Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston Logan International Airport

Massachusetts Port Authority

Federal Aviation Administration

March 2001

Volume 1

Preface

The Boston Logan International Airport Airside Improvements Planning Project Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report (Supplemental DEIS/FEIR) is jointly prepared by the Federal Aviation Administration (FAA) and the Massachusetts Port Authority (Massport). The FAA is the lead federal agency for purposes of Airport Layout Plan (ALP) approval and any federal funding approval, which are federal actions subject to the National Environmental Policy Act (NEPA). The FAA is also the project proponent with respect to the reduction in runway approach minimums for Runways 15R, 22L, 27 and 33L, and implementation of runway instrumentation. Massport is the project proponent for all of the other identified improvement concepts comprising the Preferred Alternative, which fall within its purview as proprietor of Boston-Logan International Airport.

This Supplemental Draft EIS has been prepared in response to a decision by the FAA, and to satisfy the procedural requirements of NEPA; the Council on Environmental Quality's (CEQ) *Regulations for Implementing the Procedural Requirements of the National Environmental Policy Act of 1969,* as amended, 40 CFR Part 1500; and the FAA's Airport Environmental Handbook (FAA Order 5050.4A). This document has also been prepared to satisfy the requirements of the Massachusetts Environmental Policy Act (MEPA) and its implementing regulations.[1] Because the document fulfills both federal and state purposes, it is referred to as a Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report.

Federal EIS Process

On February 1, 1999, Massport, in a joint effort with the FAA, submitted a Draft Environmental Impact Statement/Environmental Impact Report (Airside Project Draft EIS/EIR) for the Airside Improvements Planning Project (Airside Project). Approximately 500 comment letters were received during the applicable Airside Project Draft EIS/EIR federal and state comment periods from various governmental entities, including the US Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection, the Massachusetts Natural Heritage and Endangered Species Program, the City of Boston, various elected and other public officials, community groups, individual residents and other interested parties.

1 301 CMR 11.00 MEPA Regulations

In January 2000, following issuance of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA as a result of comments received during the DEIS review process. At the FAA's direction, a Supplemental Draft EIS Panel (SDEIS Panel), consisting of three members appointed by the Governor of the Commonwealth of Massachusetts and three appointed by the Mayor of the City of Boston, was formed. Under the direction of the FAA New England Region, the SDEIS Panel convened in March of 2000 and then met 12 times, concluding with a final meeting in December of 2000. In addition to these formal meetings, the SDEIS Panel also made visits to Hanscom Field, Worcester Regional Airport, T.F. Green / Providence Airport, Manchester Airport, and the Logan ATC Tower. To provide the the SDEIS Panel with appropriate background, it was presented with: (a) an Interim Supplemental Draft EIS to the Airside Project Draft EIS / EIR; (b) answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS / EIR; and (c) a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent transportation industry experts, both in favor of and in opposition to the Airside Project (minutes from the SDEIS Panel meetings are contained in Appendix A). This document reflects a special set of work tasks developed by the FAA as a result of the SDEIS Panel review process and constitutes the Supplemental Draft Environmental Impact Statement.

State EIR Process

The Draft EIR was the subject of an extended pubic comment period including public hearings on April 7, 1999 at the State Transportation Building in Boston and April 8, 1999 at the Holiday Inn in East Boston. On May 7, 1999 the Massachusetts Secretary of Environmental Affairs issued a Certificate ("EOEA Certificate") on the Draft Environmental Impact Report (Draft EIR) for the Logan Airside Improvements Planning Project. The Secretary determined in his Certificate that the Draft EIR had adequately and properly complied with the Massachusetts Environmental Policy Act (MEPA) (M.G.L. c. 30, ss. 61-62H) and its implementing regulations (301 C.M.R. 11.00). The Secretary also found that the Draft EIR presented enough information on alternatives, impacts and mitigation to meet the MEPA standard and should therefore proceed to the stage of a Final EIR. The EOEA Secretary directed that the Final EIR must address certain specific issues, as well as adequately respond to the substantive comments received. This document responds to the EOEA Certificate and includes separate volumes containing responses to comments received on the Airside Project Draft EIR.

Organization of this Supplemental Draft EIS/Final EIR

The Airside Project Draft EIS / EIR, submitted in February 1999, provided a comprehensive assessment of the benefits and potential impacts of all the project alternatives in accordance with federal and state scoping directives. Potential impacts were identified by category and quantified in relation to the proposed alternatives. This Supplemental DEIS / FEIR is

intended to complement and to be reviewed in conjunction with the Airside Project Draft EIS/EIR. As explained below, each chapter in this Supplemental DEIS/FEIR summarizes the major findings of the Airside Project Draft EIS/EIR, focuses on additional analyses conducted for the Supplemental DEIS/FEIR, and documents impacts associated with the Preferred Alternative. The "Key Points" section at the beginning of each chapter summarizes the key points for that chapter from the Airside Project Draft EIS/EIR, and reflects analyses conducted in response to the EOEA Secretary and/or the FAA's work tasks for the SDEIS.

A comparison between the chapters of the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR is provided in Table P-1 at the end of this Preface. Table P-2, also at the end of this Preface, outlines the analysis tasks required by the FAA as a result of the SDEIS Panel process. To assist the reader, the table outlines where these analyses are located within the Supplemental DEIS/FEIR.

The document is comprised of an Executive Summary and 11 volumes, the contents of which are summarized below.

Executive Summary	Available as a separate volume
Volume 1	Preface Executive Summary, Chapter 1 - Project Background, Purpose and Need Chapter 2 - Logan's Role in the Regional Transportation System Chapter 3 – Alternatives Chapter 4 - Delay Analysis
Volume 2	Chapter 5 - Affected Environment Chapter 6 - Environmental Consequences Chapter 7 - Cumulative Impacts Chapter 8 - Preferred Alternative and Mitigation List of Preparers Reviewers List Acronyms Index
Volume 3 Appendices	Appendix A - FAA SDEIS Panel Process Appendix B - Regional Transportation Appendix C - Delay Appendix D - Northwest Wind Runway Use Restriction Appendix E - Noise Appendix F - Air Quality Appendix G - Wildlife Appendix H - Cultural Resources Appendix I - Environmental Justice Appendix J - Construction
Volumes 4 – 11 Responses to Comments	EOEA Certificate and Responses Comment Letters and Responses

- **Preface** – Provides a guide to the organization of this Supplemental DEIS/FEIR and its relationship to the Airside Project Draft EIS/EIR.

- **Executive Summary** – Provides an overview of the Supplemental DEIS/FEIR and is published as a separate document.

- **Chapter 1: Project Background, Purpose and Need** – In the Airside Project Draft EIS/EIR, this chapter served as an introduction and provided the foundation for the project purpose and need. In this Supplemental DEIS/FEIR, this chapter presents a summary of the key points in the Airside Project Draft EIS/EIR and provides further clarification of the delay problem at Logan Airport. In response to a number of substantive comments, including those of the FAA, the SDEIS Panel and the EOEA Secretary, this chapter provides historical context for Logan Airport's delay problem; compares Logan Airport to other major U.S. airports; provides a more comprehensive discussion of delays; and guides the reader through complex delay terminology and the different measures of delay. Chapter 1 broadens the discussion of delays to include those that are caused by Logan Airport, as well as those incurred by Logan Airport passengers but caused by conditions at other airports or Air traffic Control (ATC) related problems. To respond to a FAA SDEIS work task, Massport has also attempted to assess the effect that Runway 14/32 would have had on Logan Airport's national delay ranking in 1998 if it had been available.

- **Chapter 2: Logan's Role in the Regional Transportation System** – In the Airside Project Draft EIS/EIR, Chapter 2 evaluated the extent to which regional transportation options, including other New England airports and advances in passenger rail services, may affect projected passenger demand at Logan Airport. Many comments received on the Airside Project Draft EIS/EIR focused on regional transportation issues and the importance of planning in a regional context. In response to the high level of public interest and concern regarding this topic, the EOEA Secretary instructed Massport to significantly expand upon the regional transportation analysis that was presented in the Airside Project Draft EIS/EIR. The FAA SDEIS Panel reinforced the Secretary's concerns. Throughout the 10-month panel review process, the SDEIS Panel indicated the need for ongoing regional planning by all relevant regional transportation agencies. As a result of these concerns, and as a follow-up to an earlier planning effort, Massport, the FAA, the regional airports, and New England state aviation planning agencies are conducting a new regional aviation system planning initiative, the New England Airports System Study.

  Chapter 2 describes the purpose and proposed scope of work for the New England Airports System Study, which will be sponsored by the FAA, the regional airports and Massport. Chapter 2 also provides an updated and more detailed analysis of regional transportation options, including a discussion of the evolving roles of the major commercial airports that will serve a majority of the region's passengers for the foreseeable future, namely Boston-Logan International Airport; T.F. Green Airport in Warwick, Rhode Island; Manchester Airport in New Hampshire, and the Worcester Regional Airport in Massachusetts. New analysis is presented to quantify the

potential role to be played by Worcester in providing relief for Logan Airport in the western portion of its service area and what Massport and the other state transportation agencies are doing to encourage that function. In addition, in response to the directive of the EOEA Secretary, Massport reports on the current status of proposed ground access improvements at Logan, Manchester, T.F. Green / Providence and Worcester airports and quantifies any effects these changes would have on passenger demand at these airports. In view of the recent rapid growth enjoyed by the regional airports and their impact on diverting traffic from Logan Airport, the forecast period has been extended from 2010 to 2015, when Logan Airport is expected to serve 37.5 million air passengers. The analysis supporting this extended forecast period is described in Chapter 2.

- **Chapter 3: Alternatives**– In the Airside Project Draft EIS / EIR, Chapter 3 provided a detailed description of the Alternatives analyzed as part of the Airside Project as specified in federal and state scoping directives. In this Supplemental DEIS / FEIR, these alternatives are reviewed again, but in more summary form. In response to FAA's additional work tasks for the Supplemental DEIS, this chapter further clarifies the proposed Centerfield Taxiway and the number of aircraft queuing on that and other taxiways. In response to a number of comments on the Airside Project Draft EIS / EIR, this chapter also includes a more detailed discussion of Massport's Program for Airfield Capacity Efficiency (PACE), which provides a more complete context for previous demand management programs at Logan Airport, and examines the PACE impact for relevance to the Peak Period Pricing concept currently under consideration. Chapter 3 also discusses demand management strategies already in place at other US and international airports.

- **Chapter 4: Delay Analysis** – In the Airside Project Draft EIS / EIR, Chapter 4 discussed the passenger and aircraft operations forecasts, the delay modeling methodology and the results of the airfield delay analysis. Both the EOEA Secretary and the FAA asked for clarification regarding the use of 1993 as a base year. Chapter 4 of this Supplemental DEIS / FEIR incorporates 1998 operational data to supplement and update the 1993 analysis. By applying the same capacity and delay modeling completed for the 1993 Historic Modeled condition, as well as the future forecast scenarios, the addition of the 1998 Actual Condition provides a current assessment of delay levels at Logan Airport.

  Chapter 4 includes updated operational and environmental analyses of 1998 conditions similar to that contained in the *Logan International Airport 1998 Annual Update (October 1999)*. While the *Logan International Airport 1999 Environmental Status and Planning Report (ESPR) (December 2000)* includes updated analyses for 1999, the differences between the two study years are small. Since the relevant comparison for evaluating the proposed Airside Project improvements is the comparison between the No Action and Preferred Alternatives, and since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS / FEIR includes the 1998 modeling analysis as a representation of recent conditions at Logan Airport.

The FAA conducted further analysis to better understand the future role of regional jets (RJs), which are rapidly being added to airline fleets at Logan Airport. Specifically, the FAA suggested examining the delay reduction effectiveness of the proposed 5,000 foot runway given a fleet with more regional jets than previously forecast. This Supplemental DEIS/FEIR presents a third fleet for the 37.5 million air passenger level (37.5M) that reflects a high proportion of regional jets, and a correspondingly low proportion of turboprops. This additional fleet is referred to as the 37.5M High RJ Fleet. In terms of operation levels, the 37.5M High RJ Fleet falls between the 37.5M Low and High Fleets.[2] For the purposes of assessing delay, the delay model inputs reflect the recommendation of a separate evaluation by the FAA's consultant regarding the use of the proposed runway by the RJ Fleet. Those assumptions are discussed in Chapter 4 of this Supplemental DEIS/FEIR. The delay reduction results of all five Alternatives (Alternatives 1, 1A, 2, 3, and No Action) under the 37.5M High RJ Fleet are included at the end of Chapter 4.

As part of the preparation of this FEIR, the EOEA Secretary instructed Massport to complete several analyses that would allow a more complete evaluation of Peak Period Pricing including a Peak Period Monitoring System and an Exemption Program for communities dependent on Logan Airport. Although Massport does not recommend immediate implementation of Peak Period Pricing as part of the Preferred Alternative, the Authority recognizes the potential delay reduction benefits associated with Peak Period Pricing in an environment of airline overscheduling. Massport is prepared to implement Peak Period Pricing when necessitated by airline overscheduling. In Chapter 4 of this Supplemental DEIS/FEIR, Massport proposes a tightly crafted exemption program that would protect greatly affected communities from losing connections to the national air transportation system. Incorporating a small community exemption program is intended to reduce the expected degree of service disruptions resulting from Peak Period Pricing, without undermining the program's delay reduction benefits. Chapter 4 of the Supplemental DEIS/FEIR presents a Peak Period Monitoring program designed by Massport to determine when airline scheduling may become problematic. The EOEA Secretary also suggested that specific analysis be conducted to determine whether a peak period surcharge could have the adverse impact of encouraging "increased reliance on early morning and late evening flights." Chapter 4 of this Supplemental DEIS/FEIR also discusses the potential for alterations in the regional airline fleet mix resulting from Peak Period Pricing.

At the FAA's and the EOEA Secretary's request, Massport broadened the discussion of the Preferential Runway Advisory System (PRAS) by providing further context to the PRAS Program. Chapter 4 of this Supplemental DEIS/FEIR examines land use patterns and residential densities among the affected communities, in order to

2 The proposed Airside Project improvements were evaluated against a near-term demand level of 29 million annual passengers and long-term levels of 37.5 and 45 million passengers. These demand levels are expected in the years 2003, 2015, and 2024, respectively, and at each passenger level, two different operations forecasts were developed. The High and Low scenarios, presented in the Airside Project Draft EIS/EIR, reflect differing fleet mix assumptions. The Low fleets assume more large jet operations than non-jet operations, similar to current conditions. The High fleets assume a greater proportion of non-jet aircraft and thus a higher level of total operations for the same passenger level.

determine whether they have remained relatively unaltered since the PRAS Program was initially developed. Chapter 4 also examines historic PRAS achievement, in order to determine its utility as a part of the baseline for the No Action Alternatives. The chapter also describes current PRAS monitoring practices and details specific Massport commitments for more frequent and comprehensive PRAS monitoring and public reporting.

An important goal of PRAS is to route flights over the water between 12:00 AM and 6:00 AM. The EOEA Secretary requested that Massport examine the potential for extending the nighttime hours for routing aircraft over water. Chapter 4 of this Supplemental DEIS/FEIR examines the feasibility of extending this preferential nighttime routing policy.

The concept of restricting the availability and use of Runway 32 to northwest wind conditions only was discussed during the SDEIS Panel process. Appendix D addresses the impact of such a restriction on delay reduction, runway utilization and PRAS achievement. This analysis was conducted under the 37.5M High RJ Fleet scenario.

- **Chapter 5: Affected Environment** – In the Airside Project Draft EIS/EIR, Chapter 5 presented an overview of the baseline environmental conditions within the airport and surrounding communities. In Chapter 5 of this Supplemental DEIS/FEIR, the analysis of baseline conditions was expanded to include evaluation of the current environmental conditions that were presented in the *1998 Annual Update*.[3] Chapter 5 was also modified to include a description of historic properties and parklands within the project impact area (this material was previously contained in Chapter 8 of the Airside Project Draft EIS/EIR) to support the analysis of potential impacts regulated under Section 4(f) of the Department of Transportation Act, and under Section 106 of the National Historic Preservation Act of 1966, as amended.

- **Chapter 6: Environmental Consequences** -- In the Airside Project Draft EIS/EIR, Chapter 6 described the potential benefits and impacts of each alternative with regard to social, cultural and environmental resources. Chapter 6 of this Supplemental DEIS/FEIR repeats much of this analysis, but focuses the comparison between the Preferred Alternative (all actions except Peak Period Pricing) and the No Action Alternative for the 29 million passengers[4] (29M) Low and the 37.5 million passengers[5] (37.5M) High fleets. These fleets were chosen because the 29M Low reflects the worst case in terms of noise, and together they represent the full range of potential impacts. In addition, the environmental impacts associated with each alternative for the 37.5M High RJ Fleet are included for review in this Supplemental DEIS/ FEIR. The remaining alternatives are presented in the Airside Project Draft EIS/EIR and repeated again in Appendices E and F of this Supplemental DEIS/FEIR.

3 *Boston-Logan International Airport:1998 Annual Update*, October 15, 1999.
4 The Low operations fleet scenarios assume more large jet operations than non-jet operations, similar to current conditions.
5 The High operations fleet scenarios assume a greater proportion of non-jet aircraft and thus a higher level of total operations for the same passenger level.

To provide further clarity for the affected areas, the noise analysis is presented through Geographic Information System (GIS) mapping with a more detailed base map and a different scale than was presented in Chapter 6 of the Airside Project Draft EIS/EIR. For the Preferred Alternative, the numbers and locations of people who are exposed to noise in the No Action Alternative or who will be exposed to each 5 decibel (dB) increment of noise exposure from Day-Night Sound Level (DNL) values of 60 to 70 dB, and the number and location of people who are expected to shift into a different 5 dB increment of exposure, are presented in tabular and graphical form. These results are reported for people who experience increases as well as decreases in noise exposure. This Supplemental DEIS/FEIR also includes the noise contours and noise-exposed populations for Alternatives 1, 1A, 2, 3, and 4 for the 37.5M High RJ Fleet.

Chapter 6 of this Supplemental DEIS/FEIR discusses the relationship between the Airside Project analysis and FAA's *Runway 27 EIS*.[6] Chapter 6 was modified from the Airside Project Draft EIS/EIR to include a description of historic properties and parklands within the Airside Project impact area and a summary of potential impacts and mitigation. This material was previously contained in Chapter 8 of the Airside Project Draft EIS/EIR. In response to the FAA's additional work tasks for the SDEIS, Appendix E includes a school year/school day 65 dB DNL contour for the Preferred Alternative for the 29M Low Fleet.

In the Airside Project Draft EIS/EIR, the Environmental Justice analysis was presented in Chapter 8. In response to comments received on the Airside Project Draft EIS/EIR from the EPA Region 1 and others, the presentation of Environmental Justice has been significantly expanded. Chapter 6 of this Supplemental DEIS/FEIR (Section 6.8) includes a discussion of Environmental Justice requirements and additional Environmental Justice analyses requested by the EOEA Secretary. The Environmental Justice discussion includes more detailed demographic data presented in both tabular and GIS map formats; an analysis of impacts at the 60 dB level, as requested by the EOEA Secretary; a comparison of the affected population with that of Boston and other affected municipalities; a discussion of other environmental and health effects in accordance with CEQ guidance; and a discussion of the community participation process followed for review of the Airside Project. Finally, the discussion and depiction of flight paths is enhanced to show additional geographic coverage.

- **Chapter 7: Cumulative Impacts** – In the Airside Project Draft EIS/EIR, Chapter 7 presented an assessment of incremental environmental impacts of the alternatives in the context of other past, present, and reasonably foreseeable projects. Chapter 7 of this Supplemental DEIS/FEIR presents an updated construction management plan that quantifies the number of daily and total truck trips expected in connection with the Airside Project and any other major construction activities planned to occur in East Boston.

6 Runway 27 Environmental Impact Statement, prepared by the FAA, issued June 1996.

- **Chapter 8: Preferred Alternative and Mitigation** – Chapter 8 describes Massport's project specific mitigation measures which include:

  - Commitments to reinforce the unidirectional use restriction on Runway 14/32.
  - Sound insulation for eligible residences located within the Preferred Alternative 65 dB DNL contour for the 29M Low Fleet scenario.
  - Relocation assistance for the airport tenants affected by construction of Runway 14/32.
  - Habitat enhancement for the state-listed endangered upland sandpiper.
  - Construction mitigation measures including participation in the Clean Air Construction Initiative.

  In addition to project specific mitigation, the May 7, 1999 EOEA Certificate required Massport to commit to a number of "concrete mitigation measures…that will maintain or reduce the existing envelope of cumulative environmental impacts from airport operations." Specific measures identified by the EOEA Secretary that are addressed in this Supplemental DEIS/FEIR include:

  - Steps to be taken by Massport and other state transportation agencies to ensure that the Worcester, Manchester and T.F. Green/Providence airports operate jointly with Logan Airport as the key elements in an efficient and environmentally balanced regional air transportation network.
  - Regular monitoring of peak period airline schedules and delays and definition of the appropriate conditions at which Massport will implement a Peak Period Pricing Program.
  - Protocols for monitoring adherence to the PRAS goals and periodic disclosure of monitoring results.
  - Massport and the FAA will continue to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 Environmental Status and Planning Report*.
  - Specific noise mitigation commitments to minimize nighttime noise.
  - Work with air carriers to reduce the use of noisier "hushkitted" aircraft at Logan Airport.

Chapter 8 also includes Massport's Draft Section 61 Findings under MEPA. A comparison between the chapters of the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR is provided in Table P-1. Table P-2 outlines the analysis tasks required by the FAA following the SDEIS Panel process. To assist the reader, the table outlines where these analyses are located within this Supplemental DEIS/FEIR.

Table P-1
Airside Project
Comparison between the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR

Chapter		Airside Project Draft EIS/EIR	Supplemental DEIS/FEIR
1	Project Background, Purpose and Need	■ Project overview ■ Foundation of analyses ❑ Logan's role in the regional economy ❑ Passenger volumes and aircraft operations ❑ Delays at Logan, and cost implications ❑ Logan's operations	■ Summary of key points from the Draft EIS/EIR ■ Comprehensive discussion of delays at Logan ■ Comparison of Logan to other United States airports in terms of delay ■ Analysis of Logan delays caused elsewhere in the system ■ Analysis of Logan's national delay ranking if Runway 14/32 were available
2	Logan's Role in the Regional Transportation System	■ Effects of regional alternatives (regional airports and rail) to Logan on projected air passenger demand ❑ Regional transportation context and role of Logan ❑ Role of alternative travel choices ❑ Report on support for regional alternatives	■ Summary of key points from the Draft EIS/EIR ■ Expanded regional transportation analysis ■ Discussion of changing role of Logan, T.F. Green/Providence, Manchester, and Worcester airports ■ Quantitative analysis of potential relief provided by Worcester Regional Airport ■ Impact of regionalization on Logan demand forecasts ■ Report on status of proposed ground access improvements at Logan, Manchester, T.F. Green/Providence, and Worcester airports ■ Report on existing studies relating to environmental impacts associated with continued growth at regional airports (Refer to Appendix B for additional information) ■ Describe planned New England Airports System Study
3	Alternatives	■ Detailed description of concepts and alternatives analyzed ❑ Unidirectional Runway 14/32 ❑ Taxiway Improvements ❑ Reduced Approach Minimums ❑ Peak Period Pricing ❑ Alternative Packages	■ Summary of key points from the Draft EIS/EIR ■ Detailed discussion of PACE program, and its relevance to Peak Period Pricing ■ Discussion of demand management strategies used by other airports ■ Clarification of Centerfield Taxiway on taxiway queuing

Table P-1 (Cont'd.)
Airside Project
Comparison between the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR

Chapter	Airside Project Draft EIS/EIR	Supplemental DEIS/FEIR
4 Delay Analysis	■ Discussion of passenger and aircraft operations forecasts and assumptions ❑ Passenger and Aircraft Operations Forecasts ❑ Delay Modeling Approach ❑ Peak Period Pricing ■ Aircraft Delay and Runway Use Results	■ Summary of key points from the Draft EIS/EIR ■ Clarification of use of 1993 Historic Modeled as baseline condition ■ Description of additional analysis condition - 1998 Existing Condition, based on the 1998 Annual Update ■ Discussion of new 37.5M High RJ Fleet ■ Evaluation of current assessment of delay levels at Logan (1998) ■ Expanded evaluation of Peak Period Pricing ■ Consideration of small-community exemption program ■ Discussion of potential for alteration in the regional airline fleet mix result from Peak Period Pricing. Broadened discussion of PRAS program including examination of land use patterns and residential densities in affected communities ■ Examination of historic levels of PRAS achievement ■ Examination of feasibility of extending PRAS nighttime hours ■ Operational analysis of 37.5M High RJ Fleet ■ Discussion of potential northwest wind use restriction on Runway 14/32
5 Affected Environment	■ Overview of baseline (1993 historic modeled) environmental condition within the airport and surrounding communities ❑ Noise ❑ Air Quality/Odors ❑ Ecosystems ❑ Water Quality ■ Soil/Sediment Characterization	■ Summary of key points from the Draft EIS/EIR ■ Comparison of environmental conditions for the 1993 historic modeled conditions with 1998 actual conditions (based on the findings of the *1998 Annual Update*) ■ Addition of description of historic properties and parklands within the project impact area (formerly in Chapter 8 of the Airside Project Draft EIS/EIR)

Table P-1 (Cont'd.)
Airside Project
Comparison between the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR

Chapter	Airside Project Draft EIS/EIR	Supplemental DEIS/FEIR
6 Environmental Consequences	■ Description of potential benefits and impacts of each alternative with regard to social, cultural, and environmental resources ❑ Land Use and Social Impacts ❑ Noise ❑ Air Quality/Odors ❑ Ecosystems ❑ Water Resources ❑ Soil/Sediment Impacts ❑ Construction Impacts	■ Summary of key points from the Draft EIS/EIR ■ Review of potential benefits and impacts of each alternative, but with a focused comparison of the Preferred Alternative (all actions except Peak Period Pricing), to the No Action Alternative ■ Analysis of environmental benefits and impacts of a 37.5M High RJ Fleet ■ GIS mapping with a more detailed base map showing land use at a larger scale ■ Tabular and graphic comparison of the Preferred Alternative and No Action Alternative showing the number and location of people who are exposed to noise ■ Discussion of the relationship between the analyses conducted for the Airside Project and the Runway 27 EIS ■ Focused noise contour analysis comparing the 1998 Annual Update, Runway 27 EIS, and the Airside Project noise contours ■ Discussion of environmental justice ■ Addition of description of historic properties and parklands within the project impact area and a summary of potential impacts and mitigation (formerly in Chapter 8 of the Airside Project Draft EIS/EIR) ■ Inclusion of a school day/school year noise contour for the Preferred Alternative under the 29M Low Fleet scenario

Table P-1 (Cont'd.)
Airside Project
Comparison between the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR

Chapter		Airside Project Draft EIS/EIR	Supplemental DEIS/FEIR
7	Cumulative Impacts	■ Assessment of incremental environmental impacts of the alternatives in the context of other airport landside projects ■ Comparison of the interrelationship/independence of Massport's airside and landside initiatives ❑ Relationship to GEIR ❑ Relationship to Logan Projects ❑ Long-term Cumulative Effects ❑ Construction Impacts	■ Updated construction management plan ■ Quantification of the number of daily and total truck trips (including simultaneous construction activity with the CA/T, other Logan projects, and planned East Boston projects)
8	Preferred Alternative and Mitigation	■ Updated construction management plan. ■ Summary of Delay Reduction ■ Summary of Environmental Impacts ■ Preferred Alternative Impacts and Mitigation ■ Compliance with Cultural Resources Laws ■ Environmental Justice ■ Permits	■ Proposed Mitigation: Massport ❑ Specific steps to be taken by Massport (and others) to ensure that Worcester, Manchester and T.F. Green/Providence airports work with Logan in a balanced regional air network ❑ Regular monitoring of peak period airline schedules ❑ A protocol to monitor PRAS goals adherence ❑ Sound insulation of homes eligible as a result of the Airside Project ❑ Progress on working with the air carriers to limit the use of "hushkitted" aircraft ❑ Reinforcement of unidirectional use restriction on Runway 14/32 ❑ Provide relocation assistance to affected airfield tenants ❑ Habitat enhancement for upland sandpiper ❑ Construction mitigation measures ❑ Participation in the Clean Air Construction Initiative ❑ Inclusion of Massport's Draft Section 61 Findings ■ Proposed Mitigation: FAA ❑ Sound Insulation

Table P-1 (Cont'd.)
Airside Project
Comparison between the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR

Chapter	Airside Project Draft EIS/EIR	Supplemental DEIS/FEIR
Technical Appendices	A: Airspace Management	A : FAA SDEIS Panel Process
	B: History of Airfield at Logan	B: Regional Transportation
	C: Screening Analysis	C : Delay
	D: Reduced Minimums	D: Evaluation of Northwest Wind Restriction on Unidirectional Runway 14/32
	E: Fleet Forecast	
	F: Regional Carrier Case Study	E Noise
	G: Cape Cod Community Case Study	F: Air Quality
	H: Runway and Taxiway Delays	G: Wildlife
	I: Northwest/Southwest Winds Case Study	H: Cultural Resources
	J: Arrival/Departure Push Case Study	I: Environmental Justice
	K: Taxiway Delays Case Study	J: Construction
	L: Noise	
	M: Air Quality	
	N: Natural Resources	
	O: Construction Noise	

Table P-2
Airside Project
Additional Analyses for the Supplemental DEIS/FEIR

Task		Action	Location in Document
1	Is a 5,000-foot Runway 14/32 effective given the expected use of regional jets in the future fleet mix?	■ Verify and confirm previous survey of airlines and manufacturers to determine minimum arriving /takeoff distances for regional jet aircraft. ■ Research regional jet aircraft usage and runway length requirements at other airports. ■ Review forecast mix of regional jet aircraft types at Logan. ■ Develop estimate of probable regional jet utilization of a 5,000 foot Runway 14/32.	Chapter 4 and Appendix C
2	Expand Regionalization analysis contained in Interim Supplemental Draft EIS	■ Discuss proposed New England Airports System Study and proposed work scope. ■ Update status of traffic and services at the regional airports, Amtrak's Acela service, and ground access projects. ■ Add historical context and on-going nature of regionalization efforts.	Chapter 2

Table P-2 (Cont'd.)
Airside Project
Additional Analyses for the Supplemental DEIS/FEIR

Task		Action	Location in Document
3	Expand analysis of peak period pricing.	■ Review changes in airline scheduling activity at Logan and assess how and why the demand profile has flattened over time. ❑ Determine which new airline/markets have contributed to changes in the demand profile. ❑ Assess whether the flattened profile or a more peaked profile is likely to occur in the new future fleet (37.5M High RJ Fleet).	Chapter 4
		■ Discuss the design of a Peak Period Pricing program that would impact regional jet scheduling practices at Logan. ❑ Base analysis on 37.5M High RJ Fleet, using an updated demand profile and a small community exemption program. ❑ 3.2.2 Discuss the economic cost of Peak Period Pricing to the consumer. ❑ 3.2.3 Discuss the uniqueness of Cape Air and the communities that it serves.	Chapter 4
		■ Identify known, comparable demand management strategies that are in use or have been proposed by other airports.	Chapter 4
4	What impact does the 2015 Modified 37.5M RJ fleet mix have on delay reduction benefits and environmental impacts?	■ Develop 2015 fleet mix and demand profile assuming 37.5M passengers and increased RJ utilization.	Chapter 6
		■ Assess the impacts of the new fleet on delays, runway utilization, noise contours and noise-exposed populations for Alternatives 1, 1A, 2, 3 and 4.	Chapter 4 and Chapter 6
		■ Assess the impacts of the new fleet on ground noise and air quality for Alternatives 1/1A and 4.	Chapter 4 and Chapter 6
		■ Perform delay sensitivity analysis using varying RJ utilization factor for Runway 14/32.	Chapter 4 and Chapter 6
5	Broaden discussion of national delays to put Logan delays into context.	■ Assess Logan's relative national delay ranking if Runway 14/32 was available in 1998. ■ Discuss how delays at Logan affect the national air transportation system. ■ Discuss measures FAA is pursuing to reduce delays nation-wide.	Chapter 1
6	Analyze potential wind/weather use restrictions on Runway 14/32 and their impact on delay reduction, runway utilization, and PRAS achievement.	■ For the 2015 Modified 37.5M RJ fleet, analyze and compare delay levels and runway utilization patterns for: (1) No Action, (2) Action [a.] As Modeled with PRAS and [b.] with wind/weather restrictions on the usage of Runway 14/32. ■ Determine impact of potential restrictions on utilization of Runways 27 and 33 for departures, PRAS achievement, and ability to reduce population exposed to the highest noise levels.	Chapter 4 and Appendix D

Table P-2 (Cont'd.)
Airside Project
Additional Analyses for the Supplemental DEIS/FEIR

Task		Action	Location in Document
7	Present enhanced flight track graphics on the same GIS base map used for the *Interim Supplemental Draft EIS* noise contours, show individual tracks, extend into the South Shore, and show altitudes.		Chapter 6
8	Incorporate a summary of existing analyses from the Draft EIS for Alternatives 1, 2, and 3 into the SDEIS in addition to the No Action (Alt. 4) and Preferred Alternative (Alt. 1A).		Appendices C, E, F
9	Analyze the potential for proposed infrastructure improvements (Runway 14/32 and taxiway improvements) and Peak Period Pricing to induce demand for Logan Airport.		Chapter 4
10	Compare current measured noise levels from monitors in residential neighborhoods to modeled results from the Integrated Noise Model (INM).		Chapter 6
11	Address the following specific issues for which clarification has been requested:	■ Provide data on predicted change in activity by runway end, including daytime and nighttime distribution.	Chapter 6
		■ Clarify discussion of proposed Centerfield Taxiway and its impact on the number of aircraft queuing on that and other taxiways while waiting to depart.	Chapter 3
		■ Respond to written questions submitted by SDEIS Panel member, Mary Ellen Welch.	Appendix A
12	Produce a school year/school day 65 dB contour for the Preferred Alternative for the 29M Low Fleet. Research school day operating hours in relevant surrounding communities to determine the appropriate hours for the analysis.		Appendix E

To assist the reader, a list of commonly used phrases and acronyms used in this Supplemental DEIS/FEIR is summarized in Table P-3.

Table P-3
Commonly Used Phrases and Acronyms

Airside Project	Logan Airside Improvements Planning Project
ALP	Airport Layout Plan
CAA	Clean Air Act
CA/T	Central Artery Tunnel Project
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DNL	Day Night Sound Level
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/ Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Planning Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport/Logan	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
PM_{10}	particulate matter less than 10 microns in size
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 million annual air passenger Low Fleet
37.5M High Fleet	37.5 million annual air passenger High Fleet
37.5M High RJ Fleet	37.5 million annual air passenger High Regional Jet Fleet

1 Project Background, Purpose, and Need

Key Points

In 2000, Boston-Logan International Airport (Logan), the nation's 18th busiest airport, handled 27.4 million air passengers with 479,000 aircraft operations. Logan suffers from a serious aircraft delay problem and is consistently ranked among the most delayed airports in the country. Current delays at Logan are principally attributable to adverse wind and weather conditions that can produce a significant decline in Logan's airfield capacity. Logan is the 6th most delayed airport in the nation and, because of a limitation in the existing runway layout, it fares even worse in arrival delays, ranking as the 2nd most delayed airport in the nation. Logan's delay problem will only worsen as future levels of aircraft operations grow.

Chapter 1 of the *Airside Improvements Planning Project Draft Environmental Impact Statement/ Environmental Impact Report* (Airside Project Draft EIS/EIR)[1] together with Chapter 1 of this Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report (Supplemental DEIS/FEIR) provides the purpose and need for the Airside Improvements Planning Project (Airside Project). In response to a number of substantive comments on the Airside Project Draft EIS/EIR, including those of the Federal Aviation Administration (FAA), the SDEIS Panel[2] and the Secretary of the Executive Office of Environmental Affairs (EOEA), this chapter provides historic context for Logan's delay problem; compares Logan to other major US airports; and provides a more comprehensive discussion of delays. This chapter broadens the discussion of delays to include not only those that are caused by Logan, but also those incurred by Logan passengers but caused by conditions at other airports. At the FAA's direction, based on input received from the SDEIS Panel, this chapter also assesses the effect that the availability of proposed Runway 14/32 would have had on Logan's current national delay ranking.

- Logan currently experiences approximately 142,000 annual hours of delay (120,000 hours runway delay and 22,000 hours taxiway delay), which is more than seven times the FAA's threshold for congestion.
- Logan delays are estimated to cost airlines and passengers more than $300 million annually.
- There are multiple causes of aircraft delays at Logan and nationwide. Solving such a complex problem requires a multifaceted solution. There is no single measure that will

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1 *Logan Airside Improvements Planning Project Draft EIS/EIR*, prepared by Massport and the FAA, February 1999.

2 In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS. At the FAA's direction, a Supplemental DEIS Panel was formed. The panel consisted of three members appointed by the Governor of the Commonwealth of Massachusetts and three members appointed by the Mayor of the City of Boston.

resolve all aircraft delays at Logan. Each cause of delay requires a unique solution and no single solution diminishes the need for other solutions.

- The principal cause of delay at Logan is the substantial drop in airfield capacity that occurs when wind and weather conditions force air traffic controllers to utilize configurations with fewer than three runways.
- Further, the lack of a third available runway in the east-west operating direction causes an imbalance in the geographic distribution of jet operations at Logan. Approximately three-quarters of Logan's jet flights overfly communities impacted by use of north and south runway configurations. Under high demand scenarios, if no actions are taken, Logan's reliance on north/south runway configurations will increase to over 90 percent. The proposed new runway (Runway 14/32) would allow for a more balanced distribution of future operations, with 41 percent in the north/south directions, 29 percent to the west and 30 percent over the water.
- The following solutions to ease airside delays at Logan are proposed:
  - Construct unidirectional Runway 14/32 to address one of the major causes of delay, strong northwest winds, by providing a third active runway in conditions that now require Logan to operate on two or fewer runways. This runway will provide a second arrival stream and prevent the decline in airfield capacity that currently occurs. All flights using the new Runway 14/32 will arrive or depart over Boston Harbor, and the additional three-runway configuration will provide an opportunity for better achievement of the long-term and short- term Preferential Runway Advisory System (PRAS)[3] goals that are designed to equitably distribute impacts among affected communities.
  - Construct taxiway improvements to reduce taxiway congestion and the potential for runway incursions, thereby enhancing the general safety of airside operations. The taxiway improvements will facilitate more efficient movement between the terminal areas and the runways during takeoff and landing procedures and will reduce the associated levels of aircraft delay.
  - Reduce approach minimums for Runways 15R, 22L, 27 and 33L to increase the availability of these runways, reduce reliance on Runway 4R in low visibility and enhance safety under adverse operating conditions. The Runway 22L and Runway 27 minimums will be reduced to levels consistent with the capabilities of the existing electronic navigational equipment, while approaches to Runways 15R and 33L will be upgraded to Category III Instrument Landing Systems (ILSs).
  - Promote increased utilization of regional airports and highspeed rail to accommodate a greater share of the region's intercity travel demand.

3 The Preferential Runway Advisory System (PRAS) is a computer program that recommends to the FAA air traffic controllers runway configuration options that will meet weather and demand requirements, while providing an equitable distribution of the airport's noise impacts. The primary objectives of PRAS are to distribute aircraft operations in accordance with annual runway utilization goals, and to provide short-term relief from continuous operations over the same neighborhoods.

- In addition to project-specific mitigation, Massport has developed other mitigation commitments including:
  - To address possible delays caused by airline overscheduling, Massport has designed a Peak Period Monitoring System and is committed to initiating a Peak Period Pricing program when and if it is needed.
  - Massport and the FAA cannot entirely eliminate delays at Logan. However, by correcting a shortcoming in Logan's existing airfield layout and by closely monitoring and managing demand, they can significantly reduce delays at Logan.

1.1 Purpose and Need

By all accounts, the air transportation industry is currently suffering from a record number of flight delays. According to the US Department of Transportation (US DOT), 27.4 percent of airline flight arrivals in 2000 were delayed by more than 15 minutes, and Logan was one of the most delayed airports in the nation.[4] According to FAA statistics, Logan was the 6th worst US airport in terms of total delays and the 2nd worst in terms of arrival delays.[5]

The national delay problem is so severe that it threatens the nation's productivity and undermines economic growth. According to the US Secretary of Transportation, "One of the greatest challenges faced by the Department of Transportation, the FAA and the commercial aviation industry is to close the gap between demand for air transportation and the capacity of our current infrastructure. We cannot afford to delay the work."[6] He also commented that the nation's air transportation system faced gridlock in the year 2000, and that while there is no quick fix to the problem of aviation congestion, airlines, airports, and air traffic control must work together to develop innovative solutions.

The Airside Project identifies physical improvements and actions that address very specific causes of delay at Logan Airport. The improvement concepts that were evaluated in the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR are summarized in Table 1.1-1. Proposed airside improvement concepts are designed to enhance Logan's operating efficiency and safety by reducing current and projected runway and taxiway delays.

4 US DOT, Air Travel Consumer Report, December 2000.
5 FAA, 2000 OPSNET data. (See Section 1.4.1)
6 U.S. Secretary of Transportation Norman Y. Mineta, Remarks before the US Chamber of Commerce, February 2, 2001.

Table 1.1-1
Purpose of Airside Improvement Concepts

Improvement Concept	Purpose
Construct Unidirectional Runway 14/32	Reduce Northwest Wind Delays
Peak Period Pricing	Reduce Overscheduling Delays
Construct Centerfield Taxiway	Reduce Taxiway Delays, Enhance Safety
Extend Taxiway Delta	Reduce Taxiway Delays, Enhance Safety
Realign Taxiway November	Simplify Taxiway System, Enhance Safety
Optimize Southwest Corner Taxiways	Reduce Taxiway Delays, Enhance Safety
Reduce Approach Minimums on Runways 22L, 27, 15R and 33L	Provide for Safer Instrument Approaches

As the gateway to New England, Logan plays a vital role in the region's current and future economic prosperity by ensuring fast and efficient access to the global marketplace. Delays at Logan cause an estimated $300 million in unnecessary costs to airlines and air passengers annually. In 2000, Logan accommodated 27.4 million passengers, representing more than 60 percent of all New England air passengers. Logan is the 18th busiest US airport based on passenger volume and the 12th busiest based on aircraft operations (arrivals and departures).[7]

The aircraft delays that plague Logan hamper the airport's ability to provide efficient and reliable access to national and world markets and threatens the region's long-term economic success.

The Airside Project Draft EIS/EIR analysis demonstrated that a large portion of the aircraft delays at Logan are avoidable and can be eliminated by correcting a limitation in the airport's existing runway layout. Approximately one-fourth of the annual aircraft delays at Logan occur during periods of northwest winds. While Massport and the FAA cannot resolve certain causes of delay, such as inclement weather, they can act to reduce delays that occur in northwest wind conditions by improving Logan's airfield layout. Most often, Logan is able to operate on three-runway configurations that can accommodate approximately 120 operations per hour. However, moderate to strong northwest winds can restrict the airport to low-capacity configurations with two or fewer runways that accommodate only 60 to 90 operations per hour. When these configurations are in use, Logan cannot accommodate normal levels of demand without incurring serious delays.

The proposed unidirectional Runway 14/32 is designed to increase the reliability of Logan Airport by preventing the decline in capacity that occurs during northwest winds. By allowing Logan to maintain its normal operating capacity, Runway 14/32 would significantly reduce these preventable delays.

7 Airports Council International, *Worldwide Airport Traffic Report,* July 2000.

Delays at Logan can also accrue when airlines schedule beyond the airport's normal runway capacity (120 operations per hour). In the early 1990s, airline overscheduling was a significant source of flight delays at Logan. At that time, Massport seriously considered establishing a peak period pricing program to eliminate airline overscheduling and related flight delays. However, these conditions subsided when one of Logan's three major regional airlines ceased operations, producing an immediate reduction in flight volume.

Logan does not currently suffer from airline overscheduling. However, Massport recognizes that overscheduling conditions could re-emerge in the future and exacerbate Logan's delay problem. The Airside Project analysis includes an evaluation of Peak Period Pricing as a delay reduction measure across a range of future operating conditions (see Chapter 4). The analysis indicates that Peak Period Pricing would be effective in reducing delays when the airport suffers from airline overscheduling. However, Peak Period Pricing would not address delays caused by northwest winds. Massport has designed a Peak Period Monitoring System to identify overscheduling conditions and would initiate a Peak Period Pricing program if and when conditions warrant such action.

In addition to improvements that are designed to relieve airside delays, Massport and the FAA examined potential improvements to Logan's complex taxiway system. The proposed taxiway improvements would increase airfield efficiency and decrease taxiway delays by simplifying the existing taxiway system. The taxiway improvements would also enhance safety by reducing the risk of runway incursions.

The Supplemental DEIS/FEIR focuses on the comparison of the Preferred Alternative (Alternative 1A) to the No Action Alternative (Alternative 4) for two of the fleets that were analyzed in the Airside Project Draft EIS/EIR.[8] Table 1.1-2 summarizes the combinations of improvement concepts, or "project alternatives," that were evaluated under five future fleet scenarios in the Airside Project Draft EIS/EIR. This Supplemental DEIS/FEIR focuses the analysis on the 29M Low Fleet, the 37.5M High Fleet, and the additional 37.5M High Regional Jet (RJ) fleet, which is evaluated for all Project Alternatives.

8 Appendices C, E and F of this Supplemental DEIS/FEIR contain the operational and environmental results for the full set of alternatives which were described in detail in the Airside Project Draft EIS/EIR

Table 1.1-2
Logan Airside Improvements Alternative Packages

	Alternative 1 All Actions	Alternative 1A All Actions Except Peak Period Pricing	Alternative 2 All Actions Except Runway 14/32	Alternative 3 No Build	Alternative 4 No Action
IMPROVEMENT CONCEPT		PREFERRED ALTERNATIVE			NO ACTION ALTERNATIVE
Runway 14/32	■	■			
Taxiways:					
Centerfield	■	■	■		
Extend Delta	■	■	■		
Realign November	■	■	■		
South West Corner Optimization	■	■	■		
Operational:					
Reduced Minimums	■	■	■	■	
Peak Period Pricing	■		■	■	

After careful review in the Airside Project Draft EIS/EIR of the extent and causes of delays at Logan and the comparative benefits of each alternative, Alternative 1A was selected as the Preferred Alternative because it would significantly reduce delay without imposing unnecessary economic costs on regional carriers and New England communities adversely affected by Peak Period Pricing. Additionally, the Preferred Alternative would achieve certain environmental benefits, including improved air quality and a reduced noise exposure for the most severely affected communities, while causing minimal environmental impacts, all of which would be mitigated.

In the Airside Project Draft EIS/EIR, Chapter 1 served as an introduction and provided the foundation for the project's purpose and need. In this Supplemental DEIS/FEIR, Chapter 1 summarizes the project purpose and need and clarifies the issues of delay and the extent of Logan Airport's delay problem. Specifically, this chapter contains a more comprehensive discussion of airport delays, provides historical context for Logan's delay problem, and compares Logan's performance to other major US airports.

This analysis further confirms the need for the Preferred Alternative. This chapter also presents additional analyses identified by the FAA as a result of the SDEIS Panel process. These include a discussion of delays at Logan that are caused by other airports and the delay reduction benefits that Runway 14/32 would have produced if the runway had been operational in 1998.

1.2 How Logan Operates

Airfield capacity is a function of airport design (the number and direction of runways and taxiways, runway instrumentation, etc.), weather conditions (visibility and wind

direction), aircraft mix (heavy, large, small), and FAA Air Traffic Control (ATC) procedures that govern the sequencing and spacing of aircraft. Thus, even for a given airfield layout, capacity is a dynamic factor that varies with changes in wind direction, weather conditions and the mix of arriving and departing aircraft.

1.2.1 The Airfield Layout

Logan's airfield layout, illustrated in Figure 1.2-1, consists of five runways, which vary in length from 2,557 feet to 10,081 feet.[9] Logan's runways are aligned in three directions with runway ends pointing toward six distinct compass headings. Aircraft must generally takeoff and land into the wind, so the availability of specific runway configurations is determined by wind speed and direction, and other weather conditions. The runway layout provides necessary operating flexibility given Logan's coastal location and highly variable wind conditions. Non-coastal airports that do not experience the same variation in wind conditions generally have a simpler airfield layout and fewer required operating configurations.

1.2.2 Runway Use Configurations

While Logan has five runways, typically no more than three runways can be used concurrently. Delays occur when only low capacity configurations (i.e., less than three active runways) are available and flight demand exceeds available capacity. To operate efficiently under all wind directions, Logan requires three active runways for most of the operating day.

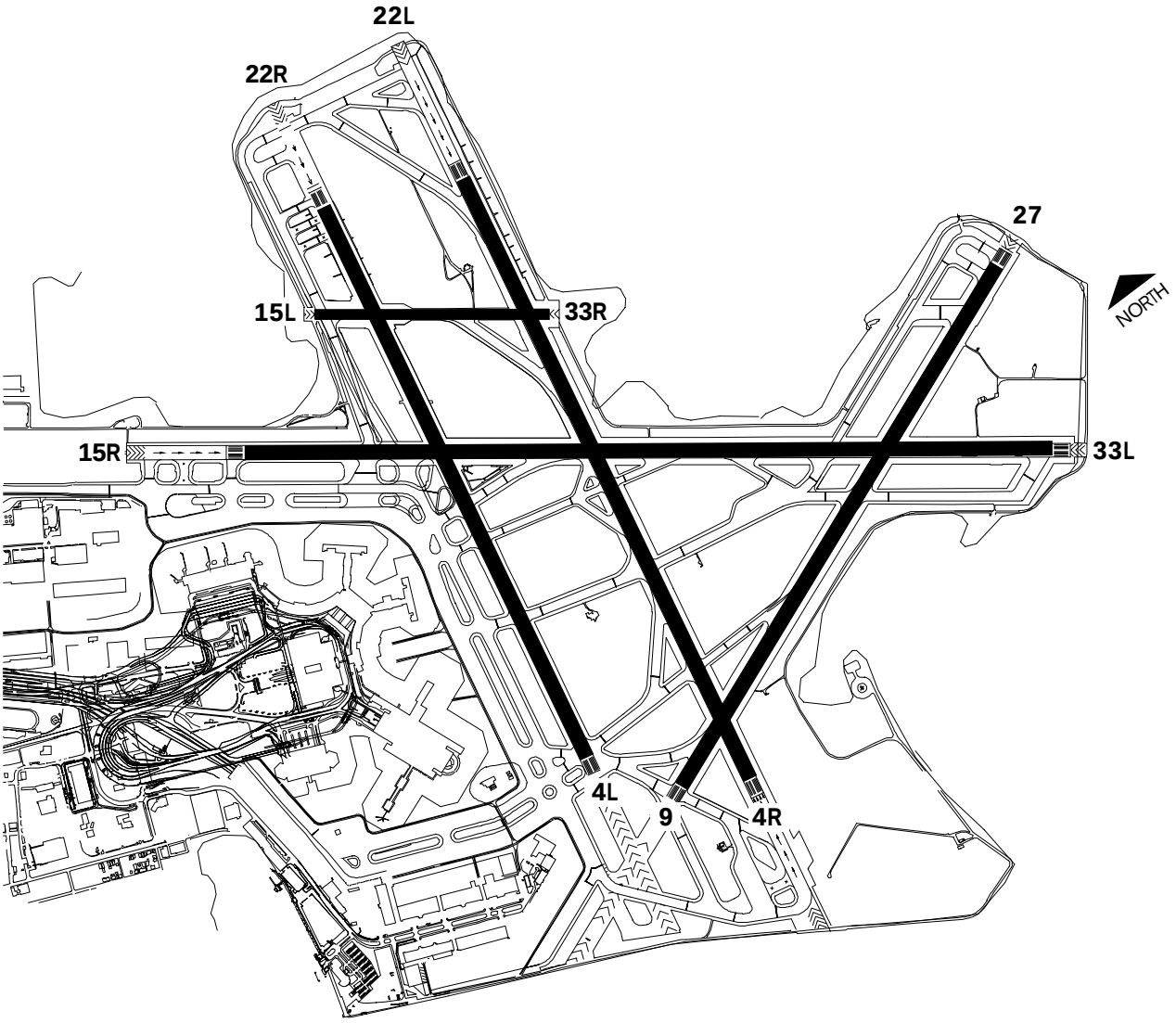
There are several primary runway configurations in use at Logan, with over 80 operating subsets of these configurations. As described in the Airside Project Draft EIS/EIR, the operational capacities of Logan's existing configurations range from a maximum of approximately 120 operations per hour when the weather is good, winds are light, and three runways are available, to fewer than 60 hourly operations for a single runway.

Logan's highest capacity configurations have three active runways which allow FAA controllers to segregate arriving aircraft of different size classes into two arrival streams and to use the third runway for aircraft departures. High capacity runway configurations are available at Logan nearly 80 percent of the year. For the remaining part of the year, poor wind and weather conditions restrict the airport to low capacity configurations with just one or two available runways.

9 Logan's shortest runway, Runway 15L/33R, has very limited utilization and can only be used by the smallest-sized aircraft, e.g., Cessna 402s with 9 seats.

As shown in Figures 1.2-2 to 1.2-3, the north-south configurations are the highest capacity configurations at Logan. These configurations include the Runways 4L, 4R, and 9 configuration and the Runways 22L, 22R, and 27 configuration. With three available runways, these configurations maximize the airport's operating efficiency by providing two runways for arriving aircraft, which permits air traffic control to segregate aircraft of different size classes. Conversely, when the airport is restricted to a two-runway or one-runway configuration with a single arrival stream, this type of segregation cannot occur. As shown in Figures 1.2-4 to 1.2-6, Logan is restricted to two or one runway when operating in an east / west orientation. These low capacity configurations include the east / southeast configuration of Runways 15R and 9, and the west / northwest configuration using Runways 27 and 33L. Under very strong northwest winds, Logan can be restricted to just a single runway, Runway 33L, to handle all arriving and departing aircraft.

Because Logan lacks a third available runway in the east-west direction and Runway 15L / 33R is too short to be used by most aircraft, the north-south runway configurations are utilized most frequently (see Figure 1.2-7). In 1998, 76 percent of Logan's jet operations landed on or departed from the north / south runway configurations (Runways 4L and 4R arrivals, 4R departures, Runway 9 departures, 22L and 22R departures, and 22L and 27 arrivals). As a result, communities affected by the north / south runway configurations bear a disproportionate share of jet overflights. Conversely, 11 percent of Logan's 1998 jet operations were on runways affecting communities west of the airport (Runway 27 and 33L departures, and 15R arrivals) and 13 percent utilized over-the-water runways (15R for departures and 33L for arrivals).



RUNWAY LENGTH DATA (feet)

Runway	Landing Length	Takeoff Length	Displaced Treshold
15R	9,201	10,081	880
33L	10,081	10,081	_
4R	8,850	10,005	1,155
22L	8,806	10,005	1,199
4L	7,860	7,860	_
22R	7,045	7,860	815
9	7,000	7,000	_
27	7,000	7,000	_
15L	2,557	2,557	_
33R	2,557	2,557	_

Logan Airport Layout Plan

1998 JET RUNWAY USE

Runway	Departure	Arrival
4L	0%	2%
4R	8%	41%
9	35%	0%
15R	6%	2%
22L	5%	7%
22R	28%	0%
27	14%	28%
33L	5%	19%

Source: 1998 Annual Update

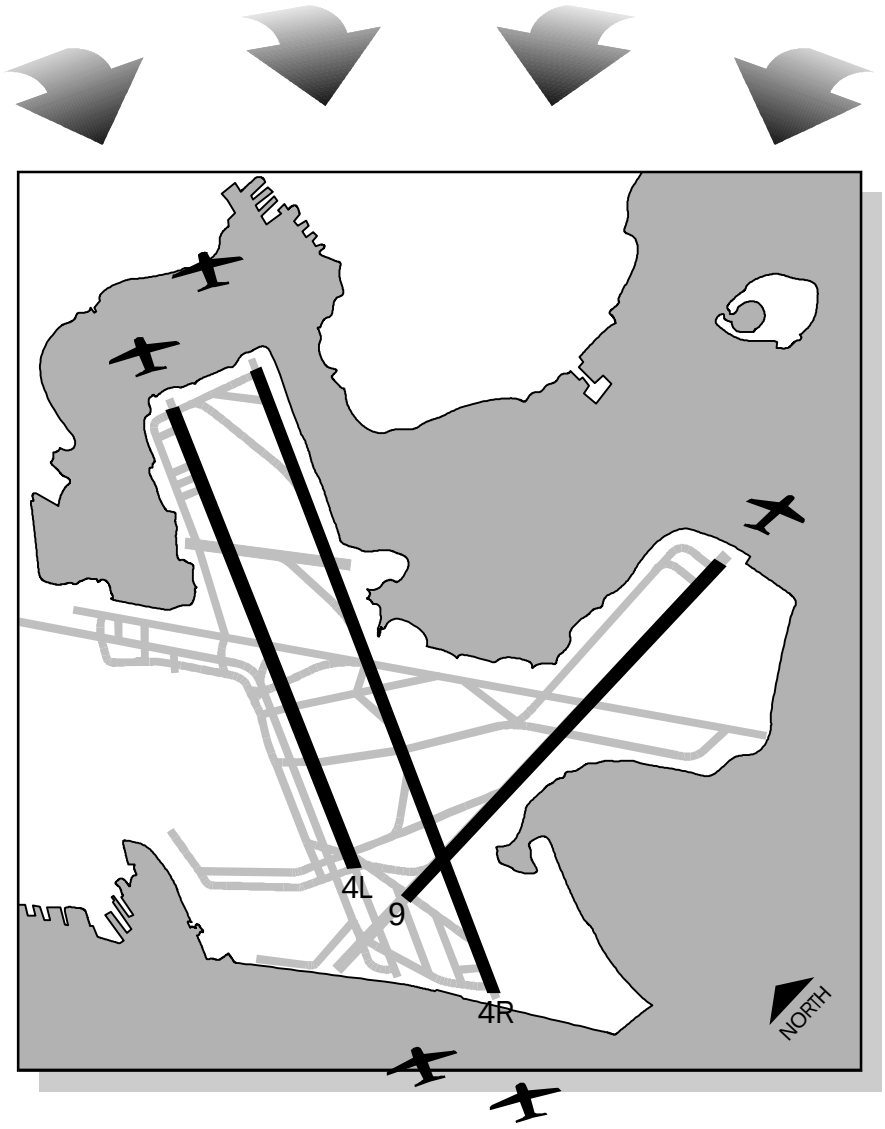
massport

Figure 1.2-1

Existing Logan Airfield Runway Layout

7466-FIG-1.2-1.p65

Three-Runway Configuration



LEGEND

Wind Direction

Figure 1.2-2

Northeast Wind Configuration Using Runway 4L, Runway 4R and Runway 9

07466-FIG-1.2-2.p65

Three-Runway Configuration

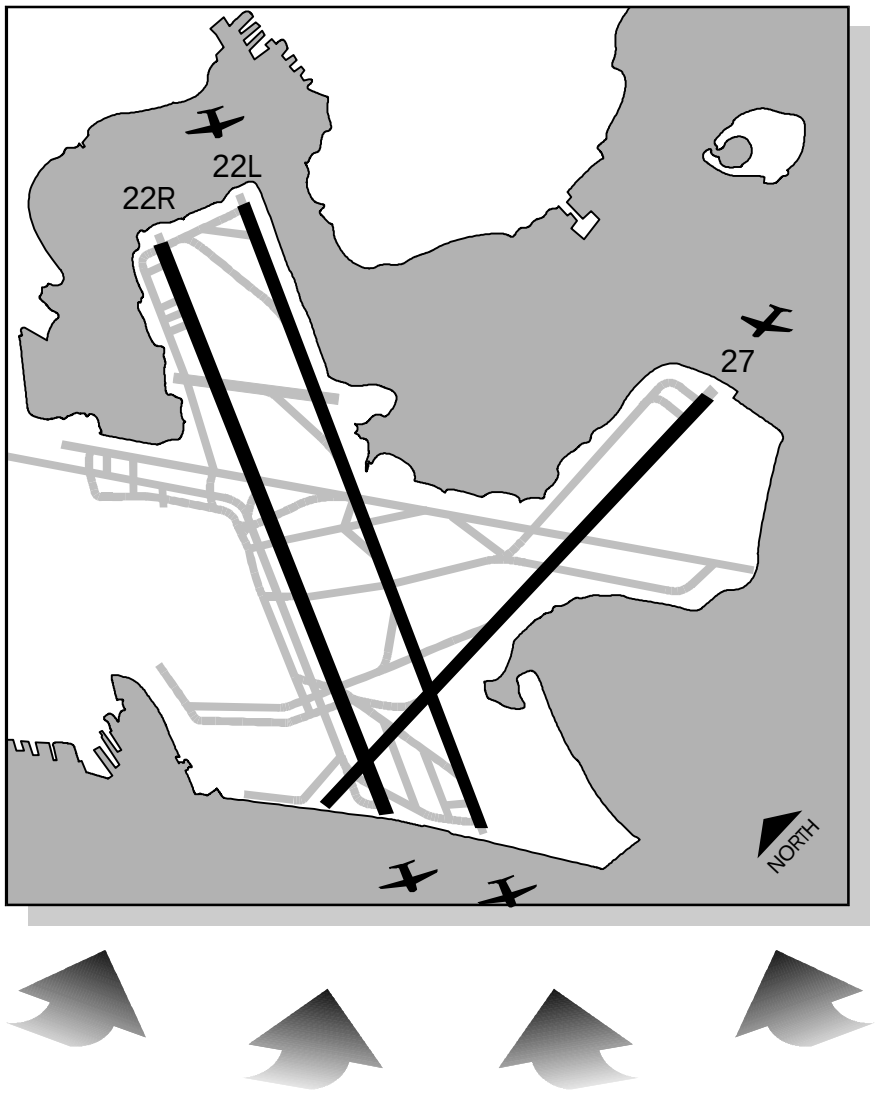
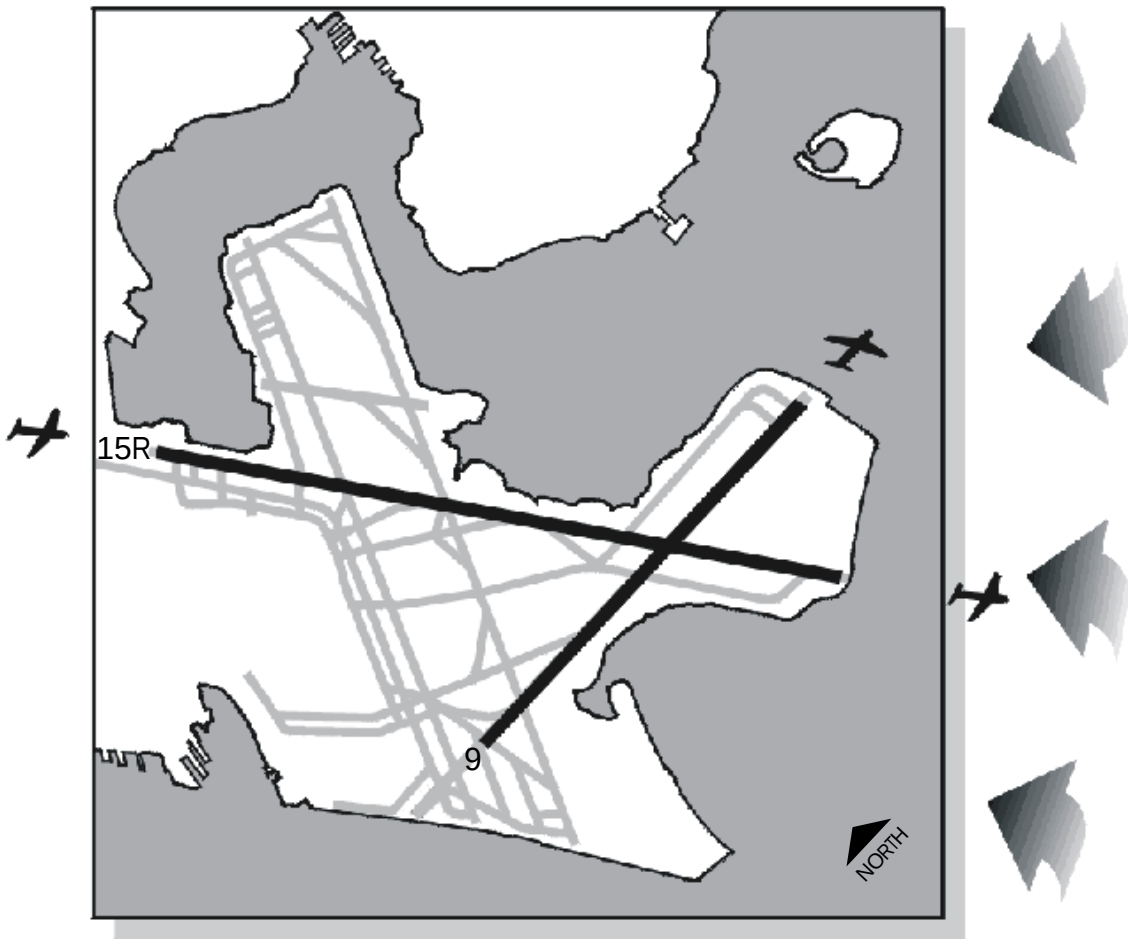


Figure 1.2-3

Southwest Wind Configuration Using Runway 22L, Runway 22R and Runway 27

7466-FIG-1.2-3.p65

Two-Runway Configuration



LEGEND

Wind Direction

NOTE

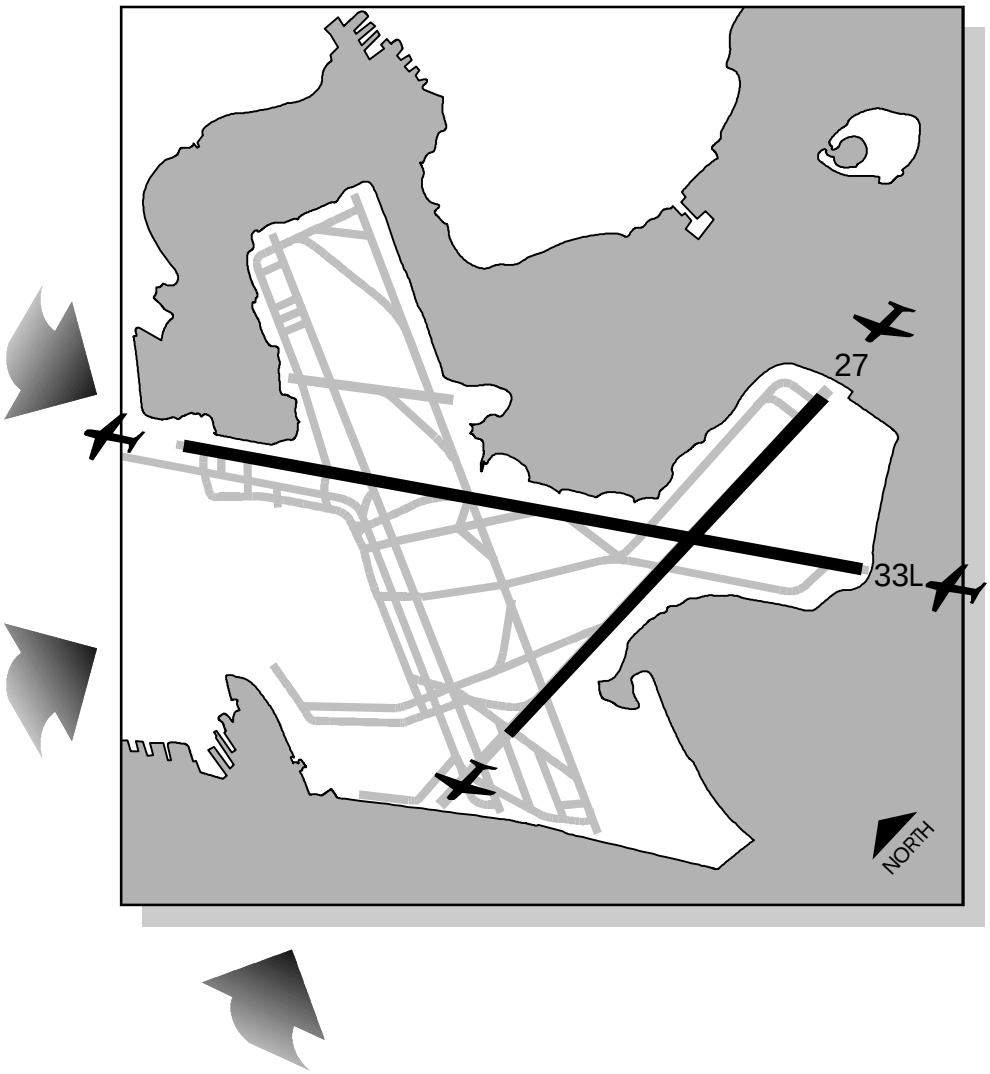
Runway 15L only used for arrivals by smalll planes, such as the 9-pasenger Cessna used by Cape Air.

Figure 1.2-4

East/Southeast Wind Configuration Using Runway 15R, Runway 15L and Runway 9

7466-FIG-1.2-4.p65

Two-Runway Configuration



LEGEND

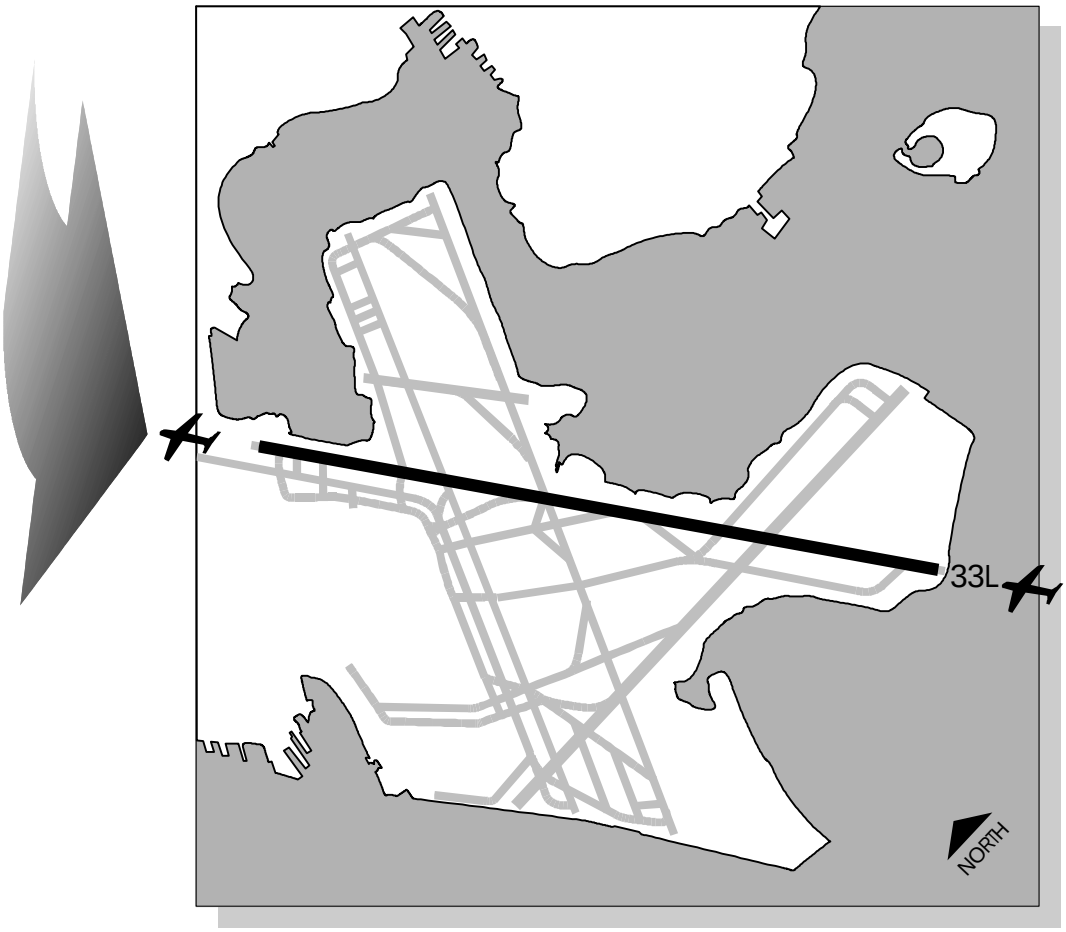
Wind Direction

Figure 1.2-5

Moderate Northwest Wind Configuration Using Runway 27 and Runway 33L

07466-FIG-1.2-5.p65

One-Runway Configuration



LEGEND

Wind Direction

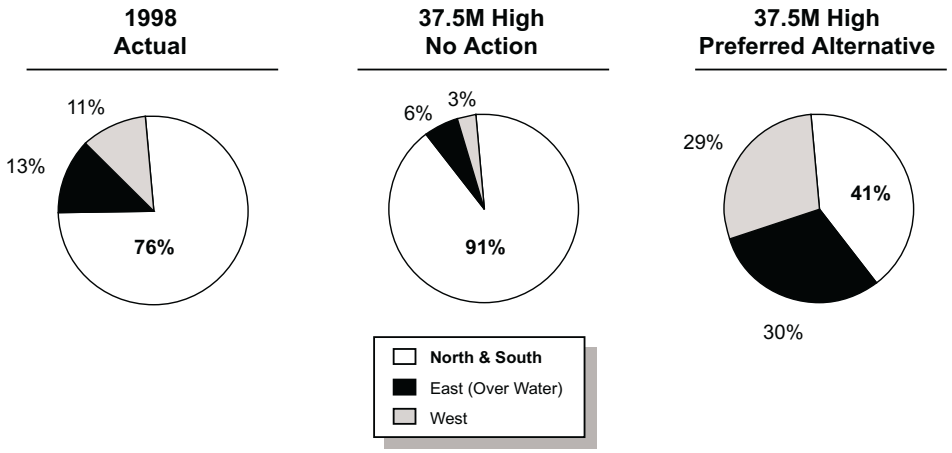
Figure 1.2-6

Strong Northwest Wind Configuration Using Runway 33L

7466-FIG-1.2-6.p65

Figure 1.2-7 shows that if no action is taken to correct this limitation in the airfield layout, Logan's dependence on north-south runways will increase to more than 90 percent under the 37.5M High Fleet[10] scenario. With construction of proposed Runway 14/32, Logan's dependence on north-south configurations would decline to 41 percent. By making a third runway available in the east-west operating direction, the Preferred Alternative allows for a more balanced geographic distribution of jet overflights – 41 percent north/south, 30 percent east (over water), and 29 percent west.

Figure 1.2-7
Geographic Distribution of Jet Flights at Logan



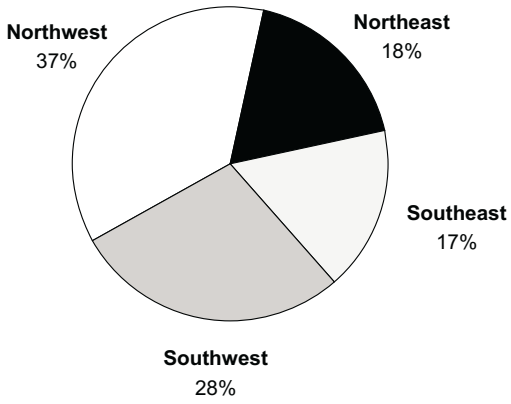
1.2.2.1 Impact of Wind and Weather Conditions on Airport Capacity

When weather conditions deteriorate, wind direction shifts to the northwest, or winds intensify, Logan is reduced to operating with only one or two active runways. A major limitation of Logan's airfield is the lack of a three-runway configuration in the northwest/southeast orientation. Even under clear weather conditions, northwest winds can create a situation in which a three-runway configuration is unavailable. Air traffic control procedures and other restrictions may further reduce the capacity of the one- or two-runway operating configurations. As a result, even when aircraft demand levels are moderate, delays can reach severe levels if wind or weather dictates the use of low capacity configurations.

10 The High Fleet assumes a greater proportion of non-jet aircraft and thus a higher level of total operations for the same passenger level than the Low Fleet, which assumes more large jet operations than non-jet operations, similar to current conditions.

Figure 1.2-8 illustrates the percentage of time that winds from different directions occur at Logan during a typical year. In light winds and good visibility, high capacity three-runway configurations are generally available. With moderate northeast and southwest winds, Logan can also operate on high capacity runway configurations. With northeast winds, the Runways 4L, 4R and 9 configuration is available for use (see Figure 1.2-2). When wind direction shifts to the southwest, the Runways 22L, 22R and 27 configuration is used (see Figure 1.2-3).

Figure 1.2-8
Typical Yearly Wind Direction at Logan



Wind-related delays become significant when moderate to strong winds originate from the northwest, the most common wind direction at Logan. Because northwest winds usually coincide with clear, visual flight rules (VFR) weather conditions, operations could be accommodated with minimal delay if a three-runway configuration were available. In fact, Logan experiences VFR weather conditions 96 percent of the time when winds blow from the northwest. Under moderate northwest winds, Logan is forced to use the low-capacity Runway 27 and 33L configuration (see Figure 1.2-5). Two-runway configurations have an operational capacity of up to 90 operations per hour in VFR conditions.

When northwest winds are especially strong or gusty, Runway 27 cannot be used due to excessive crosswinds. Under these conditions, Runway 33L is the only runway available for both landings and takeoffs (see Figure 1.2-6). Logan's operational throughput is reduced to 60 or fewer operations per hour; aircraft delays become severe and increase exponentially.[11]

11 This condition occurs approximately 10 days per year. See the *Northwest/Southeast Winds Case Study*, Logan Airside Improvements Planning Project Draft EIS/EIR, Appendix I.

1.2.2.2 Impact of Aircraft Mix on Airport Capacity

Logan operates most efficiently when air traffic controllers are able to segregate aircraft of different weight classes into separate arrival streams, allowing shorter separation distances between aircraft. Thus, the highest operating capacities at the airport are achieved when a three-runway configuration is available for use. For example, when the Runways 4L, 4R and 9 configuration is available, Runway 4L is primarily used for non-jet arrivals, Runway 4R is primarily used for jet arrivals and Runway 9 is dedicated to departures.[12] However, when poor weather and/or wind conditions restrict runway availability, controllers are forced to place all aircraft in a single arrival stream, diminishing the airport's capacity. While aircraft are currently limited to a single arrival runway during northwest wind conditions, this would be corrected by construction of the proposed new runway.

When wind and weather conditions force Logan to use a single arrival stream, the mix of aircraft seeking to use the airfield influences the capacity of the airport's runways. For safety reasons, the FAA sets minimum separation standards, which must be maintained between aircraft. All aircraft generate aerodynamic turbulence, known as wake vortices, which trail behind the aircraft in flight. Larger aircraft produce much stronger vortices, which can upset smaller trailing aircraft. Therefore, if smaller aircraft must operate behind larger jets on the same runway, increased separations between aircraft must be maintained. Longer separations reduce the capacity of each runway, since fewer planes can land in a given hour. Because of its role as a regional hub for New England communities and its lack of a dominant jet carrier, Logan exhibits a high proportion of small aircraft operations.

1.2.2.3 Revised Wake-Vortex Turbulence Rules

In response to recommendations by the National Transportation Safety Board, the FAA implemented several revisions to the wake turbulence separations that became effective in 1996.[13] They are discussed in detail in Section 1.2.3.2 of the Airside Project Draft EIS/EIR. These revisions have increased the average separation between arriving aircraft at Logan, and as a result, have decreased capacities and increased delay, particularly during use of two-runway configurations. These changes make it more important for air traffic controllers to be able to segregate aircraft arrival streams at Logan.

12 Runways 4L and 4R also handle some departures.
13 "Safety Issues Related to Wake Vortex Encounters During Visual Approach to Landing," *NTSB Report/SIR-94/01*, February 1994.

1.3 Passenger Volumes and Aircraft Operations

1.3.1 Current Activity and Historic Trends

Logan accommodated 27.4 million air passengers and 479,000 aircraft operations in 2000. More than 60 airlines, including national and international passenger airlines, commuter airlines, and all-cargo airlines, provide direct flights from Logan Airport to over 100 destinations worldwide. In addition to commercial airline services, Logan also handles general aviation activity. In 1999, Logan was the 18th busiest airport in the US in terms of passenger traffic; 12th in aircraft operations; and 19th in cargo tons.[14] Logan functions primarily as an "origin / destination"[15] airport, with 88 percent of passengers originating or terminating at Logan, and only 12 percent of passengers connecting from one flight to another. However, Logan also serves as a regional hub, providing small and isolated New England communities with access to the national airport system. While regional carrier flights carry only a small percentage of total passengers, approximately half of their passengers rely on connections at Logan to reach their ultimate destinations.

Table 1.3-1 provides a summary of air passengers, flight operations, and freight volume from 1980 to 2000. Passenger volume at Logan has increased over time consistent with the increasing levels of air passenger traffic experienced nationwide. However, the rate of passenger growth at Logan has slowed in recent years. Since 1980, passenger traffic at Logan has increased at an average annual rate of 3.1 percent. For the most recent five years (1995 to 2000) Logan passengers grew more slowly, increasing by 2.4 percent annually. In 2000, Logan's passenger traffic increased by just 1.3 percent over the prior year. The observed slow-down in Logan's passenger growth is attributable to the increased role of regional airports and rail as attractive transportation options to Logan Airport.

Aircraft operations at Logan have historically grown at a slower rate than passenger volume due to increases in aircraft size and / or passenger load factors. Between 1980 and 2000, aircraft operations increased at an average annual rate of 2.4 percent. Since 1995 the rate of aircraft operations growth has slowed to 0.6 percent per year. In 1999 and 2000, aircraft operations declined by 2.5 and 3.2 percent, respectively, as regional airlines reduced scheduled services at Logan.

More than 1 billion pounds of freight (cargo and mail) passed through Logan Airport in 2000. Approximately half of Logan's air freight is carried in the belly compartments of passenger aircraft and the remaining half is transported by all-cargo airlines, such as Federal Express and United Parcel Service. In 2000, all-cargo airlines performed approximately 12,000 aircraft operations at Logan, or 2.6 percent of Logan's total operations. Since all-cargo operations primarily occur during off-peak nighttime hours (10:00 PM and 6:00 AM), they do not contribute to aircraft delays at Logan.

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14 Airports Council International, Worldwide Airport Traffic Report, 1998.

15 For an "origin/destination" airport, most passengers either originate or terminate their airline journey at that airport. For a connecting airport, a large percentage of passengers stop at the airport as part of their airline journey to transfer from one flight to another.

This Supplemental Draft EIS/FEIR includes updated operational and environmental analyses of 1998 conditions consistent with those described in the *Logan Airport 1998 Annual Update.*[16] While the *Logan Airport 1999 Environmental Status and Planning Report (ESPR)*[17] published in December 2000 includes updated analyses for 1999, the differences between the two study years are small. Between 1998 and 1999, operations declined by 2.5 percent, primarily due to a decline in regional carrier operations.[18] Fleet mix and runway use varied little, and the shape of the noise contours and population impacts were also similar, with slightly less impact in Winthrop and Boston and slightly more impact in Chelsea and Revere in 1999 compared to 1998.[19] The air quality and other environmental analyses also yielded similar results.[20] Since the relevant comparison for evaluating the proposed Airside Project improvements is the comparison between the No Action and Preferred Alternatives, and since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS/FEIR includes the 1998 modeling analysis as representative of recent conditions at Logan.

16 *Logan Airport 1998 Annual Update*, October 15, 1999
17 *Logan Airport 1999 Environmental Status and Planning Report*, December 15, 2000.
18 A more detailed comparison of the change between 1998 and 1999 passengers and operations is included in Chapter 2 of the ESPR.
19 A more detailed comparison of the change between 1998 and 1999 noise impacts is included in Chapter 6 of the ESPR.
20 The ESPR compares all of the 1998 and 1999 analyses and discusses the differences in detail.

Table 1.3-1
Air Passengers, Aircraft Operations, and Freight: 1980 to 2000

Year	Air Passengers (000)	Annual Percent Change	Flight Operations (000)	Annual Percent Change	Total Cargo and Mail* (000 lbs.)	Annual Percent Change
1980	14,850	-	296	-	505,245	-
1981	14,941	0.6%	284	-4.1%	497,632	-1.5%
1982	15,959	6.8%	275	-3.2%	503,151	1.1%
1983	17,905	12.2%	316	14.9%	597,483	18.7%
1984	19,488	8.8%	351	11.1%	677,803	13.4%
1985	20,506	5.2%	380	8.3%	666,994	-1.6%
1986	21,933	7.0%	396	4.2%	664,559	-0.4%
1987	23,369	6.5%	415	4.8%	706,046	6.2%
1988	23,732	1.6%	408	-1.7%	784,730	11.1%
1989	22,274	-6.1%	389	-4.7%	752,554	-4.1%
1990	22,878	2.7%	425	9.3%	753,253	0.1%
1991	21,450	-6.2%	430	1.2%	766,584	1.8%
1992	22,723	5.9%	474	10.2%	819,522	6.9%
1993	23,579	3.8%	493	4.0%	835,746	2.0%
1994	24,468	3.8%	459	-6.9%	923,557	10.5%
1995	24,192	-1.1%	466	1.5%	869,642	-5.8%
1996	25,134	3.9%	456	-2.1%	911,166	4.8%
1997	25,568	1.7%	483	5.8%	974,170	6.9%
1998	26,527	3.8%	507	5.2%	970,764	-0.3%
1999	27,052	2.0%	495	-2.5%	987,655	1.7%
2000	27,413	1.3%	479	-3.2%	1,047,250	6.0%

Sources: *Boston-Logan International Airport,1994/1995 Generic Environmental Impact Report*; *Logan Airport Annual Updates - 1996,1997and 1998*; *Logan Airport, 1999 Environmental Status and Planning Report*.
Boston-Logan International Airport, Monthly Airport Traffic Summary, December 2000.

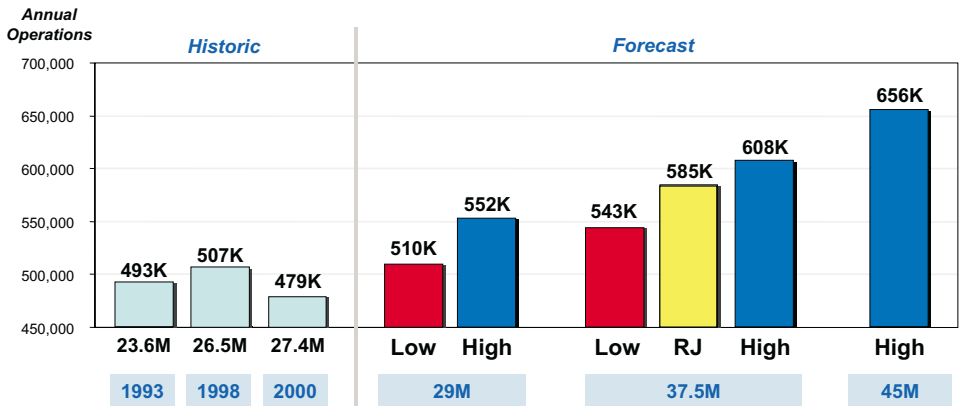
* Includes cargo and mail carried in all-cargo aircraft and in the belly compartments of passenger aircraft.

1.3.2 Forecast Aircraft Operations and Passenger Levels

Airline passenger traffic, both locally and nationally, has increased dramatically over time and is forecast to continue to grow into the future. The airfield operational and environmental impact analyses presented in the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR are based on forecasts of future aircraft operations and passenger demand for Logan Airport. Multiple aircraft fleets were analyzed for each future passenger demand level. An aircraft fleet consists of a mix of different aircraft types (i.e., large jets, regional jets and non-jets). A fleet with a high proportion of large jets, which carry more passengers than regional jets or non-jets, requires comparatively fewer annual aircraft operations for a given number of passengers than a fleet with a lower proportion of large jets.

Massport has adopted a range of near-term and long-term activity forecasts for planning purposes (see Figure 1.3-1). Annual passenger demand for Logan Airport is forecast to reach 29 million passengers (29M) early in this decade. Logan's most recent annual passenger level is 27.4 million for 2000, or 96 percent of the 29 M near-term passenger forecast.[21] If Logan remains on its current growth path, which due to the effectiveness of regional planning efforts is slower than its historic long-term growth trend, the Airport is expected to reach 29 million passengers in 2003, 34 million passengers by 2010, and 37.5 million passengers (37.5M) in 2015. These projections are more conservative than the forecasts presented in the Airside Project Draft EIS/EIR, which assumed that Logan would reach these activity levels earlier, i.e., 29M in 1999 and 37.5M in 2010. Nevertheless, the analyses presented in the Airside Project Draft EIS/EIR remain valid because they present the operational and environmental impacts associated with a range of future near-term and long-term operating levels. The revised forecast dates are consistent with the FAA's most recent Terminal Area Forecasts for Logan Airport. In its 1999 Terminal Area Forecasts, the FAA projects that Logan Airport will reach 33.6 million passengers in 2010 and 37.1 million passengers in 2015.

Figure 1.3-1
Logan Airside Passenger and Fleet Forecasts – Annual Operations by Fleet



21 Massport's planning forecasts were reviewed in the *Logan Airport 1999 Environmental Status and Planning Report*, December 15, 2000.

Massport's projected operations for the near-term (i.e., 29 million passengers) are 510,000 for a Low Fleet scenario and 552,000 for a High Fleet scenario. For the long-term (i.e., 37.5M passengers), annual aircraft operations are forecast to range from 543,000 to 608,000. The forecast range for aircraft operations reflects different assumptions regarding the aircraft fleet mix at Logan. The Low Fleet scenarios assume only two major regional airlines and a higher proportion of large jet aircraft operations than assumed in the High Fleet scenarios. The High Fleet scenarios assume a fleet mix similar to 1993 conditions, when three major regional carriers operating non-jet aircraft accounted for nearly 50 percent of total airport operations and airline overscheduling occurred during peak periods. For this Supplemental DEIS/FEIR, an alternative future fleet, which is characterized by a high proportion of the new technology regional jets, was evaluated for the 37.5M passenger level.

The analysis in this Supplemental DEIS/FEIR focuses on a comparison between the Preferred Alternative (Alternative 1A) and the No Action Alternative (Alternative 4) for the 29M Low Fleet and the 37.5M High Fleet scenarios, which were previously analyzed in the Airside Project Draft EIS/EIR. The operational and environmental analyses for Alternatives 1, 2 and 3 for the 29M Low Fleet and 37.5M High Fleet are summarized in Appendices E and F. All alternatives for the new 37.5M High RJ fleet are analyzed in this Supplemental DEIS/FEIR. For ease of reference, the analysis assumptions used in this Supplemental DEIS/FEIR are summarized in Table 1.3-2. The alternative fleet scenarios are more fully described in Chapter 4 of this report.

Table 1.3-2
Passenger and Aircraft Operations Analysis Assumptions

Time Frame	Annual Passengers	Annual Aircraft Operations	Fleet Assumptions	SDEIS/FEIR Alternatives	SDEIS/FEIR Airside Scenarios
Near Term	29 million	510,000	Low Fleet ■ 2 major regional carriers ■ No airline overscheduling	1A and 4 [1]	29M Low Fleet
Long Term	37.5 million	608,000	High Fleet ■ 3 major regional carriers ■ Airline over scheduling during peak periods	1A and 4 [1]	37.5M High Fleet
Long Term	37.5 million	585,000	High RJ Fleet ■ 3 major regional carriers ■ Regional jet aircraft 31% of the fleet ■ Airline overscheduling during peak periods	1, 1A, 2, 3 and 4	37.5M High RJ Fleet

1 Analysis results for Alternatives 1, 2 and 3 are contained in Appendices C, E and F. Analysis results for other fleet scenarios are contained in the Airside Project Draft EIS/EIR.

1.3.3 Logan's Demand Profile

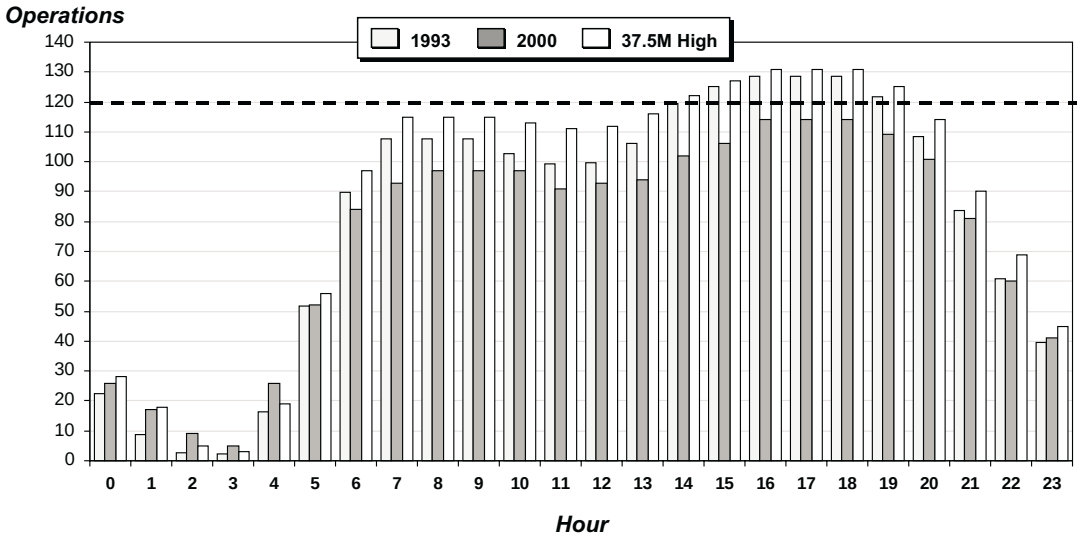
While the volume of annual operations is critical for evaluating Logan's operational and environmental impacts, the distribution of that volume is also important. Flight demand varies by hour, by day of week, and by season, and this variation can have a significant impact on airport delays. This pattern of hourly flight activity is referred to as the airport demand profile.

Logan's capacity during visual flight rules (VFR) conditions is approximately 120 operations per hour, and these VFR conditions prevail approximately 80 percent of the year. Under these good weather conditions, delays accumulate only when demand exceeds the VFR capacity of the airport for a sustained period of time. If demand at an airport causes delays even in good weather, an overscheduling situation exists.

Delays due to airline overscheduling become significant when flight activity levels exceed airfield capacity for a sustained period of time. When a short period of excessive demand is followed by a period of low activity, the airfield has an opportunity to recover and only moderate delays are incurred. If, however, flight activity levels reach or exceed available capacity for a number of consecutive hours, delays build rapidly as flights delayed during one hour add to schedule demand during the next hour. For this reason, three-hour averages of forecast flight activity levels were used to determine the periods when sustained airline overscheduling conditions exist. It is during these periods that a peak surcharge might be applied.

Figure 1.3-2 compares the August weekday demand profiles for 1993 and 2000 with the forecast demand profile for the 37.5M High Fleet. In 1993, a record year for delays at Logan, demand was considerably more peaked than it is today and exceeded the airport's average VFR capacity of 120 hourly operations and the average all-weather capacity of 115 for six consecutive afternoon hours. In contrast, the August 2000 weekday profile never exceeds the average all-weather capacity. The profile comparison clearly demonstrates that while overscheduling was a problem in 1993, it is not a problem today. The 37.5M High fleet assumes three major regional carriers and a high percentage of non-jet activity. Under this forecast scenario, flight demand exceeds Logan's average VFR capacity for six consecutive hours and the average all-weather capacity for most of the day. Clearly, airline overscheduling can be expected to cause serious delays under these conditions.

Figure 1.3-2
Logan's Average Maximum Three Hour Demand Profile –
1993 vs. 2000 vs. 37.5M High (3 Hour Maximum Average)



1.4 Delays at Logan

Delay simulation modeling conducted for the Airside Project Draft EIS/EIR indicates that Logan experienced approximately 120,000 hours of runway delays in 1998. This is six times the FAA's threshold of 20,000 annual delay hours for identifying severely congested airports, which emphasizes the magnitude of Logan's delay problem.

All available measures of delay confirm the severity of aircraft delays at Logan. For 2000, the FAA reports that Logan ranked 6th among the nation's largest airports in delayed operations and 2nd in arrival delays, yet it was only the 12th, busiest US airport in terms of aircraft operations.

This section presents historical delay statistics for Logan and comparative delay measures for Logan and other major US airports. The section also provides a description of existing delay measures, identifies the inherent drawbacks of these statistics, and discusses the appropriateness of simulation modeling for estimating delays. The various delay databases maintained by the FAA and US DOT, and the methodologies employed by each to quantify delays are described in Appendix C of this Supplemental DEIS/FEIR.

1.4.1 Delays at Logan and Other US Airports

This section presents delay statistics and rankings for Logan from a variety of sources, including the FAA, the US DOT and simulation modeling performed by both the FAA and the Airside Project study team. While varying methodologies produce different rankings and estimates of delay, these sources are consistent in demonstrating a serious delay problem at Logan. Table 1.4-1 presents Logan's rank since 1990 among US airports by total delayed operations from the FAA Air Traffic Operations Network (OPSNET).[22] Based on this delay measure, the FAA has consistently designated Logan as a "seriously congested airport." The table also shows that Logan's rank by arrival delays has progressively worsened over the past decade. For the most recent year, Logan ranked second nationwide—its worst ranking since at least 1990.

Table 1.4-1
Logan's Airside Delay Rank Among US Airports

Year	Rank by Total Delays	Rank by Arrival Delays
1990	9	9
1991	6	7
1992	6	6
1993	5	6
1994	6	4
1995	9	4
1996	9	4
1997	9	3
1998	6	3
1999	7	5
2000	6	2

Source: FAA Air Traffic Operations Network (OPSNET)

Table 1.4-2 compares operations and delays at ten of the busiest airports in the United States based on the FAA OPSNET data. In 2000, New York LaGuardia had the nation's worst delay problem according to OPSNET, followed by Newark and Chicago O'Hare. While Logan ranked 5th in delays per 1,000 operations (and 6th in total delays), it experienced a significantly higher rate of delay than Atlanta, Dallas/Ft. Worth, and Los Angeles even though these airports accommodated 54 to 80 percent more operations than Logan.

22 OPSNET is the official FAA delay reporting system for air traffic management purposes and was formerly known as the Air Traffic Operations Management System (ATOMS). Additional information is provided in Appendix C of this Supplemental DEIS/FEIR. OPSNET counts only the number of flights that suffer a delay of more than fifteen minutes at a single element of the air traffic control (ATC) system (a sector or airport).

Table 1.4-2
FAA OPSNET: 2000 Delay Ranking for Ten of the Busiest US Airports

Airport	Operations	Delayed Flights	Delayed Flights per 1,000	Delayed Arrivals	Delayed Arrivals per 1,000
Atlanta	913,449	28,229	30.9	11,022	24.1
Boston Logan	**508,283**	**24,120**	**47.5**	**6,863**	**27.0**
Chicago O'Hare	908,977	57,545	63.3	4,801	10.6
Dallas/Ft. Worth	865,777	20,638	23.8	1,180	2.7
Los Angeles	783,684	17,141	21.9	1,142	2.9
New York Kennedy	358,951	13,930	38.8	648	3.6
New York LaGuardia	392,047	61,120	155.9	3,856	19.7
Newark	457,182	37,132	81.2	3,836	16.8
San Francisco	430,612	24,478	56.8	6,541	30.4
St. Louis	484,224	8,837	18.2	1,178	4.9
	Comparative Operations Index*	**Rank**	**Rank**	**Rank**	**Rank**
Atlanta	180	4	7	1	3
Boston Logan	**100**	**6**	**5**	**2**	**2**
Chicago O'Hare	179	2	3	4	6
Dallas/Ft. Worth	170	7	8	7	10
Los Angeles	154	8	9	9	9
New York Kennedy	71	9	6	10	8
New York LaGuardia	77	1	1	5	4
Newark	90	3	2	6	5
San Francisco	85	5	4	3	1
St. Louis	95	10	10	8	7

Note: Boston ranks 5th in operations among the airports listed, but 12th nationally. Other delay rankings for Logan are also national delay rankings.

* Operations Index-- Boston = 100

Source: FAA Air Traffic Operations Network (OPSNET)

Table 1.4-3 compares 2000 delay estimates from the US DOT's Air Traffic Consumer Reports (ATCR)[23] for the same ten busy US airports. This table shows the percentage of arrivals or departures that were delayed by more than 15 minutes at each airport. While arrivals are delayed more frequently than departures at most airports, Logan has the fourth highest percentage of arrival delays based on the ATCR data. This is similar to the OPSNET data that showed Logan with the 2nd highest rate of arrival delays. The two rankings differ because of different methodologies for counting delays. For example, ATCR estimates that 35 out of 100 arrivals were delayed at Logan in 2000, but OPSNET counts 3 arrival delays per 100 flights. While the methodologies for counting delays differ, both databases indicate that Logan experiences a higher rate of arrival delays than nearly all other large US airports.

Table 1.4-3
US DOT Air Travel Consumer Report: Percentage of Flights Delayed by 15 Minutes or More at Ten Busy US Airports in 2000

Airport	Departure Flight Delays	Arrival Flight Delays
Atlanta	23.4%	25.1%
Boston Logan	**25.3%**	**34.5%**
Dallas/Ft. Worth	21.9%	22.0%
Newark	23.6%	30.8%
New York Kennedy	20.7%	28.1%
Los Angeles	27.8%	33.5%
New York LaGuardia	28.9%	42.9%
Chicago O'Hare	33.2%	36.8%
San Francisco	30.0%	39.2%
St. Louis	22.9%	22.4%

Source: US DOT, Air Travel Consumer Report.

Table 1.4-4 ranks the 29 Large Hub[24] US airports by average minutes of delay by phase of flight based on the FAA's Consolidated Operations and Delay Analysis System (CODAS)[25] data for 12 months ending November 2000. Boston is ranked 5th worst by airborne delays, 3rd by arrival delays, 7th in taxi-in delays and 10th by taxi-out and gate delays. The CODAS data captured 81 percent Logan's actual 2000 operations. The arrival delay ranking is comparable with the OPSNET and ATCR databases.

23 The US DOT's Air Traffic Consumer Reports (ATCR) provide information about the on-time performance of airline flights. They are based on Airline Service Quality Performance (ASQP) data filed by major carriers. See Appendix C for a full discussion of public delay databases.

24 Large Hub airports are those airports enplaning one percent or more of total passengers. There are 29 Large Hub airports in the US.

25 CODAS was created by the FAA, Office of Policy and Planning to provide more consistent estimates of aircraft delay by combining data from several existing sources, including data from the FAA, US DOT, the Official Airline Guide (OAG), the air carrriers' Computerized Reservation System (CRS) and the Air Transport Association (ATA). See Appendix C for a full discussion of public delay databases.

Table 1.4-4
FAA CODAS: Average Delay by Phase of Flight at the 29 Large Hub Airports (Minutes) – 12 Months Ending November 2000

Rank	Taxi-out		Airborne		Taxi-In		Arrival		Gate	
1	LGA	15.27	PHL	6.67	DFW	3.57	LGA	24.26	LGA	13.72
2	EWR	11.94	EWR	6.02	DTW	3.30	SFO	21.52	JFK	13.59
3	PHL	9.57	ATL	5.85	LAX	3.03	**BOS**	**19.33**	DEN	13.51
4	JFK	7.91	LGA	5.57	LGA	2.66	EWR	18.92	EWR	12.96
5	ATL	7.67	**BOS**	**5.33**	ORD	2.63	ORD	18.78	SFO	12.76
6	ORD	7.59	JFK	4.38	PHL	2.37	HNL	17.12	ORD	12.30
7	DTW	7.17	CLT	4.31	**BOS**	**2.28**	PHL	17.05	PHX	12.28
8	MSP	7.10	SEA	4.29	ATL	2.22	JFK	16.72	ATL	11.65
9	DFW	6.99	SLC	4.10	EWR	2.06	LAX	15.90	PHL	11.46
10	**BOS**	**6.86**	ORD	4.07	JFK	2.01	DEN	14.53	**BOS**	**10.86**
11	STL	6.26	MSP	3.98	DEN	1.90	ATL	14.25	CVG	10.19
12	CVG	5.61	SFO	3.95	STL	1.76	LAS	14.24	STL	9.93
13	SFO	5.59	PIT	3.51	LAS	1.72	PHX	14.23	DFW	9.85
14	IAH	5.53	STL	3.45	MIA	1.71	MIA	13.86	MSP	9.85
15	DCA	5.38	DTW	3.39	PHX	1.70	SEA	13.82	MIA	9.67
16	PHX	5.21	DCA	3.36	MSP	1.49	MCO	13.71	LAS	9.50
17	LAX	5.12	IAH	3.29	SFO	1.48	SAN	13.22	BWI	9.17
18	MIA	5.06	LAX	3.24	IAH	1.42	BWI	13.15	HNL	9.10
19	CLT	5.04	DEN	3.20	CLT	1.35	CVG	12.72	DTW	9.10
20	PIT	4.52	MIA	3.13	HNL	1.31	STL	12.37	MCO	8.91
21	LAS	4.46	CVG	3.10	SEA	1.20	TPA	12.28	SEA	8.80
22	SLC	4.24	PHX	3.00	SLC	1.09	IAH	11.40	IAH	8.76
23	DEN	4.13	DFW	2.87	PIT	1.03	DFW	11.33	SAN	8.69
24	MCO	3.36	MCO	2.37	BWI	1.01	DTW	11.22	LAX	8.37
25	SEA	3.05	BWI	2.21	DCA	0.98	DCA	11.03	PIT	8.01
26	BWI	2.84	TPA	2.01	MCO	0.94	PIT	10.97	SLC	7.77
27	HNL	2.81	LAS	1.44	TPA	0.73	SLC	10.84	TPA	7.77
28	SAN	2.75	SAN	1.39	SAN	0.70	MSP	10.75	CLT	7.53
29	TPA	2.44	HNL	1.20	CVG	0.66	CLT	10.15	DCA	7.41

Sources: Consolidated Operations and Delays Analysis System (CODAS); FAA Office of Aviation Policy and Plans (APO)

1.4.1.1 Comparison of Simulated Delays and Measured Delays

Many reviewers of the Airside Project Draft EIS/EIR have inappropriately compared the Airside modeled delays with the FAA and US DOT delay reporting databases and suggested that Massport's analysis overstates delays at Logan. These measures are not directly comparable. Delay simulation models estimate total annual hours of delay, and are more comprehensive than the FAA and US DOT delay reporting systems, which only report a portion of actual delays incurred. Table 1.4-5 shows the differences between modeled delays and delays reported in the OPSNET and ATCR databases for Logan Airport. As shown, the simulated results for flights delayed over 15 minutes in 1993 and 1998 actually fall between the values reported by the FAA and the US DOT.

The differences between the modeled and reported delays reflect the limitations of the OPSNET and ATCR delay reporting systems, and the fact that FAA and US DOT delay accounting systems serve different purposes than simulation modeling. (These differences are discussed in Section 1.6.2 of the Airside Project Draft EIS/EIR and in Appendix C of the Supplemental DEIS/FEIR.) Recognizing these differences, the FAA uses delay simulation models to assess the benefits of major airport investment projects such as new runways.

Table 1.4-5
Comparison of Airside Modeled Delays and FAA/DOT Reported Delays for Logan Airport

Delay Source	Measure	1993	1998
Airside Analysis	**Operating Delays > 15 min**	**13.6%**	**14.0%**
FAA OPSNET	Operating Delays > 15 min	3.9%	3.2%
US DOT ATCR	Arrival Delays > 15 min	26.6%	28.6%
US DOT ATCR	Departure Delays > 15 min	19.2%	19.2%
Airside Analysis	**Average Delay (min)**	**15.6**	**14.0**
FAA CODAS	Average Delay (min)	NA	6.2

1.4.1.2 Comparison of FAA and Airside Simulated Delays for Logan Airport

In 1992, the FAA Technical Center simulated Logan airfield operations with the Runway Delay Simulation Model (RDSIM) model and estimated that total delay would approach 270,000 hours per year at an activity level of 504,000 annual operations.[26] In comparison, simulation modeling for the Logan Airside Improvements Planning Project estimated 120,000 runway delay hours for an annual operations level of 507,000 in 1998. Table 1.4-6 compares the FAA Technical Center modeled delay with the Airside Project's delay estimate. As shown, the Airside Project's results are lower than what the FAA model predicted at a similar level of operations. The FAA has concluded that the Airside Project modeled delays represent "a plausible and conservative estimate when compared with the earlier and simpler Logan Capacity Task Force simulation of the Airport."[27]

26 *Boston Logan International Airport Capacity Enhancement Plan*, FAA, October 1992.
27 FAA New England Region letter to Massport, dated June 14, 1999.

Table 1.4-6
Comparison of Airside Project Modeled Delays for Logan Airport

Source	Year/Scenario	Logan Operations	Estimated Annual Delay Hours
FAA	Future Year	504,000	268,700
Airside Project	1998	507,000	120,000

Source: FAA, Airport Capacity Task Force and Massport, *Logan Airside Improvements Planning Project, Draft EIS/EIR*.

1.4.2 Delays at Other Airports and Changes in Logan's Delay Ranking

During the meetings of the SDEIS Panel, a number of questions were raised about the delay modeling in the Airside Project and the interpretation of the simulation results. The modeling results presented throughout the Draft EIS/EIR and this Supplemental DEIS/FEIR represent only those delays that are attributed to Logan conditions. While these Logan-caused delays are clearly the most appropriate measures for evaluating the airside improvements, the FAA and Massport decided to also assess these delays within the greater context of the total delays at Logan. In addition to delays due to Logan congestion, delays can also accrue due to congestion elsewhere in the national air transportation system. For example, congestion at LaGuardia frequently results in gate holds for passengers departing from Logan; however, since these are not Logan-caused delays, they are not reflected in the modeling results for this project. It is therefore important to understand not only the impacts of the potential airside improvements on the Logan-caused runway and taxiway delays, but also on total delays, including those caused by other airports. This requires a basic understanding of how runway and taxiway delays relate to total Logan delays, how delays at other airports affect Logan, and how congestion at Logan impacts other airports. Within this context, the FAA and Massport assessed how Logan's national delay ranking might change if the proposed airside improvements were implemented.

Section 1.6.2 of the Airside Project Draft EIS/EIR and Appendix C of this Supplemental DEIS/FEIR describe the strengths and limitations of the FAA Consolidated Operations and Delay Analysis System (CODAS), which is generally considered to be the most comprehensive database of delay statistics available. While these delay statistics are not directly comparable to the simulation results, they do contain causal information that can be used to better assess the overall delay picture at Logan. CODAS statistics include delays for all phases of flight (gate, taxi-out, airborne, and taxi-in), but the gate delays are further segregated into Estimated Departure Clearance Time (EDCT) "Where Taken" and "Where Caused" delay. For example, a twenty-minute gate hold at LaGuardia due to northwest wind congestion at Logan would be counted as twenty minutes of "Where Taken" delay for LaGuardia and twenty minutes of "Where Caused" delay at Logan. These statistics are the only benchmarks that capture the impact that a disruption at one airport can have on the ability of another airport to operate on schedule. For that reason,

these measures are the most appropriate for assessing the impact of Logan on other airports and the impacts of those other airports on Logan.

Table 1.4-7 presents CODAS delay statistics for Logan and for the top ten Large Hub destinations served from the airport.[28] For the twelve months ending November 2000, Logan was fifth in terms of total delay and third in terms of arrival delay.[29] While these statistics emphasize the delay problems faced at the airport and the need for the proposed airside improvements, the EDCT "Where Taken" and "Where Caused" delays further explain the interaction between Logan delays and delays at other airports. Figure 1.4-1 shows the flight frequencies between Logan and its top ten Large Hub destinations.

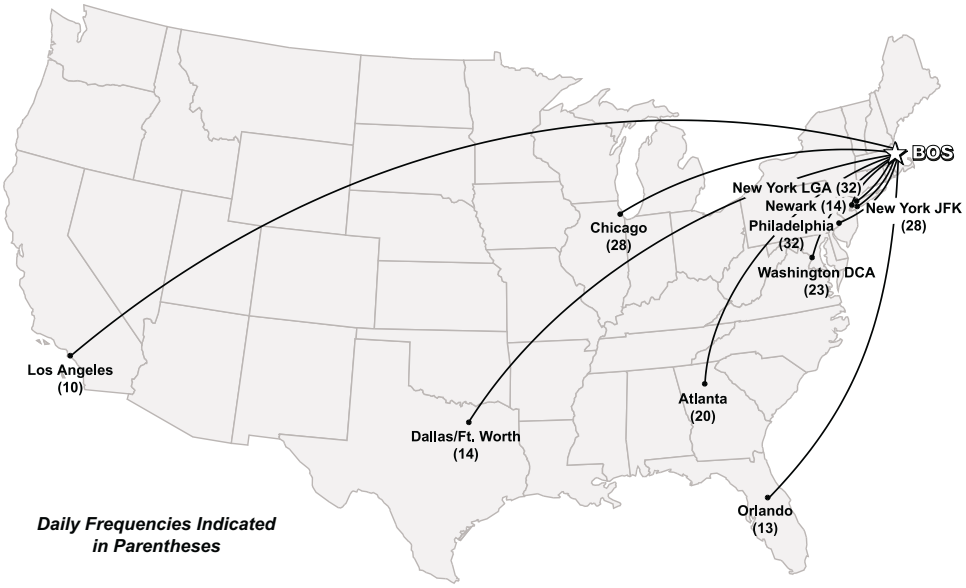
Table 1.4-7
CODAS Delays for Logan and Its Top Ten Large Hub Destinations

Airport	Pct of Logan Sched Deps	Total Delay Mins/Op	Total Delay Rank	Arrival Delay Mins/Op	Arrival Delay Rank	"Where Taken" Delay Mins/Op	"Where Taken" Delay Rank	"Where Caused" Delay Mins/Op	"Where Caused" Delay Rank
Boston BOS		**7.86**	**5**	**19.33**	**3**	**0.79**	**7**	**2.75**	**5**
New York LGA	5.1%	12.12	1	24.26	1	0.46	26	8.08	1
Philadelphia PHL	5.0%	9.85	3	17.05	7	0.61	13	1.79	7
New York JFK	4.4%	7.60	6	16.72	8	0.66	11	0.54	11
Chicago ORD	4.3%	7.39	7	18.78	5	0.37	28	3.54	4
Washington DCA	3.6%	5.48	17	11.03	25	0.97	3	0.02	21
Atlanta ATL	3.0%	8.25	4	14.25	11	0.63	12	1.44	8
Newark EWR	2.2%	10.38	2	18.92	4	0.57	17	4.45	3
Dallas DFW	2.1%	6.97	9	11.33	23	0.43	27	0.25	15
Orlando MCO	2.1%	3.99	25	13.71	16	1.04	2	0.02	23
Los Angeles LAX	1.6%	6.24	12	15.90	9	0.60	15	1.08	9

Notes:
Percent of Logan departures for top ten Large Hub destination airports based on CY2000 OAG Schedules
Delays from FAA APO CODAS for 12 months ending Novermber 2000.
Rank indicates rank among the 29 US Large Hub airports.

28 Large Hub airports are those airports enplaning one percent or more of total passengers. There are 29 Large Hub airports in the US.
29 Note that these rankings are the rankings relative to the 29 Large Hub airports in the US.

Figure 1.4-1
Logan Top 10 Large Hub Destinations



Logan ranks fifth in "Where Caused" delay, indicating that Logan is one of the airports most likely to cause delays at other airports and departure gate holds in particular. Airports ranked above Logan in "Where Caused" delay include LaGuardia, O'Hare, and Newark, three of the most delayed airports in the US. LaGuardia and O'Hare are both known for causing major delays throughout the air traffic network, and both O'Hare and Newark are hub airports with banks of flights that influence airports throughout the country. The fact that Logan ranks close behind them in "Where Caused" delays indicates that Logan congestion is having a major impact throughout the national air transportation system.

Logan also experiences a significant number of delays due to congestion at other airports, as evidenced by its rank of seventh in "Where Taken" delay. In fact, Logan's top destination, LaGuardia, is not only the most delayed airport in the country in terms of total delays and arrival delays, it is also the airport most likely to cause delays at other airports. Since LaGuardia is Logan's top destination, Logan experiences a large number of gate hold delays due to LaGuardia congestion. Similarly, major Logan destinations such as Philadelphia, Chicago, Atlanta, and Newark are also among the top ten Large Hub airports in terms of "Where Caused" delay, creating additional Logan delays that have nothing to do with Logan congestion.

While the "Where Caused" delay statistic represents only a sub-set of the total delays experienced at an airport, it removes the influence of other airports, allowing direct comparison of the delays caused by individual airports. This makes it useful for estimating the total Logan delays caused by other airports relative to the Logan-caused

runway and taxiway delays generated by the simulation models and reported throughout this Supplemental DEIS/FEIR.

While Table 1.4-8 presents only the top ten airports in terms of the delay they cause at Logan, the calculations shown were performed for each Logan destination. First, the "Where Caused" delays for each airport were compiled and compared to Logan's "Where Caused" delay value of 2.75 minutes per arrival (see Table 1.4-7). Next, the most recent simulated runway and taxiway delay hours were distributed among the airports served directly from Logan. The 142,000 hours of annual runway and taxiway delay developed for the updated 1998 baseline analysis were assumed to represent current delays and were distributed according to the percentage of Logan departures to each destination airport. For example, LaGuardia represents 5.1 percent of Logan's scheduled departures, it was therefore assumed that 5.1 percent of Logan's 142,000 modeled runway and taxiway delay hours (approximately 7,200 hours) were accumulated by operations serving LaGuardia.

After distributing these Logan-caused runway and taxiway delays, it was then assumed that the impact of any airport on Logan is proportional to the ratio of the "Where Caused" delays of the two airports. Using the LaGuardia example once again, since LaGuardia had nearly three times the "Where Caused" delay as Logan, it was assumed that for each hour of Logan-caused delay estimated by the models, Logan passengers also experienced nearly three times as many hours of delay due to LaGuardia congestion. Accumulating these statistics for each airport served directly from Logan, it is estimated that in addition to the 142,000 hours of Logan-caused delay, passengers at the airport currently experience an additional 55,000 hours of delay caused by congestion at other airports.

Table 1.4-8
Estimated Logan Delays Caused by Other Airports

Airport	Pct of Logan Sched Deps	"Where Caused" Delay per Arrival	Delays at Dest as pct of Logan Delays	Est Annual Delay Caused by Logan	Est Annual Delay Caused by Dest
New York LGA	5.1%	8.08	294.4%	7,191	21,170
Chicago ORD	4.3%	3.54	129.1%	6,096	7,869
Newark EWR	2.2%	4.45	162.2%	3,154	5,114
Philadelphia PHL	5.0%	1.79	65.1%	7,157	4,657
San Francisco SFO	1.5%	5.38	196.0%	2,135	4,184
Atlanta ATL	3.0%	1.44	52.3%	4,328	2,265
London LHR	0.9%	2.75	100.0%	1,325	1,325
New York JFK	4.4%	0.54	19.6%	6,186	1,213
St. Louis STL	0.9%	1.83	66.5%	1,325	881
Los Angeles LAX	1.6%	1.08	39.5%	2,217	875
Top Ten Airports	29.0%	0.96	34.9%	41,112	49,551
Remaining 97 Airports	71.0%	0.10	3.6%	100,888	5,132
Total	100.0%	1.06	38.5%	142,000	54,683

Notes:
When no CODAS delays available, 0.01 for US/Canada/Mexico/Caribbean destinations, 2.75 for European/Pacific destinations
Top ten airports ranked by "Est. Annual Delay Caused by Dest."
CODAS delays for 12 months ending November 2000

The analysis shows that the majority of Logan's delays are due to runway and taxiway congestion at the airport, but that the role of other airports should not be ignored. In fact, the analysis demonstrates that delays at other airports make up nearly thirty percent of the total capacity-related delays experienced by Logan passengers. It is also notable that over ninety percent of these delays caused by other airports are due to only ten airports, most of which have "Where Caused" delays similar to Logan's. This implies not only that delay reductions at these airports would benefit Logan passengers, but also that improvements at Logan would benefit passengers at other airports throughout the country.

Based on the analysis of delays at other airports, it is possible to estimate the potential change in Logan's national delay rankings with implementation of the Preferred Alternative. The simulation analysis of 1998 conditions presented in Section 4.6.1 of this Supplemental DEIS/FEIR shows that implementation of the Preferred Alternative would reduce the Logan-caused runway delays by 38,000 annual hours or 32 percent. While taxiway modeling was not performed for the 1998 analysis, based on the results of the 29M Low Fleet analysis, it was projected that the 22,000 estimated baseline taxiway delay hours would be reduced by approximately 15,000 hours under the Preferred Alternative. Based on this delay reduction and the previous analysis of delays caused by other airports, the proposed airside improvements would have reduced total delays at Logan, including those caused by other airports, by approximately 27 percent.

To convert this change in total delays into an estimate of the change in Logan's delay ranking with the Preferred Alternative, assumptions must be made regarding the change in delays at other airports. As demand levels increase, delays at other airports will tend to rise. However, flight delays are a nationwide problem, and there are numerous initiatives underway to address delays at airports throughout the country. These initiatives will tend to reduce delays, but without specific details, it is difficult to estimate the magnitude of the potential delay reductions that may result. For the purposes of this analysis, it has been assumed that delays at other airports remain constant relative to Logan delays. However, it is important to understand that improvements at other airports will benefit Logan passengers, even if Logan's delay ranking might be negatively impacted as delays at other airports improve.

Logan-caused runway and taxiway delays represent the largest portion of delays experienced at the airport, but Logan is also impacted by delays at other airports, just as those airports are impacted by Logan. This relationship means that improvements at Logan have benefits around the country and that delay reductions at other airports provide benefits to Logan passengers.

Table 1.4-9 shows how Logan's current CODAS delay rankings might have changed with the proposed airside improvements. Logan's national delay ranking would have improved from third to thirteenth in terms of arrival delays and from fifth to fourteenth in terms of total delays if the Preferred Alternative, including Runway 14/32 had been in place. In addition, Logan's arrival delay would be reduced by 5.2 minutes per operation. If other airports made improvements similar to those proposed at Logan (reducing delays by

nearly thirty percent), Logan's delay rankings would be unchanged from the current rankings, but Logan passengers would experience an even greater reduction in delays.

Table 1.4-9
Estimated Change in Logan's CODAS Delay Rankings

	Before Airside Improvements				After Airside Improvements			
	Arrival Delay		Total Delay		Arrival Delay		Total Delay	
Airport	Mins/Op	Rank	Mins/Op	Rank	Mins/Op	Rank	Mins/Op	Rank
New York LGA	24.26	1	12.12	1	24.26	1	12.12	1
San Francisco SFO	21.52	2	5.89	13	21.52	2	5.89	12
Boston BOS	**19.33**	**3**	**7.86**	**5**	**14.13**	**13**	**5.74**	**14**
Newark EWR	18.92	4	10.38	2	18.92	3	10.38	2
Chicago ORD	18.78	5	7.39	7	18.78	4	7.39	6
Honolulu HNL	17.12	6	2.78	29	17.12	5	2.78	29
Philadelphia PHL	17.05	7	9.85	3	17.05	6	9.85	3
New York JFK	16.72	8	7.60	6	16.72	7	7.60	5
Los Angeles LAX	15.90	9	6.24	12	15.90	8	6.24	11
Denver DEN	14.53	10	5.03	20	14.53	9	5.03	20
Atlanta ATL	14.25	11	8.25	4	14.25	10	8.25	4
Las Vegas LAS	14.24	12	4.51	24	14.24	11	4.51	24
Phoenix PHX	14.23	13	5.54	16	14.23	12	5.54	16
Miami MIA	13.86	14	5.45	18	13.86	14	5.45	18
Seattle SEA	13.82	15	4.64	23	13.82	15	4.64	23
Orlando MCO	13.71	16	3.99	25	13.71	16	3.99	25
San Diego SAN	13.22	17	3.27	27	13.22	17	3.27	27
Baltimor BWI	13.15	18	3.56	26	13.15	18	3.56	26
Cinicinnatti CVG	12.72	19	5.07	19	12.72	19	5.07	19
St. Louis STL	12.37	20	6.25	11	12.37	20	6.25	10
Tampa TPA	12.28	21	3.12	28	12.28	21	3.12	28
Houston IAH	11.40	22	5.65	15	11.40	22	5.65	15
Dallas DFW	11.33	23	6.97	9	11.33	23	6.97	8
Detroit DTW	11.22	24	7.30	8	11.22	24	7.30	7
Washington DCA	11.03	25	5.48	17	11.03	25	5.48	17
Pittsburgh PIT	10.97	26	4.86	22	10.97	26	4.86	22
Salt Lake City SLC	10.84	27	5.03	21	10.84	27	5.03	21
Minneapolis MSP	10.75	28	6.57	10	10.75	28	6.57	9
Charlotte CLT	10.15	29	5.75	14	10.15	29	5.75	13

Notes:
Delays from FAA APO CODAS for 12 months ending Novermber 2000.

Overall, this analysis of the interdependencies between airport delays leads to a number of conclusions:

- Logan-caused runway and taxiway delays are the most appropriate measure for evaluating the relative benefits of the proposed Airside Project improvements. While these delays represent the largest portion of Logan delays, Logan is also impacted by delays at other airports.
- Logan-caused runway and taxiway delays account for approximately 70 percent of total capacity-related delays for Logan flights; but the significant proportion of delays caused by other airports indicates a strong relationship between Logan delays and delays at other airports in the national air transportation system.
- This relationship means that improvements at Logan have benefits for air transportation as a whole, and that delay reduction initiatives at other airports will provide benefits to Logan passengers.
- The Preferred Alternative provides a significant benefit, and would have improved Logan's national CODAS delay rankings from third to thirteenth in terms of arrival delays, and from fifth to fourteenth in terms of total delays, assuming no improvements at other airports.

1.4.3 FAA Measures to Reduce Delays Nation-wide.

FAA efforts to improve safety, to reduce congestion and delays, and to accommodate a growing volume of air traffic within the national airspace system are continuing on several fronts: airport development, airspace design, air traffic operational procedures and system modernization.[30]

Improving airport infrastructure is the most direct and effective means of reducing delays. FAA efforts in this area include studies of airport delays and potential improvements, review of airport proprietary improvement initiatives at existing airports, funding airport development through the Airport Improvement Program (AIP) and Passenger Facility Charges (PFCs), development of new airports, and conversion of military airfields to civil use.

National Airspace Redesign (NAR) is an ongoing FAA activity to reduce delays by providing more efficient handling of current and future aircraft flows. The NAR Program is addressing existing chokepoints as well as introducing enroute alternatives. Other efforts involve consolidating Terminal Radar Approach facilities for more efficient control, and developing Area Navigation Routes which are not constrained by fixed ground-based navigational facilities.

Improved operational procedures are being developed and implemented to maximize the capacity of existing or planned airports and airspace. Some specific items in process are

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30 *2000 Aviation Capacity Enhancement (ACE) Plan*, FAA Office of System Capacity, December 2000.

reducing the required vertical or horizontal separations between aircraft, increasing civilian access to military special use airspace, implementing GPS approaches, removing the 250-knot airspeed limit below 10,000 feet, Simultaneous Offset Instrument Approaches (SOIA) to closely spaced parallel runways, and greater use of Land and Hold Short Operations (LAHSO).

To handle the growing demand on the air traffic system and associated delays, the FAA has prepared a long-term plan for National Airspace System (NAS) Modernization. The concept of Free Flight is the impetus for many of the elements of NAS Modernization. Free Flight will give pilots more flexibility in determining routes and speeds. Future NAS users will face fewer enroute restrictions—and thereby fewer delays—in their flight operations. The NAS Modernization Plan contains many interrelated projects, which are described in detail as "NAS Architecture".[31] The Plan includes a combination of hardware, software, new technology, procedural innovations, and collaborative decision-making that will increase system efficiency and reduce delays.

1.5 Logan's Role in the Regional Economy

Efficient aviation facilities are a critical component of a region's economic system and structure. As the largest airport in the six-state New England region, Logan provides air passenger and cargo services to international and domestic destinations, which play a significant role in the Boston and New England economies. This section discusses the importance of convenient air service to the local and regional economies, as well as the effects of Logan as an economic entity that provides employment and other direct and indirect benefits to the economy.

1.5.1 Boston's Need for Efficient Air Travel

The New England economy is largely based on a mix of travel-intensive service industries that depend on high-quality air transportation services. As illustrated in Table 1.5-1, the economies of Boston and the Commonwealth of Massachusetts have higher proportions of employment in the services and finance, insurance, and real estate sectors, than the nation as a whole. Section 1.2.1 of the Airside Project Draft EIS/EIR provides a more detailed description of the service industry in the region, including the number and names of major employers.

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31 The complete NAS Architecture 4.0 and a summary called the Blueprint for NAS Modernization are posted on the FAA web site at www.faa.gov/nasarchitecture.

Table 1.5-1
Share of Employees by Industry Sector

Industry Sector	Boston	MA	US
Services	40%	36%	30%
Wholesale and Retail Trade	22%	23%	23%
Manufacturing	11%	14%	15%
Government	11%	12%	15%
Finance, Insurance, Real Estate	8%	7%	6%
Construction and Mining	3%	4%	5%
Transportation, Communications and Utilities	4%	4%	5%

Source: US Department of Labor, Bureau of Labor Statistics, Employment and Earnings, September 1998.

The major service industries in the region include financial services, research and development, higher education, consulting, high technology, and health care and medical services. All of these industries are travel intensive because they operate in national and global markets with clients around the world. These industries often involve collaborative efforts among individuals or corporations that work closely together despite distances. Boston's hospitals and medical services are internationally recognized and highly rated, and therefore draw patients from around the world. As a global center for these industries, the region also hosts related conferences and conventions. Similar large gatherings from many other industries are drawn by the region's historic, cultural and natural attractions.

1.5.2 Tourism and the Regional Economy

Tourism is a key sector of the local and regional economies, and tourists that arrive by air typically spend more, stay longer, and provide more economic benefits to the region than those arriving by other modes. In Massachusetts, approximately 108,000 full-time jobs are created by the tourism industry, and 30,000 of these are located in Boston.[32] The number of visitors to the Greater Boston area has increased by 5 percent annually between 1992 and 1997, rising from 8.8 million to 11.1 million.[33] Visitors come from all over the US and the world. Over half of Boston's US visitors come from outside New England and more than one-fourth arrive by air. More than a million international visitors (excluding residents of Canada and Mexico) come to Boston annually, each spending an average of $1,400 during their stay.[34]

1.5.3 Logan is a Major Employer and Economic Catalyst

In addition to supporting the intercity travel needs of the region's businesses and facilitating the tourism trade, Logan itself is a major contributor to the regional economy. Activity at Logan generated an estimated $1.4 billion in direct economic benefits and

32 *1997 Fact Sheet,* Greater Boston Convention and Visitors Bureau
33 *1998 Fact Sheet*, Greater Boston Convention and Visitors Bureau
34 *1997 and 1998 Fact Sheets*, Greater Boston Convention and Visitors Bureau

$5.0 billion, or an average of $13.6 million every day, in total economic benefits during Fiscal Year 1998 (see Table 1.5-2).[35]

As owner and operator of Logan Airport, Massport provides most of Logan's major facilities, leases land and building space to other businesses at the airport, and coordinates ground access services to Logan. Massport employs more than 700 people at Logan. Massport is also continually planning for the airport's future needs through capital investment programs and is responsible for financing the facilities, as well as raising the necessary capital by leveraging revenue primarily from fees and rentals paid by airport users. Some airport costs are partly offset by federal grant money.

More than 60 airlines serve Logan and some 100 aviation-related businesses provide airport support services. Passenger travel services are augmented by restaurants and retail shops in the terminals; hotels; banks; medical offices; rental car agencies; and limousine, bus and taxi services. Of the 15,000 people working at Logan, only about 5 percent are employed by Massport, with the remaining 95 percent are employed by private industry and other government entities. In addition to the direct economic impacts of these activities at Logan, indirect benefits are generated as the tourist and supplier industries support the air transportation business at Logan. Additional economic activity and jobs, generated by these employees through the "multiplier" effect as they spend their paychecks, are included in the $5.0 billion of total economic benefits generated by Logan each year (see Table 1.5-2).

Table 1.5-2
Estimated Economic Impact of Logan - Fiscal Year 1998

Activity	Amount in $ millions
Direct Economic Benefits:	
Employee Payroll and Benefits from Direct Activity	$ 713
State and Local Tax Revenue from Direct Activity	84
Mass Turnpike Authority Tolls and MBTA* Fare Revenue	31
Public and Private Expenditures of Facility Tenants and Operators	381
Direct Income to Select Companies/Tenants	162
Subtotal Estimated Direct Economic Benefits	$1,371
Indirect and Induced Economic Benefits:	
State and Local Tax Revenue from Indirect Facility Activity	$ 178
Visitor Expenditures	2,467
Travel Agency Commissions	298
Income Multiplier (on Employee Payroll and Benefits only - net of taxes)	654
Subtotal Estimated Indirect and Induced Economic Benefit	$3,597
Total Estimated Economic Benefits	**$4,968**

* MBTA -- Massachusetts Bay Transportation Authority

Source: Massachusetts Port Authority, Economic Impact Analysis, Fiscal Year 1998.

35 *Economic Impact Analysis*, Massport, Fiscal Year 1998.

1.6 Cost of Delay on Logan Users

Delays at Logan impose substantial costs on airlines and passengers. Massport estimates that Logan flight delays cost airlines and passengers more than $300 million in 1998. When flights are delayed, the following types of costs are incurred:

- Airlines experience additional operating costs such as increased fuel, maintenance and crew costs;
- Passengers onboard the aircraft risk missed connections and lose personal or work-related time.

Additional costs, that have not been quantified, accrue to people waiting to meet delayed passengers and to shippers who may miss important flight or delivery times. Additional discussion of the costs of delay was provided in Section 1.6 of the Airside Project Draft EIS/EIR.

1.6.1 Cost of Delay to Airlines

The costs associated with delay are often difficult to quantify and require the use of different metrics. The magnitude of airport user costs can be estimated from data on airline operating costs and from FAA statistics on the value of time. Based on these metrics, the estimated airline cost per hour of delay ranges from $348 for a representative regional carrier non-jet aircraft[36] up to $1,585 for a representative 150-seat jet. Given the mix of aircraft operating at Logan, the average airline cost of delay is estimated at $1,115 per hour.

1.6.2 Cost of Delay to Airline Passengers

When flights are delayed, passengers incur lost time. The average passenger aircraft at Logan enplaned (or deplaned) 53 passengers in 1998.[37] On average, when a Boston aircraft is delayed by a single hour, 53 passengers each lose one hour of time. In a 1997 FAA Office of Aviation Policy and Plans (APO) Bulletin, the US DOT/FAA recommended the use of a $27 per hour value of time[38] for the evaluation of regulatory programs impacting airline passengers. Using this value, the average economic cost to airline passengers for a single hour of aircraft delay is $1,431 per flight.

1.6.3 Total Cost of Delay

Considering the impact of delay on both airline operating costs and lost passenger time, the total cost of delay at Logan is estimated at approximately $2,500 per hour, producing

36 Regional aircraft costs reflect a blend of 19-seat Beech-1900 and 34-seat Saab 340. In 1998, these were the most prevalent regional aircraft at Logan.
37 Massport statistics.
38 US DOT/FAA, "Treatment of Values of Passenger Time in Economic Analysis," *APO Bulletin* (APO-97-1), June 1997.

an annual cost of more than $300 million in 1998.[39] The hourly cost of delay can be applied to the estimated hours of delay reduction that will result from the various Airside Project Alternatives, in order to quantify the benefit associated with each.

1.7 Federal/State Purpose of this Supplemental DEIS/FEIR

This Supplemental DEIS/FEIR, like the Airside Project Draft EIS/EIR, was jointly prepared by the FAA and Massport. Because this Supplemental DEIS/FEIR and the Draft EIS/EIR form parts of the federal record of compliance with the National Environmental Policy Act (NEPA) and related provisions of federal law, both have been prepared under the control and responsibility of the FAA.

Massport is the proponent of all the actions studied in this Supplemental DEIS/FEIR with the exception of the proposed reduction in approach minimums on Runways 22L, 27, 15R, and 33L. FAA is the proponent of the reduced approach minimums. FAA also has primary federal jurisdiction and responsibility with regard to regulatory review and approval of airport layout plans, and airport improvement program grants of financial assistance for such projects. Therefore, FAA is acting as the lead federal agency under NEPA with responsibility for preparing this Supplemental DEIS. The Massachusetts Executive Office of Environmental Affairs, MEPA Office, is the reviewing agency for the Final EIR.

1.7.1 NEPA/MEPA History of the Airside Project

A range of Logan-specific alternatives to reduce congestion and delay and enhance safety and efficiency at Logan have been considered in the Logan Airside Improvements Planning Project (Airside Project). The Project was initiated in 1993 as a feasibility study that examined the nature of delays at Logan and evaluated the potential delay savings and efficiency and safety enhancements for a range of improvement concepts.[40] The concepts evaluated in the Airside Improvements Feasibility Study evolved from alternatives considered in previous studies, most notably the FAA's *Boston Logan International Airport Capacity Enhancement Plan* (CEP) published in October 1992. Additional sources for the concepts included the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993) and recommendations by Massport staff, airlines, and the Air Transport Association (ATA).

39 Estimated annual cost is for runway delay only.

40 *Logan Airside Improvements Feasibility Study, Phase I Report*, prepared by Jason M. Cortell Associates, Inc. for the Massachusetts Port Authority, July 20, 1995.

Based on the results of the Airside Improvements Feasibility Study completed in 1995, the Massport Board in July 1995 selected seven improvement concepts for advancement of a more detailed operational and environmental analysis through a joint federal and state EIS/EIR. The seven alternatives were presented in the Environmental Notification Form (ENF) for the Airside Project and further developed during the federal and state EIS/EIR scoping process. Consistent with the federal and state scopes, the Airside Project Draft EIS/EIR assessed the following improvement concepts:

- Construction of a unidirectional Runway 14/32;
- Construction of a Centerfield Taxiway;
- Extension of Taxiway Delta;
- Realignment of Taxiway November;
- Optimization of taxiways in the southwest corner of the airfield;
- Reduction in approach minimums on Runways 22L, 27, 15R, and 33L; and
- Implementation of Peak Period Pricing.

The analytic framework for assessing the various alternatives was structured to provide a comprehensive assessment of improvement concept packages.

Out of the possible alternatives, Alternative 1A emerged as the one best able to satisfy the Airside Project's purpose and need. If available in 1998, Alternative 1A would have reduced delays during northwest wind conditions by nearly 90 percent. Alternative 1A, the Preferred Alternative includes all actions analyzed with the exception of Peak Period Pricing.

The Preferred Alternative reduces delays without unnecessarily imposing the economic costs associated with Peak Period Pricing on regional carriers and small communities. Airline overscheduling is not currently a problem at Logan but could emerge in the future. Massport has designed a Peak Period monitoring system for early identification of airline overscheduling, and will initiate a Peak Period Pricing program if warranted by future conditions.

The Preferred Alternative significantly reduces congestion and delay at Logan particularly during northwest wind conditions; achieves important air quality and noise benefits; and increases the safety and efficiency of airfield operations.

There is no feasible and prudent alternative to the Preferred Alternative that would achieve the purpose and need of the Airside Project. The Preferred Alternative is part of a broader program that includes aggressive development of regional options to relieve Logan and all reasonable steps to minimize adverse effects of airport operations.

On February 1, 1999, Massport and the FAA jointly submitted the Airside Project Draft EIS/EIR that analyzed proposals contained in the Logan Airside Improvements Planning Project. After careful review of the extent and causes of delay at Logan, the Airside Project Draft EIS/EIR evaluated the likely level of delay and the environmental implications if nothing is done. This evaluation was completed using state-of-the-art delay modeling techniques and reflected the range of likely activity levels at Logan over the coming decades and the projected role played by regional airports and rail to divert traffic which would otherwise utilize Logan.

A Notice of Availability of the Airside Project Draft EIS/EIR was published in the *Federal Register* on February 26, 1999 and in the *Environmental Monitor* on February 23, 1999. The state and federal comment periods, which started on the notification dates, ended on April 22 and April 23, 1999, respectively. Public Hearings were held by the FAA on April 7, 1999 at the State Transportation Building in Boston and on April 8, 1999 at the Holiday Inn in East Boston.

On May 7, 1999, the Secretary of Environmental Affairs issued a Certificate on the Airside Project Draft EIR which determined that the Draft EIR adequately and properly complied with the Massachusetts Environmental Policy Act (M.G.L. c. 30, §§ 61 - 62H) and with its implementing regulations (301 C.M.R. 11.00) and provided specific direction for additional analysis to be included in the Final EIR.

In January 2000, after reviewing a draft Final EIS, the FAA requested preparation of a Supplemental Draft EIS to address a series of specific issues. At the FAA's direction, an SDEIS panel was formed consisting of three members appointed by the Governor of the Commonwealth of Massachusetts and three members appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS panel convened in March of 2000 and held 12 formal meetings and five informational visits to the regional airports and the Logan air traffic control tower. To provide appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS; answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR; and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts. Based on the SDEIS Panel process, the FAA developed specific additional analytic tasks to be included in this Supplemental Draft EIS. (The FAA task directive and minutes from the SDEIS Panel meetings are contained in Appendix A of this Supplemental DEIS/FEIR).

This document includes the additional analysis identified by the FAA as a result of the SDEIS Panel review process and constitutes the Supplemental Draft EIS. This document also responds to the EOEA May 7, 1999 Certificate on the Airside Project Draft EIS/EIR and includes separate volumes containing responses to individual comment letters received on the Airside Project Draft EIS/EIR.

1.7.2 FAA Determinations

1.7.2.1 NEPA Record of Decision

Final FAA NEPA determinations are to be made in the FAA Record of Decision following completion of the EIS process.

1.7.2.2 FAA's Regulatory Determinations

Pursuant to FAA's regulatory responsibilities, this Supplemental Draft EIS sets forth evidence demonstrating that:

(a) The project is reasonably consistent with existing plans of public agencies for development of the area;

(b) Fair consideration has been given to the interests of communities in or near the project location;

(c) Appropriate action has been or will be taken to restrict, to the extent reasonable, the use of land in the vicinity of the airport to purposes compatible with airport operations;

(d) Appropriate air and water quality requirements will be satisfied; and

(e) The action is consistent with the approved state coastal zone management program.

1.7.2.3 FAA's 4(f) Assessment

As set forth in this Supplemental DEIS/FEIR, the Preferred Alternative will not use any publicly owned land from a public park, recreation area, wildlife or waterfowl refuge, or land of an historic site. As a result, a Section 4(f) finding is unnecessary.

1.7.2.4 FAA's Non-Applicability Finding with Respect to Clean Air Act Conformity

There are no adverse air quality impacts associated with the Preferred Alternative. In fact, the Preferred Alternative provides air quality benefits when compared to the No Action Alternative. Under Section 176(c) of the Federal Clean Air Act, 42 U.S.C. § 7506(c)(1), the FAA is prohibited from engaging in, supporting in any way, or providing financial assistance for, licensing or permitting, or approving any activity that does not conform to a state implementation plan (SIP). Massport is seeking various FAA approvals for the Preferred Alternative at Boston-Logan International Airport in Boston and Winthrop, Massachusetts. Massachusetts has developed a SIP to achieve attainment of the National Ambient Air Quality Standard (NAAQS) for ozone and a SIP maintenance plan to maintain the NAAQS for carbon monoxide (CO). The Massachusetts SIP lays out a program of controls which seek to control CO emissions directly, and seeks to reduce ozone by reducing emissions of the ozone precursors volatile organic compounds (VOC) [or non-methane hydrocarbons] and oxides of nitrogen (NOx).

1.7.2.5 ALP Approval

The FAA examines, prior to issuing an airport layout plan (ALP) approval or approving financial assistance, whether the Preferred Alternative conforms to the Massachusetts State Implementation Plan's (SIP's) purpose of controlling CO and ozone precursor emissions. For purposes of Section 176(c), the Preferred Alternative is a non-transportation project, subject to the general conformity regulations, 40 C.F.R. Part 51, Subpart W and 40 C.F.R. Part 93, Subpart B.

The Preferred Alternative would not cause emissions that exceed annual General Conformity threshold levels, nor is it a regionally significant action; therefore the proposed action is presumed to conform to the SIP. By reducing congestion and delay in aircraft operations, the Preferred Alternative is expected to reduce CO and VOC emissions under predicted future conditions.

Since the Preferred Alternative will result in a net reduction of emissions over the No Build alternative for both the 29M Low Fleet and the 37.5 M High Fleet scenarios, the project advances the purposes of the Massachusetts SIP. Because the Preferred Alternative will not cause or contribute to any NAAQS violation in any area, and will not delay timely attainment of any NAAQS or any required emission reductions or other milestones in any area, the FAA finds that the Preferred Alternative conforms with the Massachusetts SIP, with the statutory requirements of 42 U.S.C. § 7401 ands 7506(c)(1), and with the regulatory requirements of 40 C.F.R. Part 51, Subpart W and 40 C.F.R. Part 93, Subpart B.

1.7.2.6 FAA's Determination Regarding Environmental Justice

For the reasons set forth in Section 6.8 of this Supplemental DEIS/FEIR, the FAA concludes that the Preferred Alternative does not have a high and adverse disproportionate impact on populations protected by federal environmental justice policies. FAA has committed to approve and fund under the Airport Improvement Program, sound insulation of all residences falling within the predicted 65 dB Day-Night Sound Levels (DNL) contour for the Preferred Alternative under the 29 M Low Fleet scenario, the worst case scenario in terms of noise exposure levels. This includes all areas within the City of Chelsea that would be newly included in the 65 dB DNL contour with the Preferred Alternative. The FAA commitment will be set forth in the Record of Decision. Massport has committed to sponsor and pay for the state's share of sound insulation costs.

1.8 Conclusion

By every available measure of delay, Logan has a serious delay problem. In 2000, Logan was the 6th most delayed airport in the US based on FAA OPSNET statistics, yet it ranked 12th in terms of total aircraft operations. FAA data indicate that Logan's record for arrivals is even worse, ranking as the 2nd most arrival-delayed airport in the nation.

Logan generally operates on three-runway configurations that can accommodate approximately 120 aircraft operations per hour. Most Logan delays occur when wind or weather conditions require all aircraft arrivals and departures to be accommodated on two or fewer runways, producing a substantial decline in airfield operating capacity. As described in the Airside Project Draft EIS/EIR and the following chapters, the Preferred Alternative includes construction of unidirectional Runway 14/32, which would correct an underlying limitation of the Logan airfield – the lack of a third available runway in the northwest/southeast operating direction—and allow normal operational capacity to be maintained during northwest wind conditions. With construction of Runway 14/32, the Preferred Alternative will address the most preventable cause of serious delays at Logan Airport.

It is clear that growth in the Boston and regional economies will continue to stimulate increasing demand for air transportation services at Logan. The challenge faced by Massport and the FAA is to safely and efficiently accommodate current and future levels of demand in an environmentally responsible manner, given the existing physical and operational constraints at Logan. The Airside Project Draft EIS/EIR explored actions that Massport and the FAA can take to improve operational efficiency and enhance safety at Logan. The individual improvements and alternative packages, including the Preferred Alternative, are discussed in Chapter 3 of this Supplemental DEIS/FEIR.

The following chapter of this Supplemental DEIS/FEIR examines the emerging role that regional airports and high speed rail will play in absorbing an increasing portion of the region's air travel demand, and assesses the impact of these regional options on the need for airside improvements at Logan.

2 Logan's Role in the Regional Transportation System

Key Points

Many comments received on the *Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report*[1] (Airside Project Draft EIS/EIR) focused on regional transportation issues and the importance of planning for Boston-Logan International Airport in a regional context. These comments were reiterated by the Federal Aviation Administration (FAA) appointed Supplemental Draft EIS Panel (SDEIS Panel) throughout the nine-month review process. The SDEIS Panel repeatedly voiced the need for ongoing regional planning by all relevant regional transportation agencies. In response to the high level of public interest and concern, this chapter expands upon the regional transportation analysis that was presented in the Airside Project Draft EIS/EIR and reports on the progress of regionalization efforts. Specifically, this chapter describes the impact that regional transportation options are having on Logan Airport, the role that Logan plays in a regional system, and planned initiatives to promote a coordinated regional transportation system.

- For more than a decade, transportation planning studies have recommended a regional transportation strategy for New England that includes an expanded role for the regional airports, high-speed inter-city rail as an alternative to air travel, and physical improvements at Logan Airport.

- The region has made considerable progress towards achieving the vision of these regional transportation studies. Substantial capital investments and marketing initiatives have increased passenger acceptance and use of regional airport options to Logan Airport. The December 2000 launch of Amtrak's Acela service will provide Boston-New York passengers with high-speed rail service, another option to Logan Airport service. These accomplishments will divert considerable air passengers from Logan Airport to other regional airports or travel modes and will reduce the region's reliance on Logan for high-speed, intercity travel.

- Service expansion at T.F. Green/ Providence Airport to the south and Manchester Airport to the north has created regional air travel options in New England. By attracting a substantial level of airline services to short- and medium–haul[2] markets, these airports are not only recapturing passengers generated within their own primary

1 *Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report*, Massport, February 1999.
2 Short-haul services are less than 750 miles, medium-haul services are 750 to 1,499 miles, and long-haul services are greater than 1,500 miles.

service areas, but are also absorbing demand from the periphery of Logan Airport's core service area.

- Massport's 1999 Passenger Survey confirms that aggressive service expansion at other regional airports, particularly the Manchester and T.F. Green / Providence Airports, is diverting passengers from the areas outside of Metropolitan Boston away from Logan Airport. The share of Logan air passengers with a trip origin in the geographic area outside Interstate-495 has decreased over time, from 22 percent in 1993, to 14 percent in 1999. Massport estimates that regional airports diverted 2.4 million passengers from Logan in 1999.

- Massport is enhancing the capabilities of Worcester Regional Airport and Hanscom Field to offer more choices to air carriers, general aviation users and the traveling public.

  - Since 1995, Massport has been working with the City of Worcester to market Worcester Regional Airport to air carriers. In January 2000, Massport assumed operating responsibility for this airport, and is committed to developing a critical level of air services. Massport has already been successful in attracting several new services to Worcester. These include Delta Connection service to Atlanta, American Eagle service to New York JFK, and Pan Am service to Orlando Sanford International Airport. These services and continued air service development will enable Worcester Regional Airport to attract a meaningful share of Logan Airport passengers from central Massachusetts and the Metro West suburbs of Boston.

  - Massport is also committed to maintaining Hanscom Field within the regional transportation system. Hanscom will continue to serve primarily as a general aviation reliever for Logan Airport, with regional carriers operating niche-commercial air services.

- Massport is promoting increased utilization of regional airports and high speed rail to accommodate a greater share of the region's inter-city travel demand.

- Convenient ground access to Logan Airport as well as the regional airports will promote an efficient regional transportation network. Several progressive ground access improvement projects at Logan, as well as T.F. Green / Providence, Manchester, and Worcester Regional airports, will likely reduce ground traffic congestion and improve the convenience of regional airports.

- Massport supports the regionalization of New England's transportation network and continues to work with aviation transportation agencies including the FAA, the Massachusetts Aeronautics Commission (MAC), other New England State Aviation Directors, and the regional airports, to ensure the efficient use of the region's transportation infrastructure. Massport, the FAA, and the regional airport directors have agreed to undertake an update of the 1995 New England Regional Airports Air Service Study. This *New England Airports System Study* will evaluate the impact of recent regional airport developments on Logan Airport, identify constraints to regional airport

growth, and highlight strategies for optimizing New England's regional aviation system.

- Every major regional transportation study has recognized that the proposed Airside Project improvements at Logan are critical to the success of an efficient regional transportation system in New England. Logan will continue to function as the region's primary airport, accommodating the core Metropolitan Boston demand and the region's demand for international and domestic long-haul travel. The Airside Project improvements that Massport and the FAA have proposed would rectify an underlying limitation of the Logan airfield that causes excessive delays in northwest wind conditions. While regional airports and rail are essential elements of a balanced and efficient inter-city travel network, they cannot relieve Logan delays that occur in specific weather conditions because of a shortcoming in the airfield geometry.

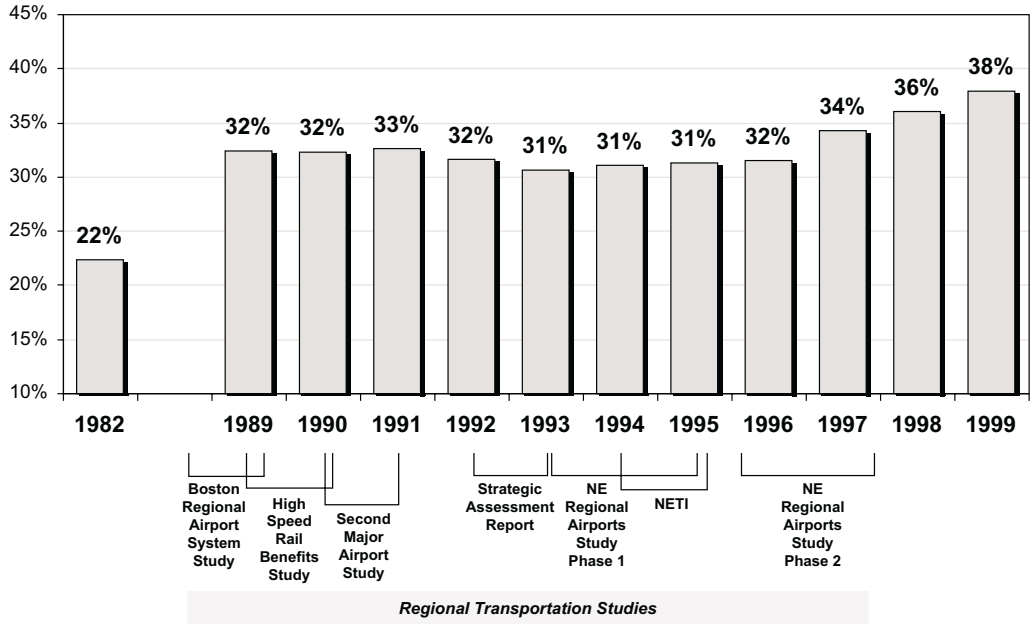
2.1 Overview

Even before the inception of the Airside Improvements Planning Project various concerned citizens and transportation planners have questioned whether increased utilization of other airports and high-speed rail would negate the need for Airside Project improvements at Logan. This question was also raised during the Supplemental DEIS Panel process. Both opponents and proponents of the proposed Logan Airside Project improvements agree that increased utilization of other facilities and modes is a necessary strategy for meeting the growing demand for inter-city travel and maintaining the region's economic success. But, even with high utilization levels, regional airports and high-speed rail would not reduce Logan's demand to levels that would solve Logan's delay problem.

Enhancing the region's transportation infrastructure requires continued development of regional transportation options and investment to improve the efficiency of Logan Airport. The analyses in the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR clearly demonstrate that regional airports and improved rail services are not "alternatives" but rather "complements" to the proposed infrastructure improvements at Logan. Regional airports and high-speed rail are part of a balanced and efficient regional transportation system. Developing and promoting these options will slow the growth in future demand for Logan Airport, but will not eliminate Logan's essential role in the regional transportation system.

Transportation planners have long identified the need for other airports and transportation modes to accommodate a greater share of the region's travel demand. Historically, Logan accommodated the majority of the region's demand for high-speed, inter-city travel, accounting for more than three-quarters of the region's air passengers in the early 1980s. Transportation agencies, including Massport, have actively pursued strategies to increase the use of regional transportation options with the goal of reducing the region's reliance on Logan Airport. Through a combination of these efforts and market forces, the regional airports have increased their share of New England's air passengers from 22 percent in the early 1980s to 38 percent in 1999 (Figure 2.1-1).

Figure 2.1-1
Regional Airports' Share of New England Air Passengers



Source: U.S. DOT, Form 41, Part 298/C and airport records.

While regional transportation options increase the efficiency of the overall transportation system, they do not diminish the need for an efficient Logan Airport. Logan plays a critical role in the regional transportation system by serving the Boston market area, which represents the largest concentration of population and commerce in the entire six-state region. As the most populous area in New England, Boston is also the region's largest generator of inter-city trips. In the global economy, high-speed access to distant markets on this continent and beyond is increasingly important to the region's economic success. Since the region's demand is primarily concentrated in the Boston area, Logan is the cornerstone of a regional transportation system and the principal airport for reaching distant long-haul domestic and international markets.

Ongoing efforts to improve regional transportation options are already changing the dynamics of inter-city travel to and from New England. Passenger traffic at the regional airports has increased by 13 percent per year since 1996, while Logan's passenger traffic grew by only 2.5 percent. As efforts to develop regional options have increased, Logan's share of the region's air passengers has declined from 68 percent in 1996 to 62 percent in 1999.

Although more passengers than ever are choosing regional airports and Logan's passenger growth has slowed, flight delays at Logan have not abated. The analysis conducted during this Airside Project EIS/EIR review process as well as all FAA and Department of Transportation (DOT) data, show a consistently high level of flight delays at Logan even as passenger growth has slowed.

While there are several causes of the delays that Logan passengers experience, a principal cause of Logan's delay problem is the inability of the airport to handle normal demand

during strong northwest winds. Proposed unidirectional Runway 14/32 is specifically designed to correct the underlying shortcoming in the airfield layout that causes excessive delays in northwest winds. There is no regional transportation alternative that could address the limitations in Logan's existing runway geometry and eliminate northwest wind delays.

Several regional transportation planning studies have concluded that regional transportation options and physical improvements at Logan are both essential for satisfying New England's transportation need. The region must work to expand transportation options and at the same time improve the efficiency of Logan Airport. This was reiterated by independent transportation experts who participated in the Supplemental DEIS Panel process. A truly regional transportation system cannot function without an efficient Logan Airport and Logan cannot operate efficiently if the source of northwest wind delays is not addressed.

The Airside Project Draft EIS/EIR presented a detailed description of Logan's role within the broader regional transportation network and an analysis of alternatives to Logan Airport that included regional airports, rail and videoconferencing. It was estimated that these alternatives could divert up to 7.3 million air passengers from Logan over the next decade.

The Secretary of the Executive Office of Environmental Affairs (EOEA) May 7, 1999 Certificate on the Airside Project Draft EIS/EIR[3] requested that Massport report on the current status of ground access improvements at the regional airports and their potential impact on future passenger levels; update estimates of passenger diversion to regional alternatives; and summarize the environmental impacts of regional airport expansion. Based upon discussions during the SDEIS Panel process, the FAA also stressed the importance of regional system planning and requested that Massport expand the regionalization analysis by reporting on the planned New England Airports System Study. This study will identify additional regional strategies for reducing Logan delays, by adding historical context to regional planning issues, and by describing the on-going nature of regionalization efforts. This chapter responds to these concerns by:

- Summarizing key points from the Airside Project Draft EIS/EIR
- Describing the regionalization of air transportation in the eastern New England area and presenting an expanded regional transportation analysis
- Discussing the increasing role of the regional airports in accommodating the region's air travel demand and the evolving role for Logan within the regional airport system
- Addressing the roles that T.F. Green/Providence, Manchester, Worcester Regional, Hanscom, and Logan airports can play in the emerging regional aviation system
- Analyzing the potential Logan traffic relief that could be provided by Worcester Regional Airport

3 The Commonwealth of Massachusetts, Executive Office of Environmental Affairs, Certificate of the Secretary of Environmental Affairs on the *Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report*, May 7, 1999.

- Summarizing the status of various rail projects and their potential to divert passengers from Logan
- Discussing the impact of all of the regional alternatives (regional airports and rail), on the future demand for Logan and the need for Airside Project improvements
- Reporting on the status of proposed ground access improvements at Logan, Manchester, T.F. Green / Providence and Worcester Regional airports
- Summarizing the documented environmental impacts of growth at the regional airports (See Appendix B of this Supplemental DEIS / FEIR)

The findings of this expanded regional analysis are consistent with the conclusions of the Airside Project Draft EIS / EIR: (1) even with increased utilization of the regional airports and high-speed rail, the demand for Logan services generated within its primary market area (inside I-495) will continue to grow; (2) in light of this continuing demand for air service out of Logan, delays will not improve solely as a result of increased utilization of regional airports and high-speed rail; and (3) Logan's current and projected level of delay can be relieved only through the additional Airside Project improvements that comprise the Preferred Alternative.

2.2 The New England Regional Airport System

2.2.1 Logan Airport's Role in the Regional Airport System

Boston is the largest metropolitan area and the center of commercial activity in New England. In 1999, there were 3.9 million people residing in the Boston metropolitan area, or 29 percent of New England's total population (Figure 2.2-1). Boston's high concentration of people, businesses, and attractions, makes it the largest generator of inter-city passenger trips in the region. Since air travel demand is primarily a function of the local population base, income levels, and economic activity, Boston's Logan Airport has naturally developed into the largest and busiest airport in the six-state region.

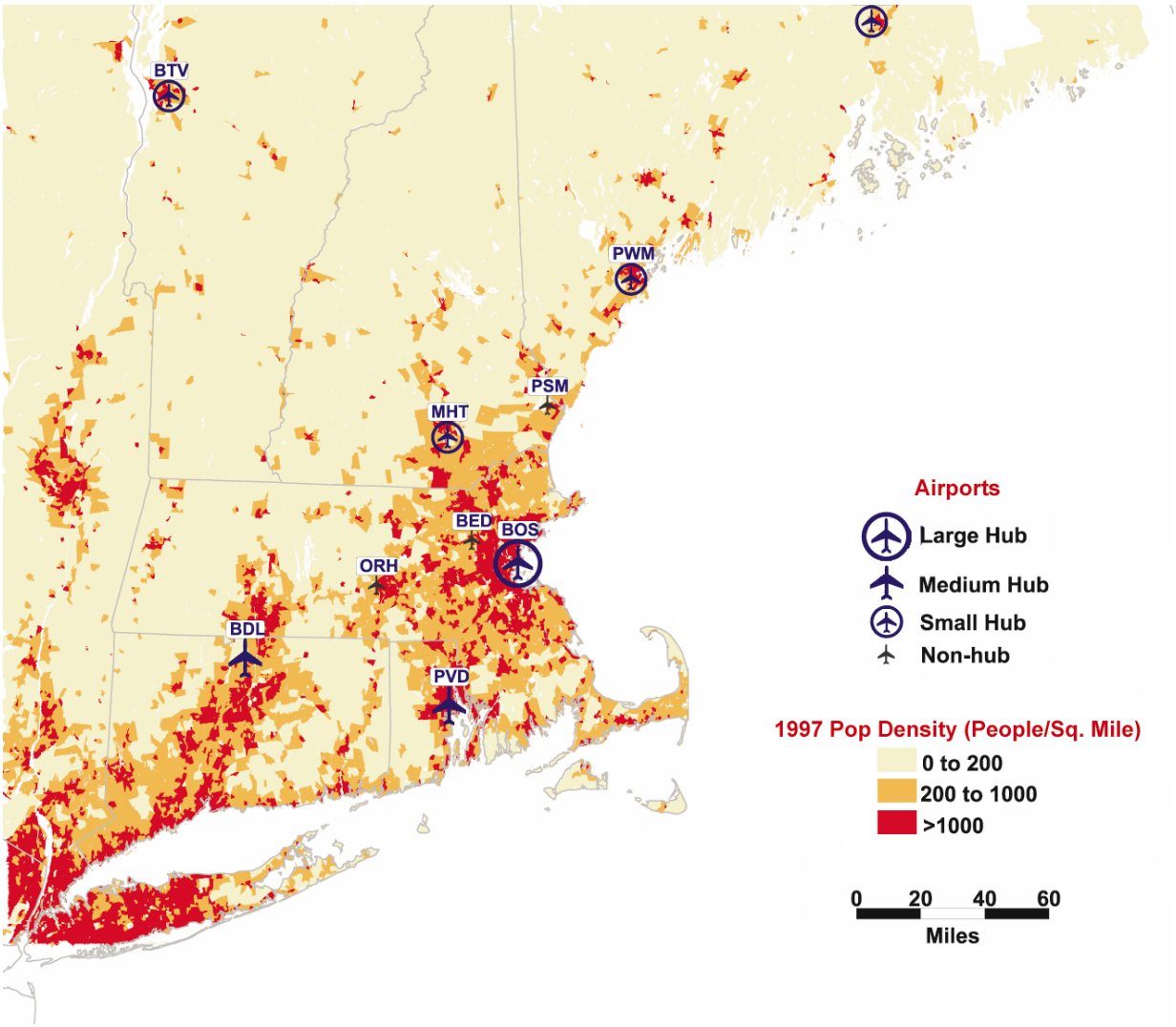


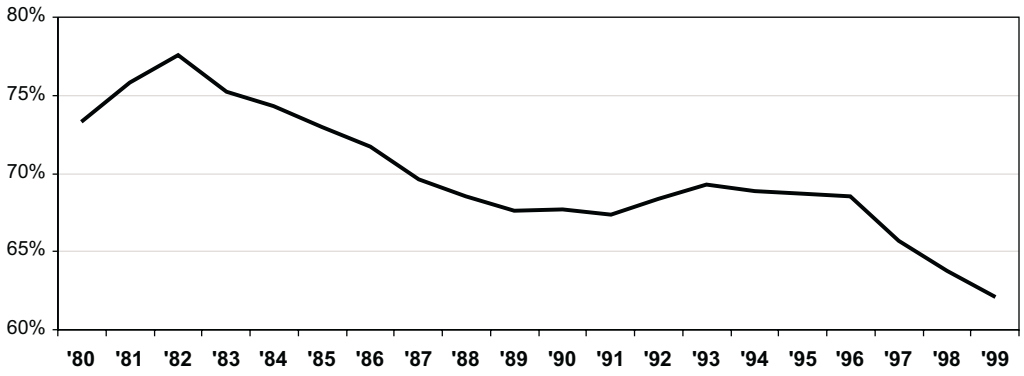
Figure 2.2-1

New England's Population is Highly Concentrated in the Metropolitan Boston Area

7466-FIG-2.2-1.p65

As Figure 2.2-2 shows, Logan historically has accommodated most of the air passenger activity in New England, in addition to the demand generated by the Boston area. In the early 1980s, Logan accounted for a disproportionate share of the region's air travel demand capturing more than three-quarters of New England's air passengers. By the late 1980s, Logan's passenger share declined to 68 percent as airlines responded to deregulation by adding services to other New England airports. However, in the early 1990s, when economic conditions weakened, air travel demand declined throughout the region. As a result, the regional airports failed to gain ground and Logan's passenger share remained constant at around 68 percent.

Figure 2.2-2
Logan's Share of Passenger Enplanements in New England



Note: Includes enplaned passengers at Logan, Hartford/Bradley, T.F. Green/Providence, Manchester, Portland, Burlington, Bangor, Tweed New Haven, and Worcester.

Source: US DOT, Form 41 and Part 298/C. Airport records for Logan and various regional airports.

Recognizing that the region's demand for air travel would grow over time and that Logan was becoming increasingly delayed, transportation planners began to develop regional transportation strategies to actively promote growth at the region's other airports and to develop alternative modes to air travel. Since 1989, a series of transportation planning studies, which are summarized in Table 2.9-2, examined regional transportation options for accommodating future demand. Many of these studies were cooperative efforts that reached across transportation agencies and state borders and involved public participation.

The outcome of the regional transportation studies was a shared commitment among the New England states, Massport, and other transportation agencies to develop and promote inter-city travel options throughout the region. Recommendations included increasing the use of underutilized airports and developing high-speed rail as an alternative mode to air travel. The studies also recognized Logan's central role in the region's intercity travel network and consistently concluded that landside and airside infrastructure improvements, which would improve the efficiency of Logan, were a critical component of a successful regional transportation strategy.

Many of the regional transportation strategies articulated by these studies are being implemented and are having a meaningful impact on intercity travel to and from New England. In terms of air travel, the region has further reduced its reliance on Logan Airport. In 1999, Logan enplaned 62 percent of the region's air passengers compared to 68 percent in 1990 and 78 percent in 1980. The decline in Logan's share is a result of coordinated efforts to increase air service options at the regional airports.

The growth exhibited by the regional airports is changing the role of Logan within the broader regional airport system. In the new regional environment, Logan is serving two primary functions. First, because of its proximity to the greatest concentration of travel demand in the region, Logan is the primary airport for passengers originating within Interstate 495. Logan is the best airport for serving the majority of the air travel needs of these passengers. It is not only the closest airport for most of these passengers, but it receives service from more airlines to more destinations than any other airport in New England.

Logan also functions as the primary airport for the long-haul[4] domestic and international travel needs of the entire region. Currently, there is only a single daily flight from a regional airport to a long-haul domestic market[5] and no scheduled flights to overseas destinations. Long-haul services have not developed at the regional airports, because the areas served by the regional airports lack a sufficient base of demand for travel to these destinations as well as connecting traffic. Opportunities for future growth in long-haul domestic and international services at the regional airports will be explored in the upcoming New England Regional Airport System Plan. For the foreseeable future, Logan is the only airport in New England that can serve as an international gateway for the region.

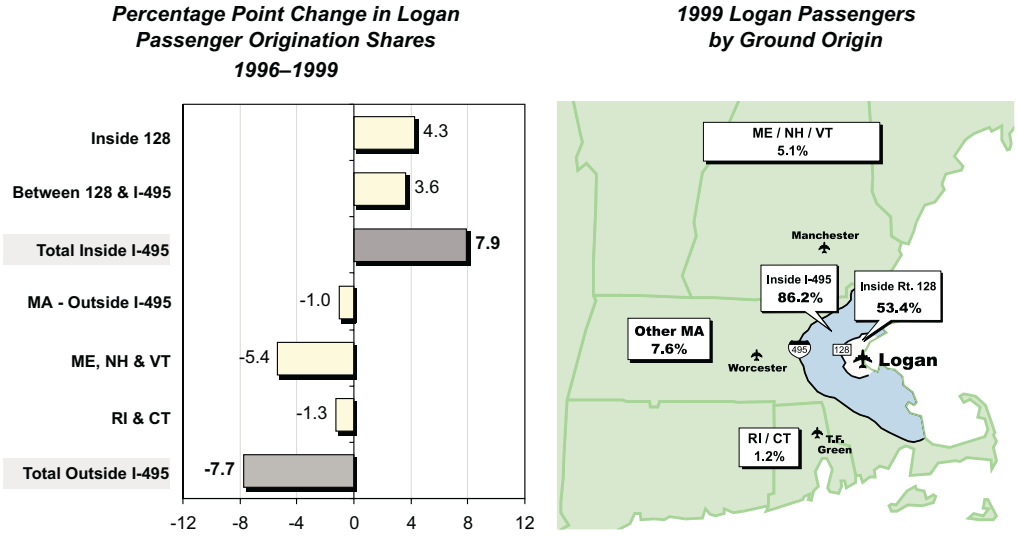
Logan's role as the primary airport for passengers that originate outside of I-495 has already diminished and is expected to diminish even further over time. Several of the regional airports have made considerable gains in obtaining direct services to short-haul high density markets and airline connecting hubs. Massport and the regional airport authorities are working together to ensure continued growth in air services at the regional airports.

The Logan Airport 1999 Air Passenger Survey, which tracks ground origin patterns of Logan Airport passengers over time, indicates that the geographic area which Logan serves has narrowed over time. As Figure 2.2-3 shows that in 1993 and 1996, approximately 20 percent of Logan's passengers originated from cities and towns outside of I-495. The most recent survey shows that in 1999 the share of Logan's passengers originating outside of I-495 decreased to just over 14 percent. These data confirm that aggressive service expansion at the surrounding regional airports is diverting passengers from Logan to the regional airports. The 1999 Air Passenger Survey data implies that approximately 2.4 million air passengers opted to use one of the regional airports instead of Logan.

4 Long haul markets are markets that are over 1,500 miles in distance.

5 Southwest Airlines operates a daily flight from T.F. Green/Providence to Houston Hobby Airport in Texas. Additional long-haul domestic services are available at the Hartford/Bradley Airport, but, because of distance, this airport is not an option for air travelers in the Boston metropolitan area.

Figure 2.2-3
Logan's Passenger Demand is Concentrated within I-495



Source: Massport Logan Passenger Survey, 1996, 1999

In addition to expanded service options at the regional airports, high-speed rail is also expected to relieve some of the burden on Logan Airport. On December 11, 2000, Amtrak initiated its high-speed Acela service, between Boston's South Station and New York's Pennsylvania Station offering passengers an alternative mode to air travel. This service, which continues on to Washington, DC represents an attractive and competitive option to high-speed air travel in the Northeast Corridor. As this service develops and more trains are added to Amtrak's schedule, as many as 1.2 million passengers[6] are expected to switch from air travel to rail travel, further reducing the region's reliance on Logan for travel to short-haul markets.

2.2.2 The Role of Regional Airports

In addition to Logan, the New England region is also served by several smaller commercial service airports throughout the six-state area (see Figure 2.2-4).[7] The regional airports closest to Logan's core service area, defined as the region within Interstate 495, have the greatest potential for serving some of the demand that has historically used Logan Airport. These airports include the T.F. Green / Providence Airport to the south, Manchester Airport to the north, and Worcester Regional Airport to the west. In 1999, these airports accommodated a combined total of 8.0 million passengers, approximately 30 percent of Logan's passenger traffic. These have been among the fastest growing airports in New England. In 1997 and 1998, T.F. Green / Providence Airport and Manchester Airport, respectively, were the fastest growing airports in the nation. In

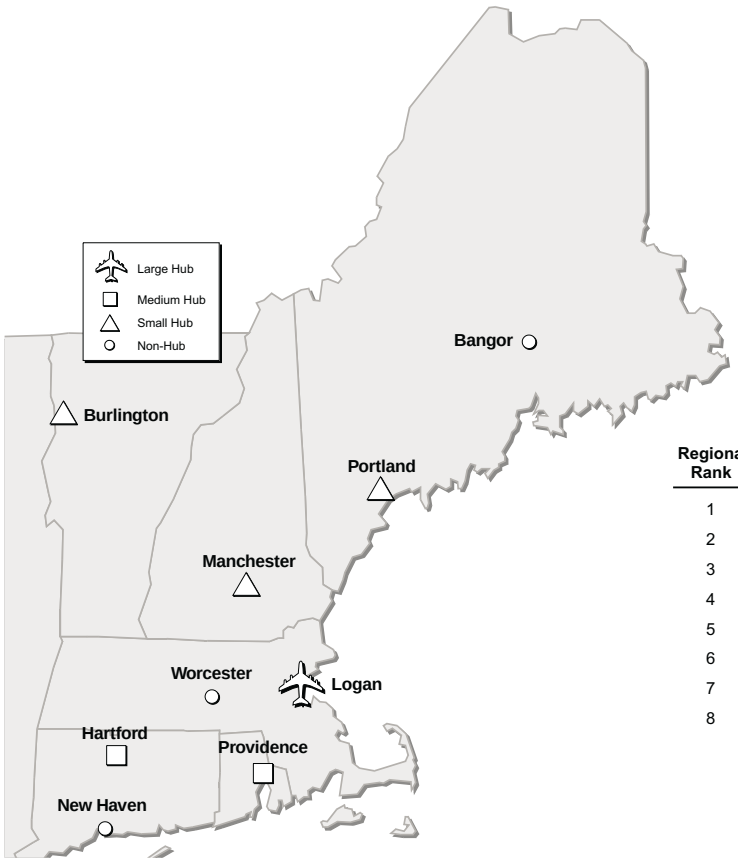
6 Final EIS/EIR and 4(f) Statement, Northeast Corridor Improvement Project, U.S. DOT, Federal rail Administration, October 1994.

7 The *New England Regional Airports Air Passenger Service Study* defined the Hartford, Providence, Manchester, Portland, Bangor, Burlington, Worcester and New Haven airports as the region's principal commercial airports, other than Logan Airport, since all of these airports either supported or had previously supported commercial jet passenger services. Limited commercial passenger service was subsequently introduced at Hanscom Field in Bedford, Massachusetts and at Pease International in Portsmouth, New Hampshire in 1999. Commercial service at Hanscom Field is on regional airline turboprop aircraft while Portsmouth is served with jet aircraft.

2000, passenger traffic at Worcester Regional Airport more than doubled as a result of Massport's aggressive efforts to attract new airline services to Worcester. The remarkable growth at these airports signals an important change in how the region's air travel demand is accommodated. Through extensive investments and growth in new, competitive services, the regional airports have become attractive service options and are capturing increasing numbers of passengers that have historically relied on Logan Airport.

In 1999, Manchester and T.F. Green / Providence remained the fastest growing airports in New England, with passenger levels increasing by 45 and 11 percent, respectively, over 1998 levels (see Table 2.2-1). Hartford / Bradley International, the largest of the regional airports, grew by only 2.1 percent in 1999, but growth for 2000 increased to double digits due to the initiation of Southwest Airlines' service at the end of 1999. Over the past decade, the Worcester Regional Airport experienced a steep traffic decline, but that trend was reversed in 2000. New airline services initiated at Worcester Regional Airport in February and July 2000 caused passenger activity levels to more than double from 50,000 in 1999 to 106,000 by the end of 2000.

Figure 2.2-4
Principal Commercial Service Airports in New England



Regional Rank	Airport	CY 1999 Passengers
1	Hartford/Bradley	5,751,578
2	T.F. Green/Providence	5,146,854
3	Manchester	2,825,136
4	Portland	1,372,016
5	Burlington	871,110
6	Bangor	418,838
7	Tweed/New Haven	90,808
8	Worcester	49,976
	Subtotal	**16,526,304**
	Logan	27,052,078
	Total Region	**43,578,382**

Note: Passengers are enplaned/deplaned passengers For Logan Airport and enplaned passengers times 2 for regional airports.

Table 2.2-1
Passenger Activity at New England Regional Airports and Logan Airport – 1998 to 1999

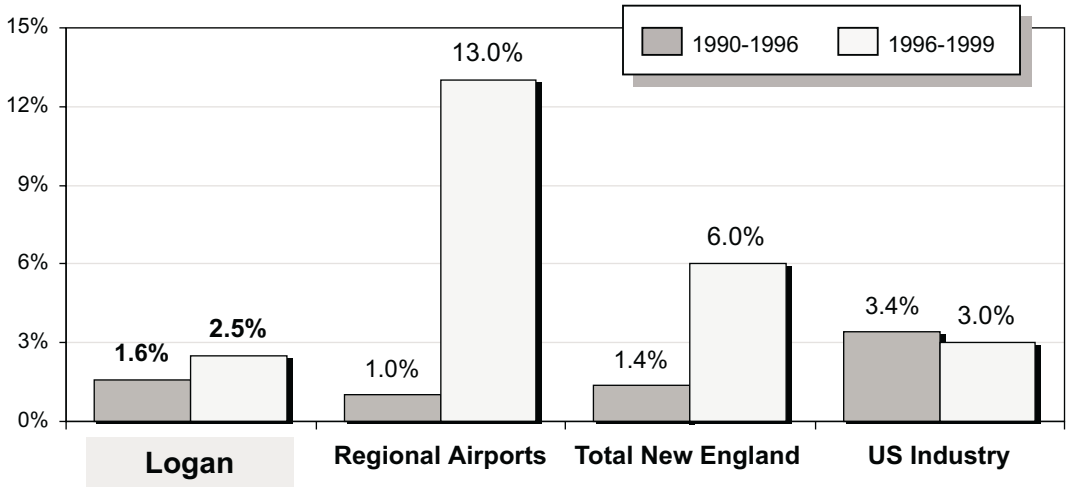
Airport*	1998 Passengers** (millions)	1999 Passengers** (millions)	Percent Change	Percent of Total
Hartford Bradley International, CT	5.63	5.75	2.1	13.2
T.F. Green/Providence, Warwick, RI	4.62	5.15	11.3	11.8
Manchester, NH	1.94	2.83	45.4	6.5
Portland, ME	1.31	1.37	5.0	3.1
Burlington, VT	0.88	0.87	(0.8)	2.0
Bangor, ME	0.45	0.42	(7.7)	1.0
Tweed New Haven, CT	0.09	0.09	1.1	0.2
Worcester, MA***	0.08	0.05	(35.2)	0.1
Subtotal	15.01	16.53	10.1	37.9
Logan Airport+	26.53	27.05	2.0	62.1
Total	41.53	43.58	4.9	100.0%

Source: The New England Regional Airports – 1999 Annual Summary, Massport.
* New England airports that have historically supported regularly scheduled passenger services.
** Enplaned plus deplaned passengers.
*** In 2000, Worcester Regional Airport passengers more than doubled from approximately 50,000 in 1999 to 106,000 passengers.
\+ Includes international passengers.

From 1996 to 1999, passengers using the regional airports increased by 13 percent a year, while passenger traffic at Logan Airport increased by only 2.5 percent annually (Figure 2.2-5). This is in contrast to the period from 1990 to 1996, when Logan's passenger traffic increased by 1.6 percent and the regional airports grew more slowly, at 1.0 percent per year. The significance of this is that, since 1996, the regional airports began to accommodate an increasing share of the region's passenger traffic.

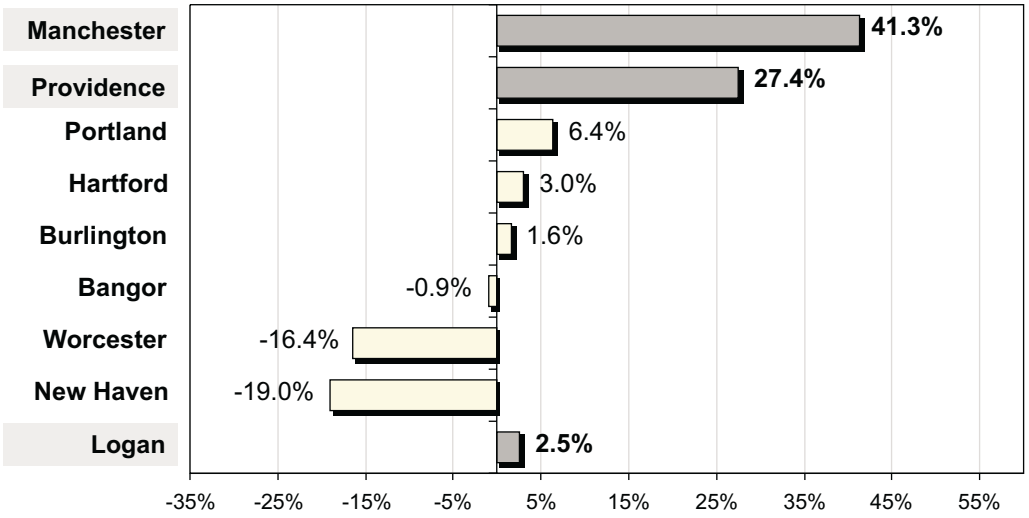
The regional airports have been able to increase their share of the region's travel demand because airlines have begun to change the way in which they serve the region. Historically, the airlines concentrated their services at Logan and only offered limited air services at the regional airports. Regional airport services were infrequent, higher-priced, operated with smaller, less desirable turboprop aircraft, and required connecting flights to reach most destinations. In 1996, the regional airports, particularly T.F. Green / Providence and Manchester, began to receive significantly improved services, including lower-priced flights, more frequencies, and more direct jet flights, due in part to marketing efforts by individual airports, as well as cooperative marketing efforts. As a result, these airports have experienced exceptional air passenger growth (Figure 2.2-6).

Figure 2.2-5
Comparison of Air Passenger Growth Trends for New England and the US – Average Annual Passenger Growth



Source: Massport, and FAA, FAA Aerospace Forecasts, various years.

Figure 2.2-6
Average Annual Passenger Growth by Airport– 1996 to 1999



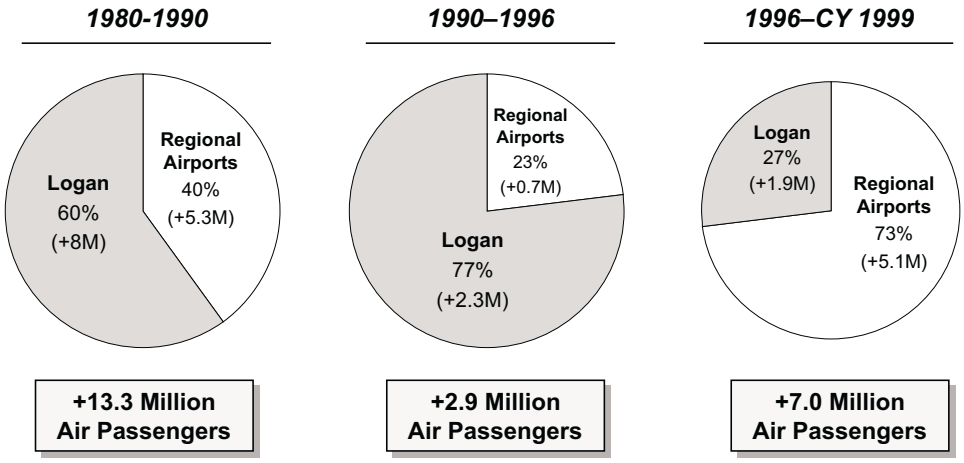
Note: Based on enplaned and deplaned passengers.
Source: Massport and regional airport authorities

The groundbreaking *1995 New England Air Passenger Service Study*, which was the first study to assess air service opportunities from a regional perspective, identified the need for low-fare services at the regional airports. The study concluded that the introduction of low-fare, jet services would increase the utilization of the regional airports. If services at the regional airports were competitive with services at Logan, the regional airports would be able to attract passengers who originate within the regional airport service areas, but travel to Logan Airport for air service. This study led to the first cooperative air service marketing efforts in the region and a change in perceptions among airline planners as to how to serve the New England market.

Higher service levels have raised the profile of regional airports, particularly T.F. Green / Providence and Manchester, and transformed them into attractive options for many Logan Airport passengers. A major accomplishment has been the introduction of Southwest Airlines, the nation's premiere low-fare carrier, into the New England market. Southwest Airlines decided to avoid Logan Airport and to serve the Boston Metropolitan region by establishing operations at T.F. Green / Providence, Manchester and Hartford / Bradley International airports.[8] This is further evidence that Logan and the regional airports are operating as a regional system of airports.

As Figure 2.2-7 shows, since 1996, the regional airports have accommodated most of the air passenger growth in New England. During the 1980s and the early 1990s, Logan accommodated 60 to 77 percent of the region's new passenger traffic. More recently, from 1996 to 1999, only 27 percent of the region's passenger growth occurred at Logan Airport and 73 percent occurred at the regional airports.

Figure 2.2-7
Distribution of New England Passenger Growth – Regional Airports vs. Logan



Note: Regional airports include Providence, Manchester, Worcester, Bangor, Burlington, Hartford, New Haven, and Portland.
Source: Airport Records and US DOT, Form 41 schedules.

8 Southwest Airlines began service from Hartford/Bradley International Airport in 1999 with 12 nonstop departures per day.

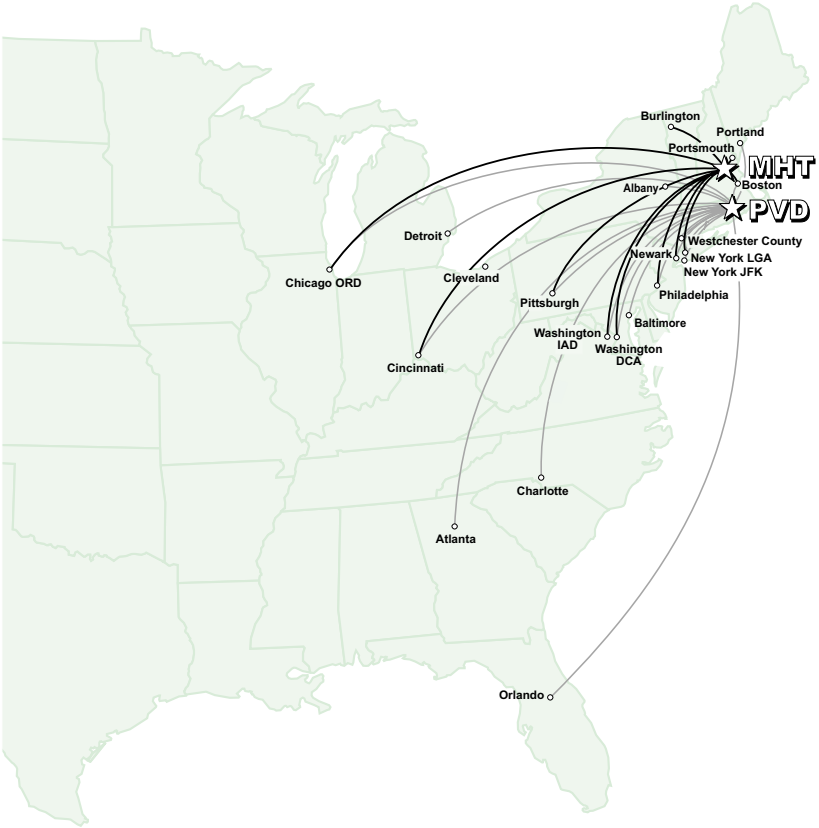
Regional airports are playing a larger role in serving the region's demand because they have benefited from substantial increases in air service offerings over the last three years. The airports that have benefited the most by achieving a critical mass of competitive services are the ones closest to the core Boston Logan Airport service area, i.e. T.F. Green / Providence and Manchester airports.

2.2.3 T.F. Green/Providence Airport

In October 1996, Southwest Airlines and Delta Express both commenced low-fare jet services at T.F. Green / Providence Airport.[9] Southwest Airlines, which strategically offers low-fare, short-haul, high-frequency, point-to-point service, is the nation's fourth largest airline in passenger boardings. Figure 2.2-8 displays non-stop service from Providence (and Manchester) to key destinations in the eastern US. Southwest Airline's entry at T.F. Green / Providence Airport was also its first entrance into the New England market.

Figure 2.2-8
Comparison of Nonstop Jet and Turboprop Markets Served from T.F. Green/ Providence and Manchester Airports– August 1995 and August 2000

August 1995 Service



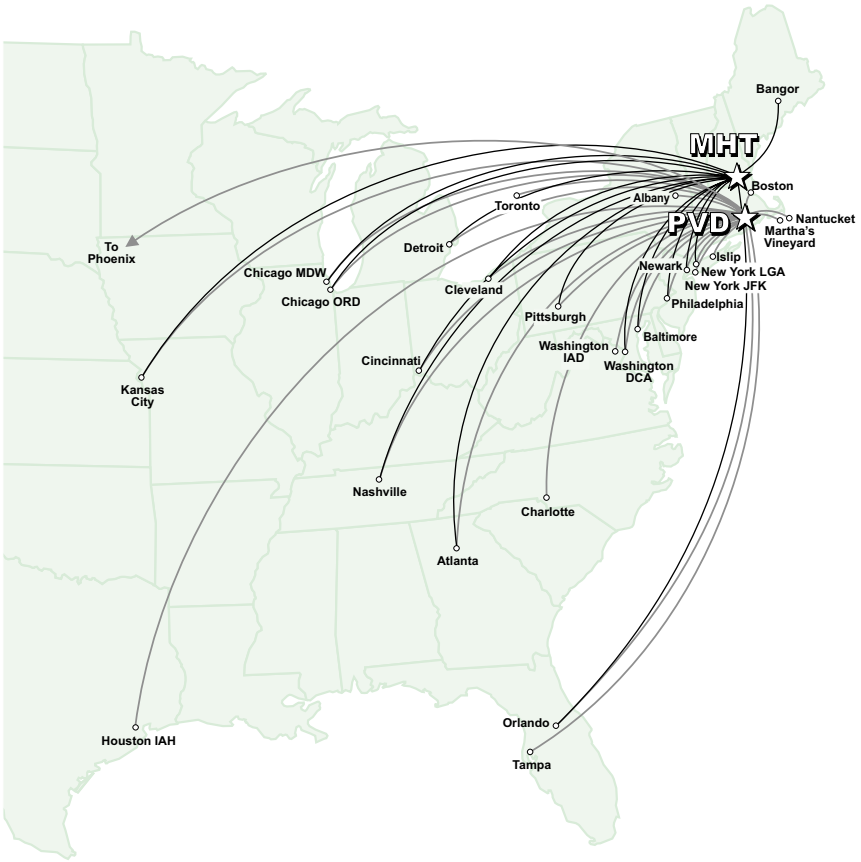
9 Both airlines initiated service in October 1996. Delta Express served the market for the entire month, while Southwest service commenced on October 27, 1996.

Southwest began its operation at T.F. Green / Providence Airport with 14 daily, nonstop flights to several key business and leisure markets: Baltimore / Washington, Chicago Midway, Orlando, Tampa and Nashville. By December 1999, Southwest Airlines increased its overall services at T.F. Green / Providence to 23 daily, nonstop departures. In 2000, Southwest Airlines continued to expand its services and now provides 27 daily, nonstop departures from T.F. Green / Providence.

Also in October 1996, Delta Express, a low-fare subsidiary of Delta Air Lines, inaugurated low-fare jet services at T.F. Green / Providence, providing two daily, nonstop flights to Orlando and a daily, one-stop flight to West Palm Beach.[10]

Figure 2.2-8 (Cont'd)
Comparison of Nonstop Jet and Turboprop Markets Served from T.F. Green/ Providence and Manchester Airports– August 1995 and August 2000

August 2000 Service



10 Delta Express service between T.F. Green and West Palm Beach was subsequently discontinued.

Other significant service improvements at T.F. Green / Providence Airport are as follows:

- In June 1998, US Airways' low-fare service operation, MetroJet, entered the T.F. Green / Providence market with six daily nonstop flights to Baltimore, with connecting services to Florida destinations. By August 1998, MetroJet had increased its service to seven daily, nonstop departures from T.F. Green / Providence Airport.
- In 1998, Air Ontario, an Air Canada regional commuter carrier, began serving the Providence-Toronto, Ontario market with three, daily, roundtrip, non-jet commuter flights.
- In 1999, Continental Airlines began offering nonstop service to Houston. It also supplemented its nonstop Cleveland jet service with two daily roundtrip flights on regional jets. In 1999, Continental upgraded its nonstop services to Newark from turboprop to large jet aircraft.
- In 2000, Southwest Airlines added four daily nonstops services to Islip and one daily nonstop service to Phoenix.
- Also in 2000, Atlantic Coast, a regional partner with United Airlines, upgraded its service to Washington Dulles Airport from turboprop to regional jet aircraft.

The introduction of these services to the Providence market has been highly successful. Between 1996 and 1999, passenger traffic at T.F. Green / Providence Airport increased by 2.7 million passengers. In 1997, the year after the beginning of Southwest Airlines and Delta Express services, the airport achieved 63.5 percent passenger growth, making it the fastest growing United States airport in 1997. In 1998, growth slowed to 13.7 percent, and in 1999, to 11.3 percent, but it is still well above the average growth rate for the New England region and the United States industry.

Over the last several years, the Rhode Island Airport Corporation (RIAC) and the FAA have made a number of capital investments at T.F. Green / Providence including:

- Construction of a $207-million terminal building with seven additional aircraft gates, and addition of a dual level roadway and access road.
- Construction of two 1,500-space parking garages to accommodate the increase in automobile traffic.
- Construction of various taxiway and runway improvements, including a Category II Instrument Landing System (CAT II ILS), to accommodate the increase in aircraft traffic.
- Construction of a new Federal Inspection Services (FIS) facility.
- On-going residential and school sound insulation.

RIAC is about to embark on a new airport master plan for the T.F. Green / Providence Airport to address future airport needs. This will be, at least, a 2-year effort that will consider the feasibility of extending both runways.

2.2.4 Manchester Airport

In June 1998, Southwest Airlines continued its expansion into the New England market by inaugurating services at Manchester Airport in New Hampshire. The airline began serving Manchester with 12 daily, nonstop flights to key markets including Baltimore / Washington, Chicago Midway, Nashville and Orlando. By 1999, Southwest Airlines added one daily, nonstop flight to Kansas City, totaling 13 daily departures.

In June 1998, MetroJet also commenced services at Manchester Airport. MetroJet offered four daily, nonstop jet departures to Baltimore / Washington, with connecting services to Florida destinations. By August 1998, MetroJet increased its nonstop Baltimore service to five daily, nonstop flights.

Other key service improvements at Manchester Airport are as follows:

- In 1998, Northwest Airlines introduced three daily, nonstop jet flights to its Detroit connecting hub; by 2000, it increased its service to five daily flights during the peak travel months.

- In 1999, Continental Express inaugurated twice-daily, nonstop service to Cleveland with regional jet aircraft. In 2000, Continental upgraded its Manchester-Newark services from turboprop aircraft to large jet and regional jet aircraft.

- In February 2000, Delta Air Lines added two daily nonstop regional jet flights to its Atlanta hub. Later in the year, Delta upgraded the service to large jet aircraft.

Consistent with the experience at T.F. Green / Providence Airport, the introduction of these services at Manchester substantially increased passenger traffic. Between 1996 and 1999, passenger traffic increased by 1.6 million passengers. In 1998, traffic increased by 73.6 percent over the prior year, making Manchester the fastest growing airport in the United States. Extraordinary growth at Manchester continued in 1999, with passenger traffic increasing by 45.4 percent over the preceding year.

Since the early 1990s, significant capital investments at Manchester Airport have included:

- Construction of a 158,000-square-foot passenger terminal.

- Construction of a six-level parking garage with a capacity for 4,800 cars.

- Construction of a new airport entrance road.
- Construction of a 97,000-square-foot general aviation terminal.
- Reconstruction / extension / instrumentation of Runway 6 / 24 from 5,000 feet to 7,000 feet.
- Construction of a new United States Customs facility.
- Ongoing residential sound insulation.

Most of the FAA funds for the development of Manchester's new terminal in the 1990s were discretionary funds provided by the Military Airport Program (MAP). MAP is a special feature of the Airport Improvement Program (AIP) allocated to former military bases that can serve to complement congested airports such as Logan Airport. Manchester Airport expects to handle five to seven million annual passengers by 2005. In November 2000, the Manchester Airport Authority announced plans to seek $121.5 million to fund additional airport development over the next five years. The plan calls for two terminal building additions, including a 70,000-square-foot addition, construction of a second parking garage, and roadway improvements. When completed in 2005, the project will have added eight additional aircraft gates. The second parking garage will be similar in size to the recently completed garage with more than 4,000 spaces. Recently the FAA announced approval of Manchester Airport's request for a Letter of Intent (LOI) of approximately $60 million over the next seven years to reconstruct and extend Runway 17 / 35 from 7,000 feet to 9,000 feet.

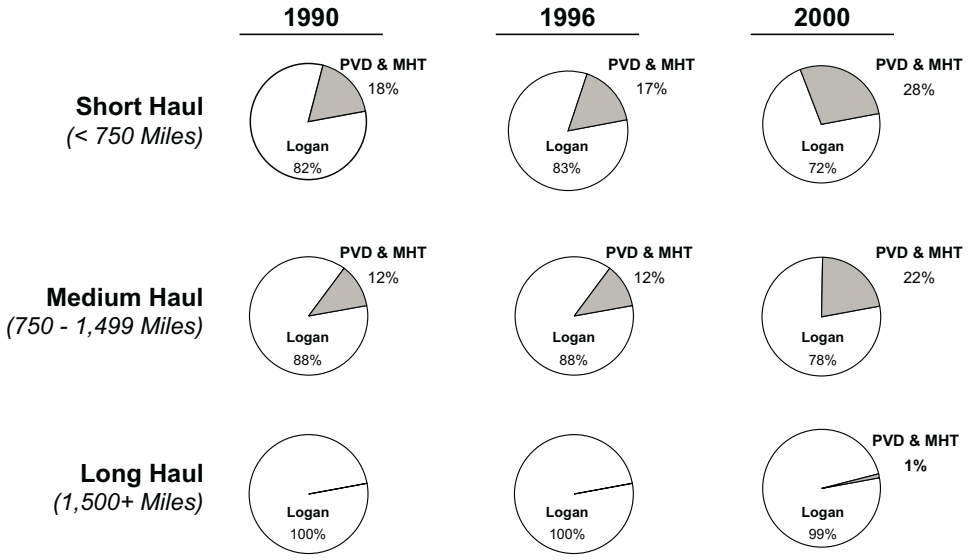
On the air service side, airport management is instituting an aggressive marketing program to attract new airline services to Manchester Airport.

2.3 The Complementary Roles of Logan and the Regional Airports in a Regional Airport System

The recent airline service expansions at the T.F. Green / Providence and Manchester airports are significant accomplishments from a regional planning and development perspective. The expanded service offerings have created true airport options for air passengers, and have effectively expanded the roles of these airports in serving the region's air travel demand. These airports now have a critical mass of low-fare, direct services to popular short- (under 750 miles) and medium-haul (750 to 1,499 miles) destinations giving many passengers that originate north and south of I-495 an attractive option to Logan Airport.

The T.F. Green / Providence and Manchester Airports now offer a considerable portion of the available airline services in the region. In 2000, the Providence and Manchester Airports provided 28 percent of available seat capacity to short-haul markets. Earlier, in 1990 and 1996, Providence and Manchester were providing less than 20 percent of short-haul seat capacity (Figure 2.3-1). Similarly, their service share to medium-haul markets rose from 12 to 22 percent, but their share of long-haul capacity increased to just one percent.

Figure 2.3-1
Share of Nonstop Seat Capacity by Market Distance – T.F. Green/Providence and Manchester Compared to Logan Airport for 1990, 1996 and 2000



* Based on Daily Seats for August of Each Year.

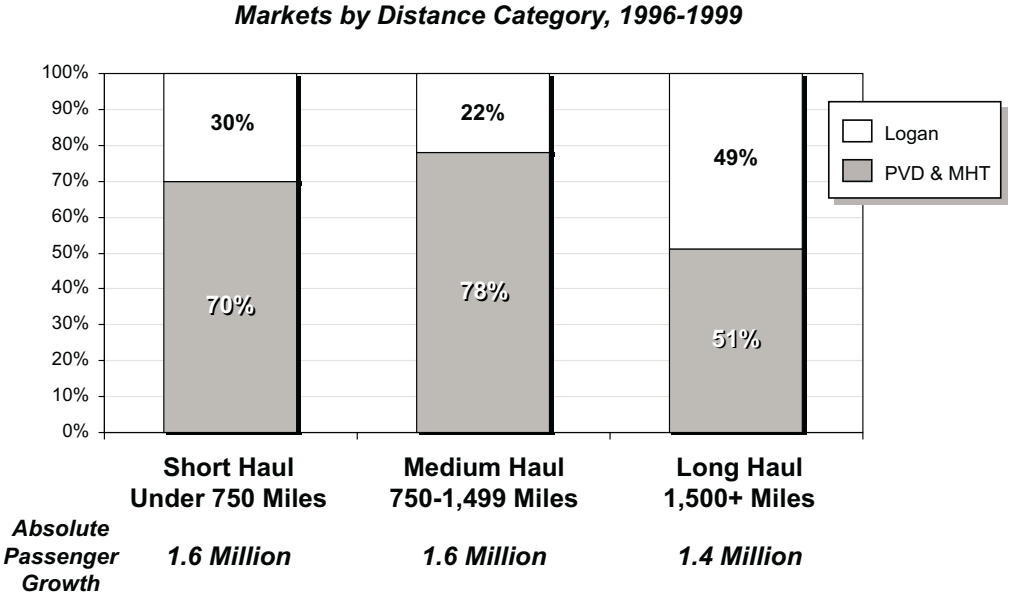
Source: Official Airline Guide, August 1990, 1996 and 2000

While the T.F. Green / Providence and Manchester Airports have increased their roles in the short- and medium-haul sectors, lower overall traffic densities within their respective market areas will prevent them from materially penetrating the thinner, long-haul market sector. Because of basic airline operating economics, Logan itself is served with fewer nonstop flights to long-haul markets, such as Los Angeles, compared to frequently traveled-to short-haul markets, such as New York. Hence, it is unlikely that the smaller, less-dense markets at T.F. Green / Providence, Manchester, and other regional airports could support a significant level of nonstop, long-haul services. Logan will remain the region's primary airport for reaching long-haul domestic and international destinations, while also serving the short- and medium-haul demand generated within its core market area (the area inside I-495).

By garnering a critical mass of services in the short- and medium-haul market segments, the T.F. Green / Providence and Manchester airports have been able to accommodate the majority of the region's passenger growth in these segments. From 1996 to 1999, short-haul demand generated by the three-airports increased by 2.3 million passengers. Seventy percent of this growth, or 1.6 million, new, short-haul passengers used the T.F. Green / Providence or Manchester Airports instead of Logan Airport (see Figure 2.3-2).

The substantial increase in medium-haul services at the two regional airports had a similar impact on airport usage. The three-airport system generated 2.0 million more medium-haul passengers, with the T.F. Green / Providence and Manchester Airports accommodating 78 percent of the increase, or more than 1.6 million passengers, as Figure 2.3-2 shows.

Figure 2.3-2
Share of Absolute O&D Passenger Growth in the Logan/T.F. Green/Providence/ Manchester Airport System – By Market Distance Category, 1996 - 1999



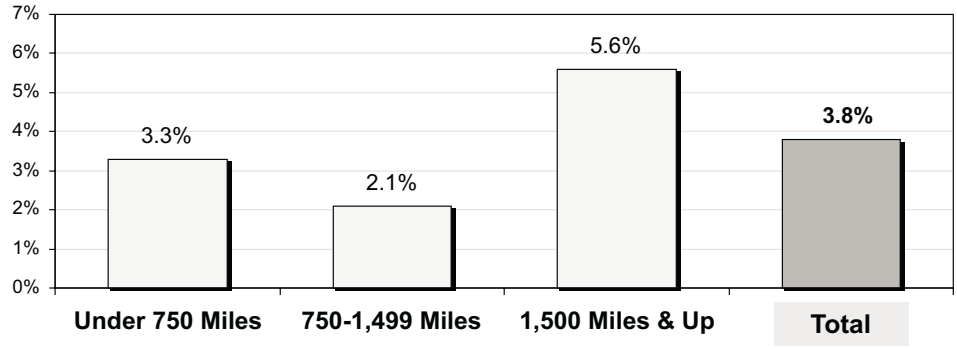
Source: USDOT, O&D Survey, and T-100.

The new traffic captured by the regional airports consists of untapped passenger demand stimulated by the introduction of low-fare services, passengers who shifted from ground modes to air because of the lower cost of air travel, and passengers who would have otherwise used Logan Airport, but switched to the regional airports because of new service offerings, competitive air fares and greater convenience.

Logan continues to be the primary airport for long-haul passengers (traveling to/from domestic and international markets), accommodating nine out of 11.2 million long-haul passengers generated by the three airports. From 1996 and 1999, the airport system generated 2.8 million additional long-haul passengers. Because Logan Airport leads the available services in this market segment, the regional airports attracted only half of this increase, or 1.4 million origin-destination (O&D) passengers, as Figure 2.3-2 shows.[11]

Figure 2.3-3 shows recent growth trends at Logan Airport which confirm that the region's reliance on Logan for travel to short- and medium-haul destinations is declining. From 1996 to 1999, the number of Logan Airport passengers traveling to short- and medium-haul markets grew relatively slowly at average annual rates of 3.3 and 2.1 percent, respectively. The number of long-haul passengers using Logan Airport grew at a faster rate, increasing by 5.6 percent per year.

Figure 2.3-3
Logan Airport's Average Annual O&D Passenger Growth by Trip Length to 1996 to 1999



Note: Includes reported domestic and international O&D passengers and estimated unreported foreign flag local passengers. Excludes connecting charter and GA passengers

Source: US DOT, Origin-Destination Survey, and T-100.

11 The majority of T.F. Green/Providence and Manchester passengers traveling to/from long-haul domestic and international markets require connecting service.

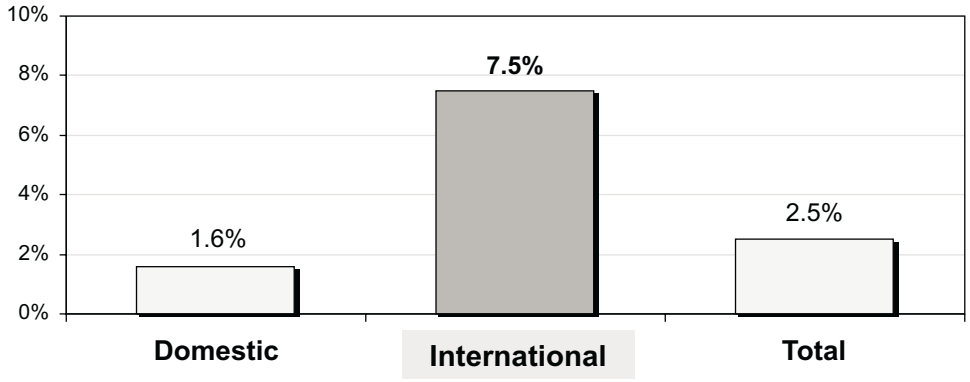
Figure 2.3-4 shows that Logan Airport's dominance in the long-haul sector is especially evident when examining its international traffic growth. From 1996 to 1999, the number of international passengers at Logan Airport increased almost five times as fast as domestic passengers. While total Logan Airport passengers increased by 2.5 percent per year during that period, international passengers grew at 7.5 percent per year and domestic passengers grew by just 1.6 percent per year.

Over time, long-haul traffic at Logan is expected to continue to grow faster than the short- and medium-haul market segments, solidifying its role in the regional airport system as the primary airport for long-haul travel.

Together, Logan and the regional airports will play essential roles in the emerging regional airport system. Logan Airport will remain the primary airport for passengers originating within I-495 and traveling to short-, medium- and long-haul destinations. The regional airports will play larger roles by functioning as the primary airports for short- and medium-haul demand that originates outside of I-495. Demographics, the distribution of demand within the region, and airline operating economics all dictate that Logan will continue to function as the region's primary airport for travel to long-haul domestic and international airports.

New England is well on its way towards achieving a true regional system of airports, but more can be done. Massport is working towards developing the Worcester Regional Airport to create a new airport option for passengers that originate in central Massachusetts and the western suburbs of Boston. The T.F. Green / Providence and Manchester Airports are engaged in development and planning efforts to ensure that they can continue to capture and accommodate passenger demand from their primary and expanded service areas.

Figure 2.3-4
Average Annual Passenger Growth at Logan Airport by Type of Service – 1996 to 1999



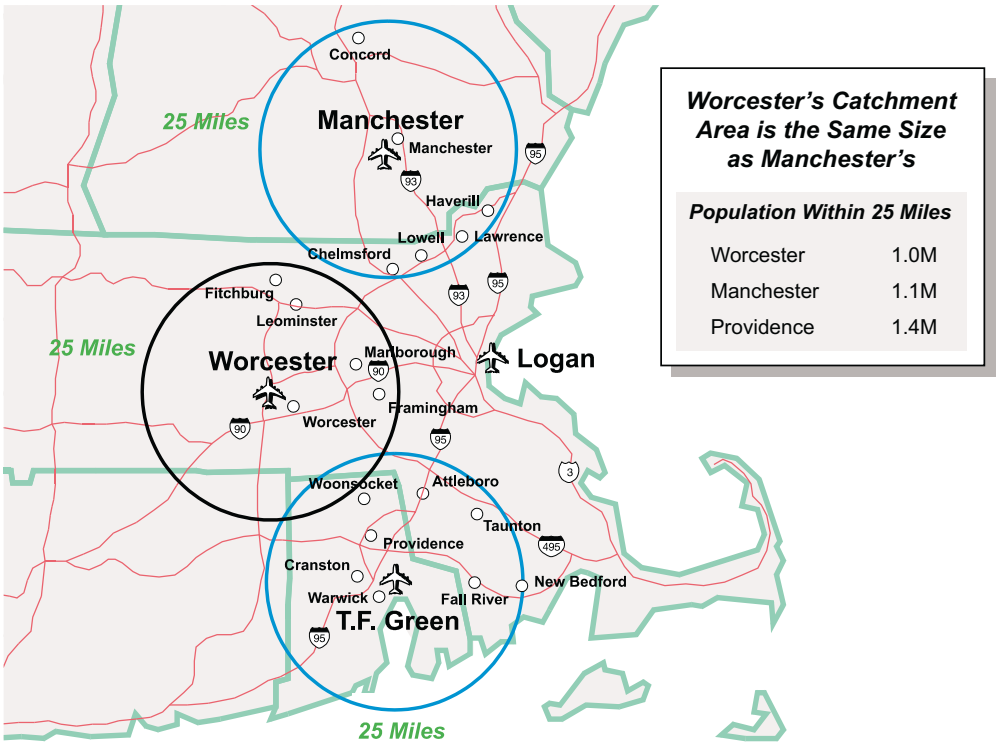
Source: Massport

The Pease Development Authority seeks to increase the role of the Pease International Tradeport in the regional transportation system and is aggressively marketing the facility to passenger and cargo airlines. Massport and the regional airports are undertaking cooperative marketing campaigns to increase passenger awareness of regional airport options to Logan. All of these efforts will move the region closer to the goal of a more efficient and balanced system of airports.

2.4 The Role of Worcester Regional Airport

T.F. Green / Providence and Manchester Airports are models of successful air service development that have contributed to the development of a regional system of airports in New England. Massport envisions the Worcester Regional Airport as the regional airport solution for air travel demand generated in central Massachusetts and the MetroWest suburbs. (see Figure 2.4-1).

Figure 2.4-1
Worcester Regional, T.F. Green/Providence, and Manchester Airports' Service Area and Location Relative to Logan Airport



2.4.1 Worcester Regional Airport Catchment Area

Worcester Regional Airport's natural catchment area is similarly sized to that of the Manchester Airport, which currently supports 50 daily jet departures to 15 destinations.[12] Each airport has a population base of about 1.0 million people residing within a 25-mile radius. For Worcester Regional Airport, this natural service area extends east to the Framingham / Natick area, north to Fitchburg, west to Belchertown, and south beyond the Connecticut and Rhode Island borders.

Four competitive airports are within an approximate one-hour drive of Worcester Regional: Logan is 46 miles east, T.F. Green / Providence Airport is 41 miles south, Manchester Airport is 67 miles north, and Hartford / Bradley International Airport in Windsor Locks, Connecticut is about 71 miles southwest of Worcester Regional. Since these larger, well-served airports are within a reasonable driving range, the Worcester Regional Airport must attract a competitive level of services that includes frequent jet flights and attractive airfares to compete with these nearby airports.

2.4.2 Worcester Regional Airport Service Area Demand

The Worcester Regional Airport service area, defined by a 25-mile radius, generates about 2.1 million annual origin-destination passengers.[13] This is an estimate of unconstrained demand, which essentially assumes equal access, service levels, and airfares for Worcester Regional and the surrounding airports. Since Logan Airport will continue to have a higher level of air services than Worcester, the Worcester Regional Airport will never capture 100 percent of its market area demand. However, in 1998, Worcester Regional Airport captured only three percent of its estimated passenger demand, indicating that the airport has substantial growth potential.

A survey conducted in 1999 of Worcester-area travel agencies and their airline ticket sales indicated that more than half of the demand generated within the Worcester Regional market area uses Logan Airport and almost one-third uses the T.F. Green / Providence Airport, as Figure 2.4-2 shows.[14]

The large portion of Worcester area passengers that uses Logan Airport indicates that service development at the Worcester Regional Airport would provide relief to Logan Airport. Similarly, the large portion of traffic using the T.F. Green / Providence Airport is an indication that T.F. Green / Providence is already providing relief to Logan Airport. Before the low-fare service expansion at T.F. Green / Providence, Logan Airport was capturing 80 percent of Worcester area passengers,[15] thus T.F.Green / Providence is capturing Worcester-area passengers that were formerly using Logan Airport.

▼

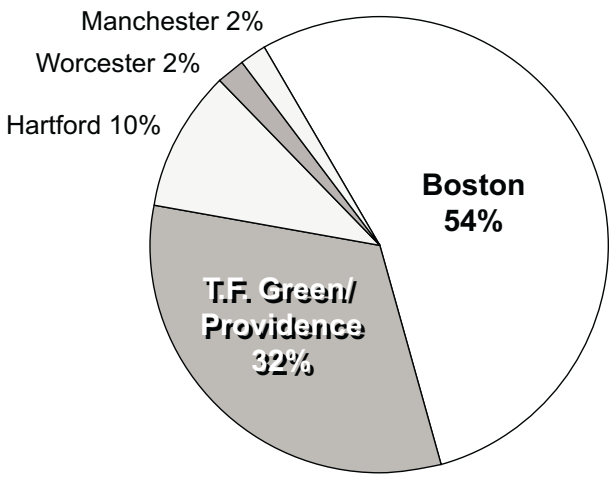
12 Official Airline Guide, October 2000.

13 Based on previous estimates of Worcester's catchment area passenger demand as presented in the New England Regional Airports Air Passengers Service Study, 1995 by SH&E and the Passenger, Cargo, Economic Feasibility Study for Worcester Airport, 1995 by Sabre Decision Technologies.

14 Worcester Travel Agency Ticket-Lift Survey, conducted by SH&E, Inc. during summer 1999.

15 New England Regional Airports Air Passenger Service Study – Phase 2, Worcester Travel Agency Ticket-Lift Survey, 1996.

Figure 2.4-2
Worcester Area Passengers by Originating Airport - 1999 Travel Agency Ticket Lift Survey



Source: Worcester Ticket Lift Survey, 1999

The Worcester Travel Agency Ticket Lift Survey also revealed airport usage patterns by destination (see Table 2.4-1). It showed that Logan Airport was the airport of choice for key, short-haul, business markets capturing 51 to 70 percent of area passengers traveling to Washington, Atlanta, New York and Philadelphia. Offering a minimum of hourly service to each of these destinations, the carriers operating at Logan Airport provide a distinct advantage over the services provided by carriers at other airports.

Passengers traveling to markets with a lack of direct flights from the regional airports, such as Tampa, Ft. Myers, Dallas / Ft. Worth and St. Louis, most often used Logan Airport. T.F. Green / Providence attracted high shares of passengers (48 to 77 percent) in several markets, particularly destinations served with nonstop or multiple-stop flights on Southwest Airlines: Orlando, Chicago, Los Angeles, Detroit, Phoenix, and Baltimore.

Table 2.4-1
Airport Usage Patterns by Destination for Worcester-Area Passengers- 1998/1999

Rank	Market	BOS	PVD	BDL	MHT	ORH	Total
1	Orlando	31.9%	**47.5%**	18.9%	1.3%	0.5%	100.0%
2	Chicago	**42.7%**	**48.8%**	3.7%	4.0%	0.8%	100.0%
3	New York	**64.4%**	23.0%	2.1%	1.8%	8.7%	100.0%
4	Atlanta	**63.1%**	13.5%	20.4%	1.3%	1.7%	100.0%
5	Detroit	29.2%	**59.0%**	7.9%	3.4%	0.5%	100.0%
6	Tampa	**49.5%**	28.4%	17.4%	2.2%	2.6%	100.0%
7	Washington	**51.2%**	23.8%	3.7%	0.5%	20.8%	100.0%
8	Fort Lauderdale	**39.4%**	18.7%	**40.2%**	0.1%	1.6%	100.0%
9	Fort Myers	**58.6%**	23.2%	15.3%	1.8%	1.2%	100.0%
10	Phoenix	31.0%	**64.5%**	2.3%	1.9%	0.3%	100.0%
11	Los Angeles	36.9%	**58.4%**	3.7%	1.1%	0.0%	100.0%
12	Philadelphia	**70.0%**	13.8%	3.9%	1.3%	11.0%	100.0%
13	Baltimore	11.0%	**76.5%**	2.6%	7.9%	2.0%	100.0%
14	Dallas/Fort Worth	**64.8%**	13.5%	19.4%	1.0%	1.3%	100.0%
15	St Louis	**73.4%**	23.1%	3.1%	0.4%	0.0%	100.0%
	Subtotal	**46.2%**	**36.8%**	**11.7%**	**2.0%**	**3.3%**	**100.0%**
	All Other	**60.8%**	27.6%	7.4%	2.5%	1.8%	100.0%
	Total	**53.5%**	**32.2%**	**9.6%**	**2.3%**	**2.5%**	**100.0%**

Source: Worcester Travel Agency Ticket Lift Survey, 1999.
Note: Shaded box indicates the airport with the highest market share.
BOS = Logan PVD = T.F. Green BDL = Bradley MHT = Manchester ORH = Worcester

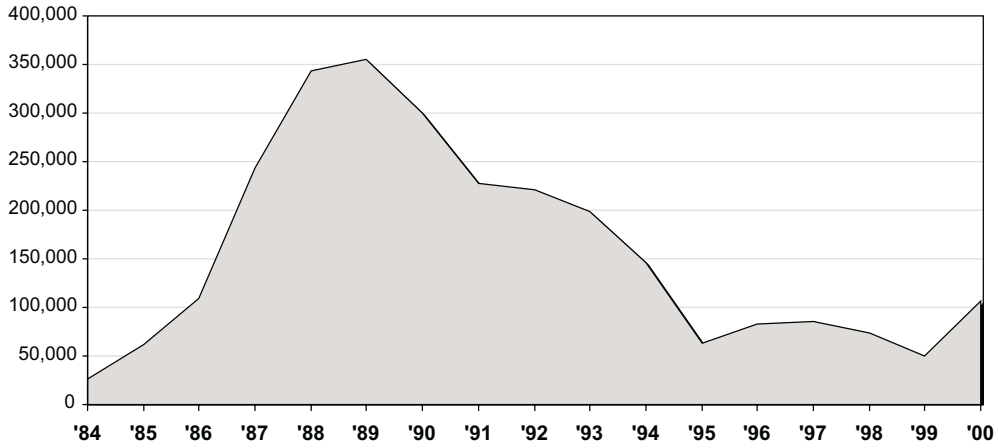
2.4.3 Worcester Regional Airport Air Traffic and Service Trends

Worcester Regional Airport has accommodated scheduled passenger service since the late 1940s.[16] However, these services were limited and passenger traffic grew only modestly. After reaching 90,000 passengers (enplaned and deplaned) in 1957, passenger levels declined until 1986. In that year, Worcester Regional Airport experienced brief unprecedented growth. Airport passenger traffic increased sharply from 58,000 in 1985 to a peak of 355,000 in 1989, as Figure 2.4-3 shows.

Between 1986 and 1989, Worcester Regional enjoyed exceptionally strong air traffic growth. This was a period of rapid growth in the local and national economies and of major expansion within the airline industry. In 1989, Worcester Regional received daily jet services to Baltimore, Newark, Detroit, and Pittsburgh.

16 Construction of the Worcester Airport was completed in 1948.

Figure 2.4-3
Worcester Airport Passenger Enplanements – Calendar Year 1984 to 2000



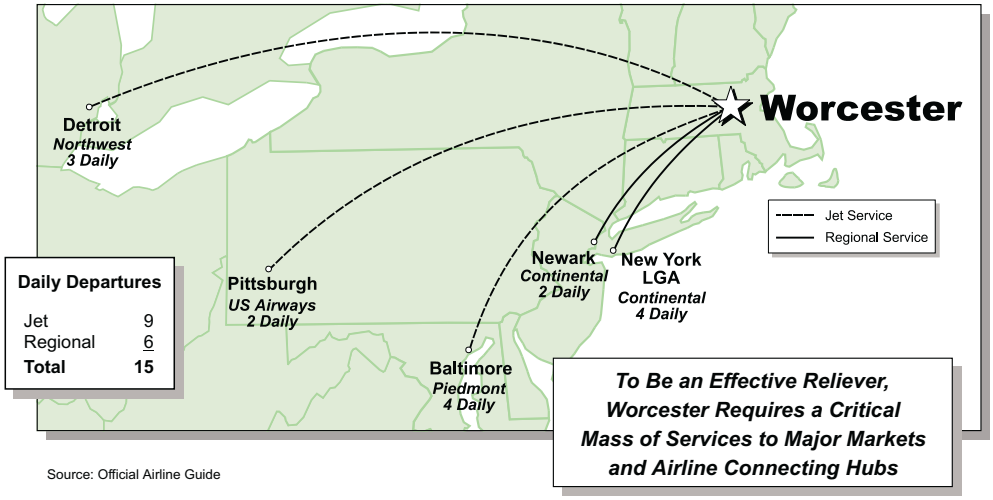
Source: USDOT, Form 41 - Schedule T3 and Part 298/C, and Airport Records.

Worcester Regional Airport's passenger traffic began to decline again in 1990, the same year that the Massachusetts economy entered a difficult recession. Massachusetts was particularly hard hit because the local economy was heavily tied to the defense and mainframe computer industries, which were also declining. At the same time, the airline industry was consolidating, which, coupled with slower economic growth and weakened air travel demand, led to severe financial losses. As airlines tried to rationalize their merged networks and stem financial losses, they withdrew services from many small communities like Worcester. Worcester itself was impacted by the 1990 merger of US Airways (then USAir) and Piedmont Airlines.

In 1993, the New England economy entered another period of prosperity, but passenger traffic at Worcester Regional Airport did not rebound to previous levels as other regional airports did. In 1999, 50,000 commercial airline passengers used Worcester Regional Airport, compared to its peak of 355,000 passengers in 1989. After aggressive marketing efforts by Massport, traffic at the Worcester Regional Airport more than doubled to 106, 000 passengers in 2000.

As Figure 2.4-4 shows, in its peak year, Worcester Regional Airport was served with 15 daily departures to nine destinations, nine on jet aircraft and six on turboprops. In 1989, Worcester Regional received scheduled passenger services from Piedmont (now US Airways), US Airways, Continental and Northwest Airlines. The airport had nonstop services to New York LaGuardia, Newark, Baltimore, Pittsburgh and Detroit. Worcester Regional Airport's peak level of service, however, proved to be insufficient to attract the necessary levels of passenger traffic to relieve growth pressures at Logan Airport or to establish Worcester Regional as a viable air service market. The resulting effects of this were the withdrawal of carriers from the market and the decline of traffic.

Figure 2.4-4
Worcester Regional Airport Nonstop Service - August 1989



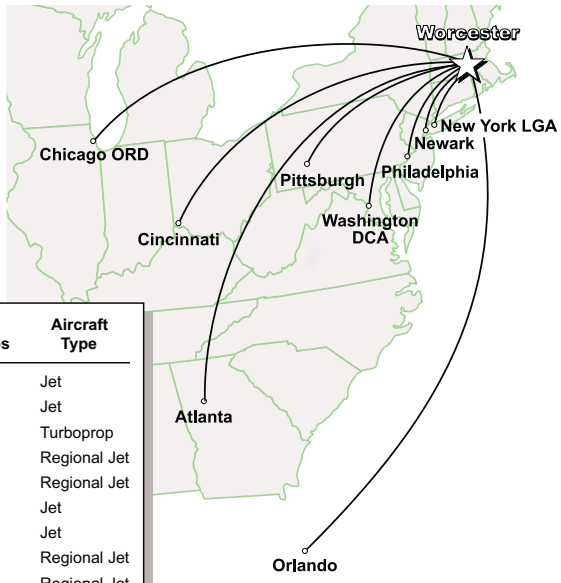
As of August 2000, the Worcester Regional Airport was served by three commercial passenger airlines. US Airways Express provides four daily, nonstop turboprop flights to Philadelphia. Atlantic Southeast Airlines, a Delta Connection carrier, provides two daily, nonstop regional jet flights to Delta Air Lines' Atlanta hub. Finally, American Eagle flies three times a day to New York JFK International with turboprop aircraft. In February 2001, Pan Am initiated nonstop service between Worcester and Orlando Sanford International Airport. In April 2001, Delta Connection will increase its service to Atlanta to three daily roundtrips.

In addition to general industry and economic conditions, facility, equipment, and ground access constraints also contributed to Worcester Regional Airport's decline and slow recovery. The sections below explore these constraints.

2.4.4 Worcester Regional Airport Service Feasibility

Worcester Regional Airport's past experience and the recent successes at T.F. Green / Providence and Manchester airports demonstrate that, to be an effective reliever in the regional airport system, the Worcester Regional Airport requires a critical mass of competitively priced services to key connecting hubs and major destinations. To assess Worcester Regional Airport's potential in serving the central Massachusetts and MetroWest passenger demand, the feasibility of potential Worcester Regional Airport air-service routes was analyzed. The carrier routes selected for feasibility analysis were based on existing air service patterns at the T.F. Green / Providence, Manchester, and Portland, Maine airports. Based on the same planning models and methodologies that airlines use to assess competitive market shares in a multi-airport environment, several jet, regional jet and turboprop routes were found to be feasible (see Figure 2.4-5). The analysis assumed convenient ground access to Worcester Regional Airport.

Figure 2.4-5
Candidate Worcester Regional Air Service Routes



Market	Carrier	Daily Roundtrips	Aircraft Type
Philadelphia	US Airways	4	Jet
Washington DCA	US Airways	2	Jet
New York LGA	Business Express	7	Turboprop
Chicago ORD	American	3	Regional Jet
Newark	Continental	4	Regional Jet
Orlando	Spirit	1	Jet
Pittsburgh	US Airways	3	Jet
Cincinnati	Delta	4	Regional Jet
Atlanta	Delta	4	Regional Jet

Candidate air service routes from Worcester Regional Airport would include service to short-haul, high density, business markets such as Washington Reagan National and New York LaGuardia; service to major airline connecting hubs such as Atlanta, Philadelphia, Pittsburgh, Chicago O'Hare, Newark, and Cincinnati; and low-fare service to leisure markets, such as Orlando. If just four to five of these candidate air-service routes were in place in 2010, Worcester Regional could achieve 600,000 to 800,000 passengers per year, depending upon the exact routes. At this level of activity, Worcester Regional Airport could potentially recapture about 300,000 to 400,000 passengers that otherwise would use Logan Airport.

2.4.5 Worcester Regional Airport's Ability to Attract Air Service

Several factors influence the ability of a regional airport, like Worcester Regional, to attract and sustain airline services. These include:

- The size of the airport's catchment area and the associated demand for air travel
- The proximity of alternative airports
- The availability of airside facilities
- Effective marketing efforts to attract both airlines and passengers
- Adequate ground access to the airport

In nearly all of these measures, Worcester is a favorable air service market. The market area of the Worcester Regional Airport is sizeable and generates approximately 2.1 million annual O&D passengers. However, because of its proximity to alternative airports, the Worcester Regional Airport requires a critical mass of air services in order to attract passengers from its substantial market area.

Massport, with the aid of an air service marketing consultant, is engaged in an aggressive marketing campaign to attract new airlines and passenger services to the Worcester Regional Airport. On January 15, 2000, Massport assumed actual operating responsibility for Worcester Regional Airport with the goal of developing a more efficient regional transportation network by increasing the airport's utilization. Massport has presented air service proposals to several airlines including Spirit Airlines, Jet Blue, American Trans Air, American Airlines, Delta Air Lines, Continental Airlines, Shuttle America, and Pan Am. Massport will continue these efforts, which have already resulted in several new services at Worcester:

- In February 2000, Atlantic Southeast Airlines (Delta Connection), a regional carrier subsidiary of Delta Air Lines, began serving Worcester Regional Airport market with two daily flights to Atlanta, with 50-seat Canadair Regional Jets. This service has been so successful, with passenger load factors reaching 94 percent in August, that Delta Connection is adding a third daily roundtrip in April 2001.

- In July 2000, American Eagle initiated nonstop flights to New York JFK International Airport. The service is operated three times per day, with 34-seat Saab 340 turboprops.

- On February 6, 2001, Pan Am began nonstop service from Worcester to the Orlando Sanford International Airport. This service operates once a day with Boeing 727 jet aircraft.

The FAA and the City of Worcester have invested $33 million in airside and landside improvements to upgrade the Worcester facility. In the mid 1990s, a $15.7-million passenger terminal was constructed and more than $8 million was invested in navigational equipment and airfield improvements to enhance the Airport's operational reliability.

As part of a regional transportation project, the Massachusetts Highway Department (MassHighway) is working to improve road access to the Worcester Regional Airport. A number of ground access routes that will improve access in the city and provide a connection between the airport and the inter-state highway system are being evaluated by MassHighway. A surface route would not only reduce congestion on major thoroughfares in the city and improve access to several western suburbs, it would also provide a safe, direct route from the Massachusetts Turnpike (I-90) and I-290 to Worcester Regional Airport. MassHighway submitted an ENF on the access road options to EOEA and received a Certificate from the Secretary on February 11, 2000. A combined Draft EIS/EIR is expected to be filed in October 2001. If approved, construction of a new road is expected to begin in 2004 and be completed by 2007.

The Worcester Airport is an example of how Massport is actively involved in promoting a regional airport system and the extent to which coordination with federal, state and local agencies can effectively promote and improve transportation options in the region.

2.5 Impact of Regional Alternatives on Logan Airport Demand

Despite the strength of the local and national economies, Logan's passenger traffic has grown more slowly than the United States average and the New England region for several years. The slower growth observed at Logan Airport coincides with extraordinary growth at neighboring regional airports.

The regional airports, particularly T.F. Green / Providence and Manchester, have become attractive options for many former Logan Airport users because of their proximity to the Boston metro area, lack of congestion, improved air service offerings, and low airfares. These airports will continue to dampen future growth at Logan by capturing a greater portion of the region's growth in air travel demand, particularly in the short- and medium-haul travel sectors.

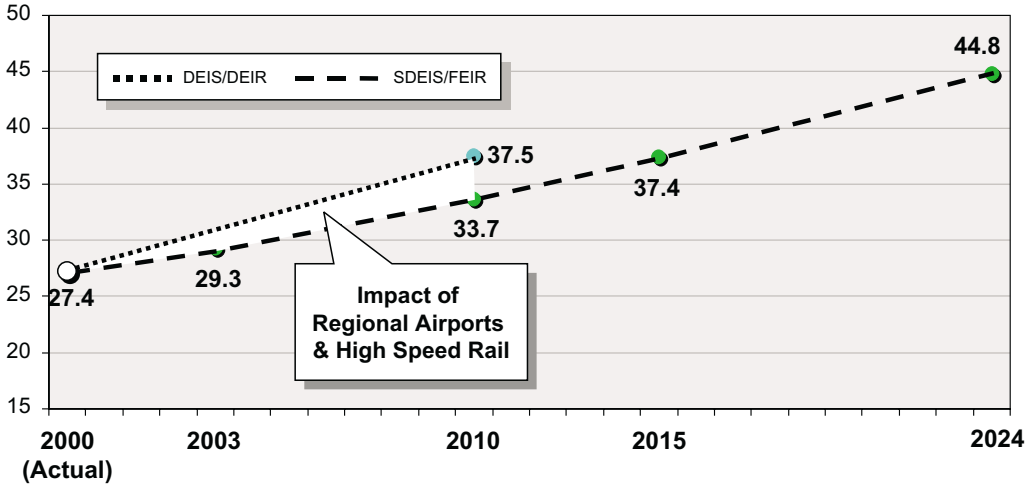
Also, many of the inter-city rail projects, which were discussed in the Airside Project Draft EIS/EIR, are closer to implementation. These projects, which include Amtrak's high-speed Acela service between Boston's South Station and New York's Penn Station, should also divert passengers from Logan Airport and reduce Logan's future passenger growth.

The increased role of regional airports and improved inter-city rail will continue to diminish passenger growth at Logan Airport. Based on this assumption, Massport has lowered its passenger growth projections. If growth continues at the slower rate observed over the last several years, Logan is expected to reach 34 million passengers in 2010 and will not achieve 37.5 million passengers until 2015 (Figure 2.5-1). This revised passenger forecast, which assumes that regionalization continues, is carried through the operational and environmental analyses in Chapters 4 and 6.

The operational analysis indicates that the proposed Airside Project improvements at Logan are necessary even with increased regional transportation options and significant passenger diversion from Logan to the regional airports and rail. While the expansion of regional transportation options will play an important role in reducing future demand for Logan Airport, it will not reduce passenger demand generated within Logan's core market area or the long-haul domestic and international travel demand of the broader region. The proposed Airside Project improvements, particularly the construction of Runway 14/32, are needed to improve the reliability, efficiency and safety of current and future operations at Logan. Runway 14/32 is the only measure that will correct the

existing limitation in Logan's airfield layout that causes excessive, yet avoidable, delays during northwest wind conditions.

Figure 2.5-1
Logan Airport Passenger Forecasts: Impact of Regional Transportation Options



2.6 Role of Other New England Commercial Airports

In addition to Logan, T.F. Green / Providence, Manchester, and Worcester Regional Airports, several other airports serve the New England region. These airports which are depicted in Figure 2.2-4, and described below, primarily serve areas outside the Boston Metropolitan Service Area in northern and southwestern New England. Because of their distance from Logan's core service area, the potential role that these airports can play in diverting demand from Logan is limited.

2.6.1 Hartford/Bradley International Airport, Hartford, Connecticut

The Hartford / Bradley International Airport is the second largest airport in New England after Logan Airport. Located in northern Connecticut, its primary function is to serve air passenger demand that originates in the southwest region of New England. Because of its distance from Boston and its proximity to New York, the Hartford airport primarily serves passengers that would otherwise use New York City airports, and has no potential to divert passengers from Logan Airport.

In October 1999, Hartford / Bradley International Airport became the third New England airport to receive Southwest Airlines' low-fare jet services. As of October 2000,

Southwest Airlines provides 13 daily departures from Hartford to Baltimore, Chicago Midway, Nashville and Orlando. Also in 1999, America West, another low-fare jet airline entered the Hartford market. America West provides one daily jet flight to Las Vegas, one daily jet flight to Phoenix, and three daily jet flights to Columbus, Ohio.

Over the last year, other carriers have also expanded services at Hartford. Delta Air Lines added one daily jet flight to New York JFK International; Midway Airlines added an additional flight to Raleigh / Durham; Continental Airlines upgraded its Newark flight to a larger aircraft; and US Airways upgraded its services to Baltimore from US Airways Express turboprops to MetroJet jet services.

Recent facility improvements at Hartford / Bradley International include renovations to Terminal B, the construction of a new FAA Tower, and a new firehouse.

2.6.2 Portland International Jetport, Maine

The Portland International Jetport, in Portland, Maine primarily serves the southern Maine area. The *1995 New England Airports Air Passenger Study* concluded that the Portland Airport had only a minimal ability to attract passengers that originate in Logan Airport's outer market area. However, Portland has historically relied on air services to Logan for connecting flights to destinations outside of New England. Thus, expanding air services at Portland can provide relief to Logan Airport by reducing the need for air services between Portland and Boston, which are often operated with small commuter aircraft. The economic feasibility of additional direct services from Portland will be analyzed in the upcoming *New England Airports System Study* (see Section 2.9.1, Table 2.9-3 and Appendix B for a description of the study and the proposed work scope).

In 1999, there was a decline in scheduled airline services at the Portland International Jetport compared to 1998. In terms of jet service reductions, Continental Airlines eliminated its daily nonstop service to Newark, United Airlines reduced it nonstop jet services to Chicago O'Hare from three daily roundtrips to 2, United discontinued one daily roundtrip to Washington Dulles, and US Airways reduced its Philadelphia service by one daily roundtrip. Among the regional carriers, both Business Express (now American Eagle) and US Airways Express reduced services to Boston and New York LaGuardia.

Since 1999, the Portland International Jetport benefited from several airline service additions. Continental Airlines added two daily, nonstop jet departures to its Cleveland connecting hub. Northwest Airlines increased jet services between Portland and its Detroit connecting hub. US Airways added an additional daily jet flight to Philadelphia and a new nonstop regional jet flight to Washington Reagan National. These additional flights at Portland reduce the need for Portland passengers to fly to Logan Airport for connecting services. In fact, in 2000 American Eagle (formerly Business Express) reduced its turboprop services between Portland and Boston by three daily roundtrip flights.

Capital investment projects for the Portland International Jetport include a new roadway system, a 50,000-square-foot terminal with two new gates and a ramp addition, and improvements to the Maine Turnpike-Jetport interchange.

2.6.3 Bangor International Airport, Maine

The Bangor International Airport, in Bangor, Maine, is even more distant from Logan Airport and the Boston market area than the Portland International Jetport, so it plays no role in relieving local passenger demand for Logan Airport. Because of its distance from Boston and its comparatively small population base, Bangor is even more reliant than Portland on air services to Logan Airport for connections to national and international destinations. Thus, improving air services at Bangor can reduce the need for direct air services to Logan Airport. The economic feasibility of these types of services will be analyzed in the upcoming *New England Airports System Study* (see Section 2.9.1, Table 2.9-3 and Appendix B for a description of the study and the proposed work scope).

In 1999, Delta Air Lines withdrew its mainline jet services at Bangor International Airport and replaced them with Delta Connection regional jets, operated by Comair, to Cincinnati. The change in Delta's service pattern eliminated single plane services from Bangor to Delta Air Lines's Atlanta hub and replaced two daily onestop departures to Cincinnati on large jets with four daily nonstops on regional jets. Other service changes included reductions in Continental Express services to Newark and US Airways Express services to Boston. Business Express added two daily nonstops to New York LaGuardia on non-jet aircraft.

In 2000, overall airline services increased slightly at the Bangor International Airport. Pan Am entered the Bangor market with nonstop services to Pittsburgh and Portsmouth, NH (Pease International). However, Bangor Airport lost several of its direct services to the New York / Newark area. Continental Express withdrew its two daily, turboprop flights to Newark and American Eagle discontinued two of its daily, nonstop, turboprop flights to New York LaGuardia. To compensate for these service reductions, US Airways Express added a nonstop flight to Portland with continuing single-plane service to New York LaGuardia; four daily, nonstop flights to Boston; and two daily, nonstop flights to Philadelphia.

Several facility improvements have been made at Bangor International Airport over the last several years. These improvements include taxiway improvements, the expansion of the commuter airline parking apron, the addition of enclosed passenger walkways, the rehabilitation of terminal and general aviation aprons, and the construction of a general aviation hanger. Over the next couple of years, the runway at Bangor International Airport will undergo major renovations to renew the life of the runway pavement.

2.6.4 Burlington International Airport, Vermont

Burlington International Airport is another distant airport that primarily serves air passenger demand originating in Vermont. Like other northern New England airports, it relies on air services to Logan Airport for connecting flights. To the extent that Burlington can attract more direct services to short-haul high density markets and airline connecting hubs, its reliance on air services to Logan will diminish. The economic feasibility of these types of services will be analyzed in the upcoming *New England Airports System Study* (see Section 2.9.1 and Appendix B for a description of the study and the proposed work scope).

In 1999, the Burlington Airport benefited from several service upgrades. US Airways replaced a non-jet service to New York LaGuardia with a regional jet service. Similarly, United Express replaced a non-jet flight to Washington Dulles with a regional jet. Continental Express initiated new nonstop regional jet service to Continental's Cleveland connecting complex.

In 2000, Burlington International Airport gained many new air services. JetBlue, the nation's newest low-fare jet carrier, entered the Burlington market with two daily, nonstop flights to its New York JFK hub. JetBlue, which former Southwest Airlines executives operate, is rapidly expanding its operations at JFK, offering connecting services to destinations throughout the country. Continental Express expanded its operation at Burlington International Airport by supplementing its turboprop services with regional jet flights to its Newark and Cleveland hubs. United Express upgraded its Washington Dulles services from turboprops to regional jets. Similarly, US Airways Express upgraded one of its flights to Washington Reagan National from a turboprop aircraft to a regional jet.

Several significant capital improvements to Burlington International Airport are in various stages of construction. A 17,000-square-foot expansion to the terminal building is under construction. Other projects include the addition of a commuter ramp extension to accommodate regional jets, and construction of a 40,000- square-foot maintenance hanger and a three-level parking garage.

2.6.5 Tweed-New Haven Airport, Connecticut

Located in southern Connecticut, the Tweed-New Haven Airport has no impact on Logan Airport. It is not close enough to Logan's core market area to provide any passenger relief and there are no scheduled services between New Haven and Logan Airport. Its service area largely overlaps with the Hartford / Bradley Airport service area.

In 1999 and 2000, the airline services offered from the Tweed-New Haven Airport have remained unchanged. The airport continues to receive eight daily, nonstop departures from US Airways Express. Five flights link New Haven to US Airways' Philadelphia hub and three nonstop flights are operated to Washington Reagan National.

The Tweed-New Haven Airport is currently conducting a Master Plan Study. In terms of capital improvements, an existing building has been modernized to serve as a new terminal.

2.6.6 Other New England Commercial Passenger Airports

In addition to New England's principal, commercial service airports, described above, there is another tier of airports that serve isolated communities or provide niche-commercial airline services. (Figure 2.6-1)

Several of these airports serve very small, remote communities that can only support services to Logan Airport. For these communities air service to Logan Airport is their sole access to the national air transportation network and destinations beyond Boston. These airports include Augusta, Presque Isle and Rockland, all in Maine. Other airports, such as Hyannis, Nantucket and Martha's Vineyard, serve higher-demand markets with services to Logan Airport and other major Northeast airports during the peak travel season. New Bedford, MA[17] and Westerly, RI, are only served with air-taxi operations to/from island markets (Nantucket, Martha's Vineyard and Block Island). Hanscom Field and Pease International did not receive scheduled passenger services until 1999. Both airports are now served with scheduled niche scheduled commercial airline passenger services.

Most of these airports are very remote from the core Logan service area and have limited market areas. Consequently, they are unable to support a sufficient level of air services to attract passengers that now use Logan Airport, and play virtually no role in relieving Logan Airport. Since Hanscom Field is part of Massport's proprietary airport system, it is somewhat of an exception and deserves further discussion. Because of the proximity of Pease International Tradeport, it also deserves further focus.

2.6.7 Hanscom Field

Hanscom Field, which Massport owns and operates, plays an important role in the regional transportation system as a general aviation reliever to Logan Airport with niche commercial passenger service. Hanscom Field accommodates a variety of general aviation operations, including private, business, charter and air taxi operations that might otherwise use Logan Airport.

17 Environmental analysis for the potential lengthening of the runway at New Bedford to accommodate integrated cargo services, as well as regional jet services, is currently underway. A Draft EIS/EIR is expected to be filed with MEPA and FAA/NEPA by the end of 2001.

Figure 2.6-1
Other New England Airports Receiving Commercial Air Passenger Service

Source: Official Airline Guide

In 1999, there were 197,302 general aviation operations at Hanscom Field, an increase of 7.7 percent over 1998 activity. Hanscom Field accommodated more than five times the number of general aviation operations that occurred at Logan Airport, which accommodated 38,000. Approximately 45 percent of Hanscom Field's operations were conducted with single-engine, piston aircraft. Training operations, which consist primarily of practice take-offs and landings by flight school students and staff, represented over 37 percent of Hanscom Field's operations. Business jets, twin-engine turboprop aircraft, helicopters, and military aircraft accounted for the remainder of the activity.

Even when its training activity is excluded, Hanscom Field handles more than three times the number of general aviation operations that occur at Logan Airport. Moreover, there are about 400 general aviation aircraft based at Hanscom Field, while there are none based at Logan Airport. For many general aviation users, Hanscom Field is a more attractive facility than Logan Airport because it has lower user fees and less restrictive airspace. Massport does not require general aviation users to pay a landing fee at Hanscom Field,[18] whereas Logan Airport users are required to pay a landing fee. These factors divert many operations from Logan Airport to Hanscom Field each year, as the substantially higher volume of general aviation activity at Hanscom Field indicates.

In September 1999, Shuttle America, a new entrant regional/commuter airline began scheduled commercial passenger service from Hanscom Field to Trenton/Philadelphia and Buffalo (one stop via Trenton) with four daily, roundtrip flights on 50-seat Dash-8 turboprop aircraft. In 1999, Hanscom Field accommodated 22,924 Shuttle America passengers and 1,164 Shuttle America aircraft operations. In 2000, the first full year of Shuttle America's Hanscom services, there were 162,147 scheduled service passengers and 6,572 scheduled operations at Hanscom Field. In October 2000, Shuttle America scheduled four daily, nonstop flights to Buffalo and seven to Trenton/Philadelphia. On November 1, 2000, Shuttle America began serving the Hanscom Field-LaGuardia market with five daily roundtrip flights and increased its Hanscom–LaGuardia service from five to seven daily roundtrips in February 2001.

Because the service areas of Logan, Manchester and Worcester Regional Airports envelope Hanscom Field's service area and there has been rapid low-fare service development at Manchester Airport, Hanscom Field will continue to be a general aviation reliever for Logan Airport, while offering niche commercial airline flights, such as the Shuttle America services.

2.6.8 Pease International Tradeport

In 1991, the federal government transferred operational authority for the Pease Air Force Base in Portsmouth, New Hampshire to the Pease Development Authority (PDA). Since assuming control over the former military base, the PDA has worked to develop the facility into an international aviation hub. A new, 20,000-square foot passenger terminal with a Federal Inspection Service facility and a Federal Trade Zone designation was built at the Pease International Tradeport. In addition to the terminal, the FAA has provided funds to rehabilitate the taxiway and apron, as well as upgrade/add the runway ILS and approach lighting systems. Like Manchester Airport, Pease has received, and continues to receive, MAP funds, which are allocated to former military bases that can serve to complement congested airports, such as Logan.

▼

18 Hanscom Field operations that occur between 11:00 PM and 7:00 AM are assessed a nighttime surcharge of $42.00 for aircraft under 12,500 lbs. and $306 for aircraft over 12,500 lbs. For operators with more than 5 violations (on arrival or departure) in a single year, the nighttime surcharge is doubled starting with the sixth violation.

The PDA is marketing the airport, which has an 11,300-foot runway in addition to its new passenger terminal and FIS facility, to large air carriers. With these new facilities, the Pease International Tradeport is potentially an attractive market for charter operators and cargo airlines. The potential long-term role of Pease International Tradeport will be evaluated in the *New England Airports System Study* (see Section 2.9.1).

In 1998, Pan American Airlines signed a long-term lease with the PDA, and, in 1999, it initiated scheduled and charter passenger service from the airport. Pan Am currently provides nonstop jet service to Orlando Sanford International Airport and Gary, Indiana. Emery Worldwide, an all-cargo airline, also serves Pease International Tradeport with one daily Boeing 727 freighter to Emery's Dayton, Ohio cargo hub. In addition to aviation uses, there has been tremendous growth in other land uses on the former military base which have contributed to the local economy.

2.6.9 General Aviation Reliever Airports

In addition to New England's regional commercial service airports there is another tier of airports that supports the general aviation component of the system. The role of these general aviation airports is appropriately identified in FAA's National Plan of Integrated Airport Systems (NPIAS) as "Reliever" airports. General aviation reliever airports typically are located and developed to attract the general aviation activity that would otherwise be active at a nearby congested airport. The Boston regional system has five such airports: Hanscom Field in Bedford, MA; Norwood Memorial in Norwood, MA; Beverly Municipal in Beverly, MA; Lawrence Municipal in Lawrence, MA ; and Boire Field, in Nashua, NH. Almost 1,000 aircraft are based at these airports and they accommodate about 750,000 operations annually. Runway lengths at these airports range in length from 4,000 feet to 7,000 feet, and except for Nashua, all have crosswind runways. They also have instrument capabilities to service non-precision or precision approaches. This reliever general aviation system receives priority consideration when FAA considers federal funding for capital improvement projects. Although no major improvements are planned for these facilities, there are on-going projects to maintain safe operations.

2.7 Other High-Speed Intercity Travel Options

2.7.1 Rail Service

In addition to the regional airports, several rail projects in the New England area will increase options for inter-city travel and create a more efficient and environmentally balanced regional transportation system. Table 2.7-1 provides the status of each of these projects and their potential impact on reducing air travel out of Logan Airport.

Table 2.7-1
Regional Rail Projects with Air Diversion Potential from Logan Airport

Project	Lead Agency	Description	Status	Projected Completion	Estimated 2010 Air Diversion
Northeast Corridor High Speed Rail	Amtrak	Reduce Boston to New York City rail travel times to four hours for Acela Regional Service and about three hours for Acela Express.	Completed	Acela Regional started January 2000 Acela Express started December 2000	1,220,000[1]
Portland-Boston Amtrak Service	Amtrak	Reinstate Portland, ME/Southern New Hampshire/ Boston North Station service using existing rail lines.	Completed	Service to begin in 2001	133,000[2]
Warwick/T.F. Green/ Providence Intermodal Station	Rhode Island DOT	Amtrak/Commuter Rail service from Boston South Station to Warwick Station with People Mover Connection to T.F. Green/ Providence Airport.	EA approved by FHWA in July 1999.	Construction to begin by late 2001.	128,000[3]
North Station-South Station Rail Link	MBTA	Construction of a rail tunnel to link North Station and South Station in Boston.[4]	Under environmental study	—	—
TOTAL					Up to 1,481,000

1 Latest publicly available data. Appendix B provides Amtrak's reply to request for updated numbers.
2 Interpolated from estimated 2015 diversion of 200,000 passengers annually.
3 Interpolated from 2000 and 2020 ridership estimates assuming 67 percent are non-airport employees (based on Survey of Warwick Intermodal Station at T.F. Green/Providence Airport Warwick, Rhode Island, May 1, 1999).
4 North-South Rail Link is not expected to be operational until after 2020.

Northeast Corridor High-Speed Rail

Of all rail projects, Amtrak's high-speed, Boston-New York Acela service offers the greatest potential for reducing Logan Airport's air travel demand in the Boston-New York corridor. By reducing the travel time between downtown Boston and downtown New York to about three hours, the Acela service will be an attractive alternative to the Boston-New York air shuttles for business passengers.[19] This will provide relief to Logan Airport by accommodating up to 1.2 million Logan passengers or one-third of the estimated future air-travel demand in Logan Airport's largest origin-destination market, the Boston-New York market. For more information on Northeast Corridor Amtrak Service see Sections 2.4.2.2 and 2.4.2.5 of the Airside Project Draft EIS/EIR.

19 While Acela service is an attractive option for Boston-New York air passengers, it is not competitive with air travel in the Boston-Washington market due to its longer distance (470 miles versus 250 miles for the Boston-New York City train) and uncompetitive travel time (6 hours, 30 minutes for Acela versus one hour, 40 minutes for air travel).

Boston-Portland, Maine Rail Service

In 2001, rail service between Boston and Portland, Maine will be restored. The service, called the "Downeaster," will be provided by Amtrak with conventional diesel locomotives reaching a maximum speed of 79 miles per hour. The service will terminate at Boston's North Station with stops in Woburn at the Woburn Regional Transportation Center (RTC), Haverhill, Dover, NH, Durham, NH, Exeter, NH, Wells, ME, and Saco, ME. Total trip time between Portland and Boston is projected to be two hours and 30 minutes compared to 2 hours by automobile. By 2010, with eight trains per day, the service is expected to divert approximately 133,000 air travelers by 2010

Warwick/T.F. Green Commuter Rail Station

An intermodal station is being developed at T.F. Green / Providence Airport in Warwick, RI. This station will provide a commuter rail link from Boston's South Station and the Route 128 Station to the Warwick, RI Station, with people mover access to T.F. Green / Providence Airport. This access improvement will allow more residents of the Boston Metropolitan Area to use the frequent, low-fare air services of T.F. Green / Providence Airport. It is estimated that this service will divert approximately 128,000 passengers from Logan Airport in 2010. The Environmental Assessment was approved in 1999. The design process is underway with construction slated to be completed by the end of 2002.

North-South Rail Link (NSRL)

A rail tunnel linking North Station and South Station, which is a Massachusetts Bay Transportation Authority (MBTA) initiative, has been under environmental review by the MBTA for several years. The proposed rail tunnel would improve the Boston metropolitan commuter rail system by allowing the MBTA to link both of its commuter rail systems and would improve intercity travel by allowing Amtrak to extend its Northeast Corridor rail service to North Station and beyond to the Woburn RTC. Early analysis indicated that the project could divert approximately 47,000 air passengers in the year 2020. Completion of the NSRL Draft EIR has been delayed because of a lack of funding for the project.

Northern New England High Speed Rail Initiative

In March 1999, the states of Massachusetts, Maine and New Hampshire filed a joint application with the Federal Railroad Administration to designate the Portland-Boston rail corridor a high-speed corridor. In August 2000, Massachusetts joined with Vermont and New Hampshire to file a similar application for the Boston-Montreal corridor (which would run diagonally across New Hampshire). Federal transportation officials approved both of these applications in October 2000, making the participating states eligible to apply for Federal money to fund safety and capacity improvements on higher-speed rail lines.

2.7.2 Video Conferencing

Section 2.4.3 of the Airside Project Draft EIS/EIR identified video conferencing as a potential substitute for business-related air trips. The Airside Project Draft EIS/EIR also noted that while video conferencing capabilities could reduce the need for certain business-related air trips, it was also likely to create new, global business opportunities and stimulate business-related air travel. Many analysts anticipate that video conferencing will result in a net increase in air travel demand. Thus far, the technology has failed to advance as quickly as telecommunications analysts had envisioned and has not been widely adopted by businesses. For this reason, Massport does not anticipate that video conferencing will have a material impact on Logan's air travel in the near term.

2.8 Ground Access Improvements at Logan and the Regional Airports

In his Certificates on the *Logan Airside Improvements Draft EIS/EIR* and the *1998 Annual Update*, the Secretary of Environmental Affairs directed Massport to report on the status of the ground access improvements at Logan Airport and at the primary regional airports that can relieve Logan Airport: T.F. Green/Providence, Manchester and Worcester Regional airports. Table 2.8-1 describes the major ground access projects at the regional airports.

The Secretary also directed Massport to quantify the impacts of these ground access improvements on passenger levels at the specified airports. Ground access enhancements can improve passenger convenience by reducing roadway congestion and travel times. However, adequate ground access is just one of many factors that affect a passenger's decision when choosing from multiple airport options. Other factors that override the ground access factor include airline services available at each airport: the number of daily flight frequencies; the timing and availability of the flights; whether the services are operated with jet or turboprop aircraft; airfares; the particular airlines that serve the airport; and whether the destination can be reached with a direct or a connecting flight.

Ground service improvement projects that improve access to airports that already benefit from convenient access, such as the widening of Route 3 north leading to the Manchester Airport, are not expected to materially alter airport usage patterns. Other ground access projects which offer alternative modes to an airport, such as the Silver Line or Airport Intermodal Transit Connector (AITC) projects that create bus links to Logan Airport, are also not expected to alter air passenger levels at Logan Airport. On the other hand, projects which conveniently link a congested airport service area to an alternative, less congested airport, such as the Warwick Intermodal Station, may have the potential to influence airport usage patterns. It is estimated that the Warwick Intermodal Station, which will provide a rail link from downtown Boston and the Route 128 station to the T.F. Green/Providence Airport, could divert up to 128,000 passengers annually from Logan Airport to T.F. Green/Providence (see Table 2.8-1).

Table 2.8-1
Ground Access Planning Initiatives at Logan, T.F. Green/Providence, and Manchester Airports

Initiative	Project Description	Lead Organization	Status Report	Projected Completion Date
Logan Airport				
Airport Intermodal Transit Connector (AITC)	Implementation of a Bus Rapid Transit Route to connect South Station with Logan Airport through the Ted Williams Tunnel. The project will use 60-foot, low-floor, articulated buses in conjunction with the Silver Line.	Massport	Fully approved. In process of selecting and purchasing vehicles. Service will commence as soon as the MBTA Transitway is completed. In the interim, the Logan DART bus service opened on November 16, 2000, and links South Station and the Logan Airport terminals.	2002
Silver Line	Three-part project to develop Bus Rapid Transit routes in Boston. Includes Washington Street Replacement Project, Transitway Phase 1 with tie-in to AITC and Transitway Phase 2.	MBTA	See Below.	
Silver Line: Transitway Phase 1	Includes one-mile tunnel and surface sections to be operated by dual-mode (electric/diesel), articulated buses. Massport will use eight of the vehicles ordered for the AITC to connect South Station with Logan Airport through the Ted Williams Tunnel.	MBTA	Construction has begun on a $600M bus tunnel to connect South Station to the South Boston Waterfront.	Not earlier than 2001
Silver Line: Transitway Phase 2	Bus Rapid Transit route to connect Washington Street Replacement Project with Transitway Phase I. Tentatively planned to connect with Boylston and Chinatown MBTA subway stations.	MBTA	In September 2000, construction for the Dudley Square to Chinatown segment began. At a cost of $52M, project will be completed in 2003. Funding for the Chinatown to South Station tunnel is expected in 2004 with construction completed by 2008.	2004-2008
Fourth Logan Express	Planning is underway for a fourth Logan Express location which would serve the North Shore, areas of northeastern Massachusetts, southern New Hampshire, and southeastern Maine. Massport is currently considering a candidate site and moving forward with conceptual design of this facility.	Massport	Site identification and feasibility study underway	Late 2001
Urban Ring	Currently, a series of cross-town bus routes linking low-income and developing Boston area neighborhoods with access to MBTA subway lines. Long-term vision would see the project develop into light rail or dedicated bus ways. One of these cross-town bus routes, the CT3, currently goes from the Longwood Medical area through Roxbury to Logan Airport.	MBTA	In study phase. Implementation not expected for several years.	
Worcester Regional Airport				
Worcester Access Road Improvements	Improvement of access to Worcester Regional Airport from nearby interstate highways. The Regional Access Improvement Study, prepared for the MassHighway in October 1998, identified three feasible alternatives to construct new highways, construct short linking segments and develop existing roads.	MassHighway Department	Project is in the pre-permitting stage. Alternative routes are being analyzed and discussed with the City of Worcester. An ENF was filed, and a Certificate issued on February 11, 2000. A combined Draft EIS/EIR is anticipated to be filed in October 2001, with a Final EIS/EIR filed in Spring 2002.	2004-2007
T.F. Green/Providence Airport				
Warwick Intermodal Station at T.F. Green/ Providence Airport	Proposed construction of an Amtrak/ Commuter Rail Station on the Northeast Corridor with a people mover connection to T.F. Green/Providence Airport. Most likely scenario includes moving sidewalk similar to new Logan Airport pedestrian ways; and horizontal elevator similar to Wellington Shuttle in Medford, MA. The governors of RI and MA signed a formal agreement that will allow the MBTA to extend Commuter Rail service to the station when it is completed.	Rhode Island Department of Transportation	Environmental Assessment, which was completed in July 1999, received a Finding of No Significant Impact from the Federal Government. Conceptual design for the project is underway. The City of Warwick and RI Economic Development Council have issued an RFP to develop land near the station. Design work for the station will coordinate with development efforts. Station construction anticipated to begin by the end of 2001.	December 2002
Manchester Airport				
Manchester Airport Access Road	Construction of a limited access highway to connect Route 3 (F.E. Everett Turnpike in New Hampshire) directly to Manchester Airport.	New Hampshire Department of Transportation	Undergoing final phase environmental review process.	2004-2005
Route 3 North Improvements	Upgrade of Route 3 from Route 128 in Burlington to the New Hampshire state line in Tyngsborough. A third travel lane will be built in each direction and shoulders will be widened.	MassHighway Department	In spring 2000, MassHighway awarded contract to design/build consortia. Multiyear construction began in October 2000.	Not earlier than 2003.
Manchester Airport Entrance Roadway	Reconfiguration of Manchester Airport main entrance to ease traffic flow in and out of the airport and connect to the Manchester Airport Access Road when completed.	Manchester Airport	Phase 1 began Summer 2000. Phase 2 is scheduled to begin in 2001. Phase 3, the final phase, is expected to be completed in 2004.	2004

The Greater Worcester Access Road Improvement Project, is expected to significantly improve access from major inter-states to the Worcester Regional Airport. The current access routes to the airport are perceived by passengers and airlines as confusing and inconvenient. By significantly improving access to the airport, The Greater Worcester Access Road Improvement Project, can positively impact airport passenger levels. The impact of the proposed project on Worcester Regional Airport passenger levels is being studied and will be reported on in MassHighway's *Greater Worcester Access Improvement Project, Draft EIS/EIR* (expected filing date is October 2001).

2.9 Initiatives in Support of Regional Transportation Options

Federal, state, and local transportation agencies are collaborating to develop and evaluate regional transportation options in New England which will ease the burden on Logan Airport. This section discusses the ways in which these agencies are achieving this shared goal. Table 2.9-1 summarizes major past and planned investments at regional airports and highlights cooperative funding efforts.

2.9.1 Agency Roles in Regional Transportation Planning

Massport

Massport is promoting the use of regional airports and travel modes to provide relief to Logan Airport. As an independent authority that owns and operates Logan Airport and Hanscom Field, operates Worcester Regional Airport, and owns and operates the Tobin Bridge as well as many properties in the Port of Boston, Massport is just one of many agencies that influence regional transportation policy. With regard to aviation, Massport's primary responsibilities are the provision, operation, and maintenance of airport infrastructure at Logan Airport and Hanscom Field, and operation of Worcester Regional Airport. On April 15, 1999, Massport entered a Memorandum of Understanding (MOU) with the City of Worcester, Massachusetts and the Worcester Airport Commission. The MOU contemplates Massport's takeover of Worcester Regional Airport in two separate phases. In January 2000, the first phase, assumption of operating responsibility, occurred. The second phase, transfer of ownership, is anticipated to be effected by separate agreement by 2005.

Table 2.9-1
Investments in the Region's Airports

Airport	Investments up to December 2000	Proposed Investments in Next Five Years
T.F. Green/Providence	***$100M FAA Funds***	***$25M FAA Funds***
	$11M Rhode Island Airport Corp.	***$18M Rhode Island Airport Corp.***
	New Passenger Terminal	***$25M Federal Rail Administration***
	New Roadways	***$5M State***
	New Parking Garage	Expand Terminal Facilities
	Airfield Improvements – Taxiway and Runway Reconstruction	Amtrak Rail Station and People Mover to Terminal Complex
	Residential and School Sound Insulation	Improved Runway Safety
		Complete Residential and School Sound Insulation
Manchester Airport	***$75M FAA Grants***	***$70M FAA***
	$7M Manchester Airport Authority	***$105M Manchester Airport Authority***
	New Passenger Terminal	***$75M Federal Highway Administration***
	New Parking Garage	Expand Terminal
	Improved Runway Instrumentation	Expand Parking Garage
	Runway Extensions (under construction)	Provide CAT III Instrumentation to Runway 35 and add ILS to Runway 24
	Residential & School Sound Insulation	Continue Sound Insulation and Property Acquisitions
		Complete Runway and Taxiway Extensions
		Access highway connection to F.E. Everett Turnpike and Route 3
Worcester Regional Airport	***$17M FAA Grants***	***$20M FAA***
	$2M City of Worcester	***$2M City of Worcester***
	New Terminal Building	***$50M Mass Highway***
	Improved Runway Safety	Airfield Enhancements
	Improved Instrumentation to reduce Weather Cancellations	Improved Runway Safety
		Greater Worcester Access Improvements
Pease International Tradeport	***$23M FAA Grants***	***$10M FAA Grants***
	$2M Pease Development Authority	***$1M Pease Development Authority***
	New Terminal Building	New Access Road/Auto Parking
	Reconstruction of Runways and Taxiways	General Airfield Improvements
	Improved Instrumentation and Approach Lighting	

Since Massport has no jurisdiction over the development, operation, or use of infrastructure at airports other than Logan, Hanscom Field, and Worcester Regional, or over the use of inter-city rail, Massport's role in regional transportation planning often focuses on cooperative planning with other airports and agencies. The following subsections discuss those agencies, other than Massport, that assume responsibility for the development and operation of other airports and inter-city rail

Federal Aviation Administration (FAA)

The FAA, an agency of the US Department of Transportation (U.S. DOT), is the principal Federal entity responsible for national aviation planning and airspace management in the United States. The FAA employs several mechanisms for supporting the planning and development of the nation's airport infrastructure: prepare the *National Plan of Integrated Airport Systems*; administer the Airport Improvement Program (AIP) Trust Fund; approve Passenger Facility Charges (PFCs); and promulgate standards and guidelines for airport design and construction. By law, the FAA cannot dictate the airports that an airline may serve; the schedules that an airline may offer; or the fares that an airline may charge. The airlines make all of these decisions according to market conditions and their respective operating strategies. However, the FAA does approve operating specifications with respect to new entrant airline services at individual airports.

Beginning with the first regional assessment for a new airport, the FAA New England Office has been an active partner in regional aviation planning in New England. The FAA has also funded all of the aviation planning efforts listed in Table 2.9-2. The FAA will play the same role in the upcoming *New England Airports System Study*. The study will evaluate the impact of recent regional airport developments on Logan Airport, identify constraints to regional airport growth, and highlight strategies for optimizing New England's regional aviation system.

The proposed draft scope of work outline for this study is presented in Table 2.9-3 (see also Appendix B). As early as 1990, the FAA began prioritizing its Airport Capital Improvement Plan (ACIP) to reflect the importance of AIP funding development at the Manchester and T.F. Green / Providence Airports in the regional system.

In conjunction with the proposed *New England Airports System Study*, the FAA, through the United States Department of Transportation's "One DOT" initiative, has formed an intermodal group that includes the Federal Highway Administration (FHWA), the Federal Transit Authority (FTA), and the Federal Rail Administration (FRA). The purpose of the intermodal group is to discuss and coordinate planning and development that can impact the Boston regional transportation system.

Table 2.9-2
New England Regional Transportation Planning Studies

Year	Study	Author	Conclusions
1989	Boston Regional Airport System Study	Massport	Scheduled service at regional airports will re-capture some passengers that were using Logan, but growth in demand at Logan will continue. High speed rail service to New York provides some relief, but there will be a need for a major second airport beyond 2010.
1990	High Speed Rail Benefits Study*	Coalition of Northeastern Governors (CONEG)	Electrification of Northeast Corridor rail would shift 2.2 million passengers from air to rail by 2010.
1991	Second Major Airport Study*	Massachusetts Aeronautics Commission (MAC)	Developing a second major airport would require a 10- to 15-year planning horizon for site selection and environmental review in addition to a multi-year construction period. While the SMA identified sites for further study, none of the sites had good access to Logan's core market area and there was significant opposition to siting a new airport anywhere in Massachusetts. Therefore construction of a second airport is not a solution for accommodating demand for the foreseeable future.
1993	Strategic Assessment Report (SAR) *	FAA and Massachusetts Aeronautics Commission (MAC)	High speed rail, development of the regional airports, and infrastructure improvements at Logan Airport are all needed to accommodate the region's growing demand for inter-city travel. The SAR recognized the importance of Runway 14/32 for reducing delays at Logan and the limitations of peak hour pricing. Further, the SAR clearly stated that peak hour pricing would impose "significant costs to travelers, commuter operators and air carriers, and the local economies of numerous cities and towns."
1995	New England Transportation Initiative (NETI)	New England Governor's Council	Coordinated planning is necessary to enhance the competitiveness of regional airports and the efficiency of the region's air transportation network. Procedural and infrastructure improvements at Logan are also necessary to mitigate increasing congestion and delay at the region's primary airport.
1995	New England Regional Airports Air Passenger Service Study*	New England Council, 6 New England States, FAA, Massport and MAC	The study identified sufficient demand at the outlying airports to support improved jet services. The study concluded that expanded jet services, particularly low-fare airline services, at the regional airports would enhance their ability to attract passengers that bypass the regional airports in favor of Logan.
2000	New England Intergovernmental Coordinating Council	Council of New England Governors	The first ICC meeting was held in February 2001. The Council is establishing committees to examine opportunities for inter-modal connections and to recommend interstate transportation initiatives. The ICC members are the six state transportation secretaries, Massport and the regional airport directors.
2001	New England Airports System Study Update*	New England Council, 6 New England States, FAA, Massport and MAC	The *New England Airports System Study* will evaluate the impact of recent regional airport developments on Logan Airport, identify constraints to regional airport growth, and highlight strategies for optimizing New England's regional aviation system. See Table 2.9-3 for the proposed scope of the study update.

* Partial funding provided by Massport.

Table 2.9-3
New England Airport System Study Proposed Scope of Work

Phase	Tasks	Products
I	■ Regional Aviation Forecasting ■ Studies to Facilitate a Possible Reshaping of the Market	■ New Regional Passenger and Cargo Forecasts ■ Updated Passenger and Fleet Forecasts ■ Identification of Updated Catchment Areas ■ Identification of New Service Market Opportunities
II	■ Evaluation of Major Public Policies, Alternate Airline Strategies, Federal Aviation Policies and Regulations that Guide Regional Systems Planning ■ Evaluation of Federal Aviation Policies or Regulations that Restrict Cooperative Intermodal System Planning ■ Public Policy Development and Action Recommendations	■ Implementation Plan/Program of Major Actions Required to Support a Regional Strategy to Enhance Air Passenger Service ■ Ongoing Planning and Evaluation Capability to Guide Evolution of Regional Strategy
I and II	Ongoing Public and Agency Consultation with Congressional, Business, Environmental and Community Groups	

State Aviation Authorities and Departments of Transportation

State entities involved in aviation planning in New England include statewide aviation authorities and transportation departments. In Massachusetts, the Executive Office of Transportation and Construction (EOTC) coordinates statewide transportation planning and compiles the Statewide Transportation Improvement Program (STIP). The Massachusetts Aeronautics Commission (MAC) performs licensing and reviews activities at all civil airports in the state, except for Logan Airport and Hanscom Field, which fall under Massport's jurisdiction. The MAC was also the lead agency for the *State Airport System Plan, The Second Major Airport Study*, and the *Strategic Assessment Report*. In addition, MAC was a co-sponsor, along with Massport, for the *New England Regional Airports Air Service Study*.

The New England state aviation directors and departments of transportation formed a unique alliance with the FAA, Massport and regional airport authorities to study regional airports in 1994. This alliance produced *the New England Regional Airports Air Passenger Service Study* in 1995.

Local Airport Proprietors

At the local level, airport authorities, commissions and municipal departments own and operate civil airports. Local airport proprietors supply, operate, and maintain airport infrastructure, which includes the runways, taxiways, terminal facilities, parking facilities, and access roads. The airport proprietor plays no role in the decisions of private airlines

regarding airfares, airline routes or service levels, but routinely engages in marketing activities to foster air service development.

Federal Railroad Administration (FRA)

The FRA is the Federal agency within the U.S. DOT that plans and funds inter-city railroad projects. The agency promotes safe, environmentally sound and effective rail transportation in the United States. The FRA was the principal funding source for the recently-completed Northeast Corridor Improvement Project (NECIP), which allows high-speed train travel between Boston and New York.

Federal Highway Administration (FHWA)

The FHWA is the federal agency within the U.S. DOT that provides expertise, resources, and information to continually improve the quality of the nation's highway system and its intermodal connections. These goals are accomplished through two main FHWA programs. The Federal-Aid Highway Program provides federal funds to the States for new construction and improvements to the National Highway System, urban and rural roads, and bridges. The Federal Lands Highway Program provides access to and within public lands, such as national forests, by preparing plans, letting contracts, supervising construction, and conducting bridge inspections and surveys. The FHWA also conducts and manages a comprehensive research, development, and technology program to support the nation's highway system.

2.9.2 Regional Transportation Planning and Development in New England

The proposed Airside Project improvements at Logan are an important component of a broader regional transportation strategy that has been evolving for more than a decade. A series of regional transportation planning studies beginning in 1989 examined various strategies and modes for accommodating the growing demand for inter-city travel and for relieving congestion and delays at Logan Airport. Each study built upon the conclusions of prior studies and included participation from a range of transportation interests and agencies.

The key regional planning efforts and their principal conclusions, which were described in Section 2.2.1 of the Logan Airside Improvements Planning Project Draft EIS/EIR, are summarized below and in Table 2.9-2.

These regional transportation planning studies have consistently recommended the development of High Speed Rail in the Northeast Corridor, a growing role for the regional airports, and infrastructure improvements at Logan as essential elements of a regional transportation strategy. The recommendations and goals put forth by these regional planning efforts are now being achieved in New England.

- Low-fare airlines, notably Southwest Airlines, Delta Express, and MetroJet, as well as other major United States airlines, have substantially expanded jet services at the T.F. Green / Providence and Manchester airports. As a result, these airports have increased their roles in accommodating the region's air travel demand and are providing considerable traffic relief for Logan Airport, particularly for passengers originating from points to the north and south of Logan's core service area.

- The electrification of the northern portion of the northeast corridor rail has been completed and Amtrak's high speed Acela service was initiated in December 2000. This service will provide relief to Logan by accommodating some of the inter-city air passenger demand in the Boston-New York market, which is Logan Airport's largest origin-destination market.

- An intermodal station being developed at T.F. Green Airport in Warwick, RI will provide a commuter rail link from Boston's South Station and the Route 128 Station to the Warwick, RI Station with people mover access to T.F. Green Airport. This access improvement will allow more residents of the Boston Metropolitan Area to utilize T.F. Green's frequent, low-fare air services.

- Substantial infrastructure improvements at the regional airports have been completed and others are in various stages of planning or construction.

  - Since 1996, investments made at T.F. Green Airport include a $207-million terminal building and seven additional aircraft gates. In 1999, investments included a $1.5-million expansion with a new Federal Inspection Facility (FIS) and parking facilities.

  - The Manchester Airport is involved in a 9-year, $260 million capital improvement project. The project includes reconstruction and lengthening of both runways; an ILS upgrade; taxiway work; expansion of the terminal building; a parking garage; and a new roadway entrance. The New Hampshire Department of Transportation is also planning a $75 million highway that will connect the airport to the F.E. Everett Turnpike. Construction of the roadway is expected to begin after 2000.

  - The Massachusetts Highway Department (MassHighway) is studying alternatives for an east-west connector road that would improve access to and within the City of Worcester and to the Worcester Airport. MassHighway filed the Greater Worcester Access Road Project Environmental Notification Form (ENF) at the end of 1999. In February 2000, the Secretary of the Executive Office of Environmental Affairs (EOEA) issued a decision on the ENF requiring an EIR. A combined Draft EIS / EIR is expected to be filed in October 2001.

- In January 2000, Massport assumed operational control of Worcester Regional Airport to increase its utilization and provide relief to Logan for traffic originating in Central Massachusetts and the MetroWest suburbs.

- Massport continues to invest in Logan Airport, which will remain the region's principal airport. It is completing landside improvements and is proposing Airside Project improvements that will allow Logan to operate more safely, reliably and efficiently, resulting in less congestion and delay.

2.9.3 Massport's Initiatives in Support of Regional Alternatives

Massport advocates a regional transportation policy to improve the efficient use of the region's transportation infrastructure by appropriate expanded use of regional airports and alternative transportation modes. To achieve this policy goal, Massport is committed to cooperative transportation planning and is actively working with a broad array of transportation agencies and concerned parties to ensure an integrated, multi-modal regional transportation network. Massport has undertaken several initiatives to advance the role of regional airports in accommodating a greater share of the region's air travel demand. Massport is also participating in several interagency transportation planning forums pertaining to alternative, inter-city travel modes. The *1996, 1997,* and *1998 Annual Updates* and the *1999 Environmental Status and Planning Report* (formerly the GEIR) describe some of these past initiatives and cooperative planning ventures. The following subsections describe Massport's more recent initiatives.

Massport Involvement in Cooperative Planning Initiatives

- Massport continues to maintain an aviation information database and distributes quarterly summary reports that track aviation trends at all of the regional airports to parties interested in promoting regional airport services. Massport compiles and issues monthly statistical summaries of passenger levels, aircraft operation counts and airline schedule data at each regional airport. At the end of each year, Massport also prepares an annual report summarizing regional airport trends and service developments.

- Massport participates in meetings of other regional and state aviation organizations and the MAC. Topics discussed at these meetings include airfield and terminal improvements at state airports; capital improvements at New Bedford, Martha's Vineyard, and Nantucket; and the Worcester Marketing Program.

- In January 1999, the Transportation Research Board (TRB) invited the FAA, Massport and MAC to present their collaborative regional planning efforts as a national model for regional aviation system planning.

- On November 23, 1999, Massport participated in a "Regional Transportation Summit" that it sponsored with the Cellucci / Swift Administration. This summit enjoined New England governors, transportation officials, and business leaders to discuss joint transportation initiatives in New England. The agenda included a panel discussion on aviation, which focused on joint marketing initiatives among the major commercial airports in New England and the economic value of airports to the New England economy. At the close of the Summit, state leaders agreed to the following action steps:

  - Encourage the Massachusetts legislature to pass the Transportation Bond Bill to increase rail service to Providence. This legislation was passed, and through the Pilgrim Partnership formed between the MBTA and Rhode Island, in July 2000, three additional commuter rail trains were added between Boston's South Station and Providence. The additional rail services, coupled with the link that is under-construction to the T.F. Green / Providence Airport will increase transit options for Boston passengers seeking use of theT.F. Green / Providence airport.

  - Create a joint marketing program to promote the region's airports to air passengers inside and outside New England. The program includes detailed brochures that display the region's airports, their airlines, and major access routes. The program also involves participation in industry trade shows to promote the regional airports. A joint web site, *flynewengland.com*, linked with the various airport and state aviation home pages, and with travel and tourism sites, has been developed.

  - Establish a comprehensive rail plan for all of New England to integrate each state's assets and needs into one regional strategy. Since the Summit, the Executive Office of Transportation and Construction has partnered with New Hampshire to develop commuter rail from Lowell, MA to Nashua, NH. Furthermore, Massachusetts has joined other New England states to ask the Federal Rail Administration to designate two high-speed, rail corridors. In March 1999, Massachusetts, Maine, and New Hampshire jointly filed applications for a Portland-Boston designation. In August 2000, Massachusetts, Vermont, and New Hampshire jointly filed an application for a Boston-Montreal designation. Federal transportation officials approved both of these applications in October 2000, making the participating states eligible to apply for Federal money to fund safety and capacity improvements on higher-speed rail lines.

  - Meet annually to discuss regional transportation issues and accomplish regional goals to improve infrastructure development, use, and efficiency.

- In December 1999, Massport met with MassHighway and MAC to develop the Regional Airport Signage Program. MassHighway developed signs to direct Massachusetts residents to the Manchester, T.F. Green / Providence and

Bradley / Hartford airports, and installed them in February 2000. MAC provided $20,600 in funding for the signage program.

- Massport spent $80,000 on a print advertising program to promote regional airports. The program ran advertisements in newspapers west of I-495 and near the Connecticut, New Hampshire, and Rhode Island borders to promote the advantages of regional airports over the traffic and congestion at Logan Airport.

- In 2000, Massport, the FAA and the regional airport directors agreed to jointly undertake a *New England Airports System Study*. This study will evaluate the performance of the regional airports since the completion of the 1995 Regional Airports Air Passenger Service Study. It will re-evaluate airport market areas and capture rates in light of the significant air service changes that have occurred in the last few years; evaluate the potential for international, charter, and cargo services at the regional airports; evaluate capacity issues at each of the airports; and consider the development of high occupancy vehicle / ground transportation and rail alternatives to improve access to the regional airports. (See Table 2.9-3 and Appendix B).

- In January 2001, Massport committed $500,000 to a regional marketing plan, to encourage air travelers to fly out of regional airports, when possible, instead of Logan. The marketing campaign will consist of TV ads, printed materials, and industry trade shows to promote the regional airports.

- On February 16, 2001, Massport participated in the first meeting of the New England Intergovernmental Coordinating Council Meeting.

Worcester Regional Airport: Marketing and Planning Initiatives

Since 1995, Massport has been working with the City of Worcester to develop strategies to realize its airport's full potential, thereby improving the New England air transportation network. Recent efforts are summarized below.

- In accordance with an Operating Agreement with the City of Worcester and the Worcester Airport Commission, Massport assumed operational responsibility for Worcester Regional Airport on January 15, 2000.

- Massport has secured new nonstop services at Worcester Regional Airport:

  - In February 2000, Atlantic Southeast Airlines, a regional carrier subsidiary of Delta Air Lines, began serving Worcester Regional Airport market with two daily flights to Atlanta, with 50-seat Canadair Regional Jets. This service has been highly successful. During the first four months of service, load factors reached 73 percent, climbing to 94 percent in August 2000. Delta will increase its Worcester-Atlanta service to three daily roundtrips in April 2001.

- In July 2000, American Eagle initiated nonstop flights to New York JFK International Airport. The service is operated three times per day, with 34-seat Saab 340 turboprops.

- In February 2001, Pan Am began daily nonstop jet service to Orlando Sanford International Airport.

- Massport has embarked on an aggressive marketing campaign targeted to travelers and the airlines:

  - Massport launched an advertising campaign promoting the headline "Even Worcester Airport has delays ...five minutes to park, two minutes to check in." The campaign targets travelers within 25 miles of the airport and builds awareness of its new air services and convenience. The campaign runs advertisements in area cinemas and local newspapers, and on local radio stations. Additionally, Massport hired a full-time marketing manager to promote the airport to airlines, travel agents, local businesses, and residents.

  - Massport is engaged in a strategic marketing plan to attract airlines that could provide services at Worcester Regional Airport. To date, Massport presented air service proposals to Spirit Airlines, Jet Blue, American Trans Air, American Airlines, Delta Air Lines, Continental Airlines, Shuttle America, and Pan Am. Other airlines are also being targeted for new services at Worcester Regional Airport.

Other Cooperative Regional Transportation Planning Efforts

- Massport supports inter-city rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board that consists of these other state and regional agencies: EOTC; MassHighway; Metropolitan Area Planning Council (MAPC); MBTA; and the MBTA Advisory Board. Massport and the other MPO agencies prepared the *Transportation Plan for the Boston Region* and *the Boston Transportation Improvement Program (TIP).*

- Rhode Island Governor Lincoln Almond hosted the second annual New England Regional Transportation Summit on December 14, 2000. Joining Governor Almond was Massachusetts Governor Cellucci, Connecticut Governor John Rowland, and Massport officials. The Governors cited aviation, truck transportation and the movement of more goods by rail as their top transportation priorities, and resolved to re-establish the New England Governors Conference Committee on Transportation as a regular forum for discussing regional transportation initiatives. (See Appendix B for the New England Governors' Resolution.)

2.10 Conclusion

New England's demand for high-speed intercity travel, particularly air travel, has increased over time and will continue to increase in the future. This poses significant challenges for the region which is increasingly congested on its roads and interstate highways, and at Logan, its principal airport. Major investments and innovative solutions are needed to accommodate future travel demand efficiently and with minimal congestion. Reducing travel delays provides widespread regional benefits by eliminating wasted time, promoting stable economic growth, and minimizing negative environmental impacts.

Local, state and federal agencies throughout the region share the goal of improving New England's transportation network and have already begun to work, both independently and cooperatively, to achieve that goal. Great strides have been made in the last decade. Regional airports have become meaningful options to Logan Airport and passengers traveling to and from New York can now choose high-speed rail over air travel.

These are significant achievements that resulted from years of planning efforts involving many different agencies. Local airport authorities and the FAA were responsible for significant infrastructure investments at the region's airports. Through individual and cooperative efforts, the regional airports have attracted meaningful airline services and have increased their share of the region's travel demand. Massport has assumed operating responsibility for the Worcester Regional Airport, which is capable of handling more of the region's air travel. In just one year, Massport obtained new air services for the airport which resulted in a two-fold increase in Worcester's passenger traffic. State governments have undertaken a number of road and commuter rail projects to improve access throughout the region and make regional airports more accessible. The Federal Rail Administration and Amtrak have implemented high-speed rail along the Northeast Corridor, the only active high-speed rail service in the nation.

While these are meaningful accomplishments, the process for ensuring a balanced, integrated and efficient regional transportation system is on-going. The states are evaluating additional opportunities for high-speed rail services in New England. The FAA and Massport are sponsoring a *New England Airports System Study* to identify new opportunities for growth at the regional airports and other innovative initiatives. Massport is spearheading a cooperative marketing campaign to attract more passengers to the regional airports. Massachusetts and Rhode Island are cooperating to bring rail access to the T.F. Green / Providence Airport. All agencies are doing their part to ensure that the region meets its long-term transportation objective.

Many of the region's transportation projects and planning efforts are directed at creating and expanding transportation options to Logan Airport. Experience shows that increasing the role of regional airports reduces the rate of passenger growth at Logan by distributing air passenger growth across the region. Yet, Logan plays a critical role in the

regional transportation network. It is closest to the majority of the region's travel demand and the only airport in New England that can serve the long-haul domestic and international travel needs of the region. Even with regional airports and rail improvements, Logan will continue to be a vital part of the regional transportation network and its passenger levels will continue to grow. From a regional system planning perspective, it is imperative that Massport improve the efficiency of Logan Airport, since Logan serves the greatest number of passengers and there is no other airport or group of airports that could fulfill the role that Logan plays as the primary airport for the region within I-495 and the region's gateway for nonstop services to long-haul domestic and international destinations.

Massport's Logan Modernization Program, which will be completed in the coming decade, is improving the airport roadway network and upgrading the airport's landside facilities. The proposed Airside projects are also needed to improve the efficiency and reliability of Logan's airside operations.

Despite past and planned efforts to improve regional transportation options, Runway 14/32 is the only measure that can eliminate Logan delays that occur during northwest wind conditions. If Runway 14/32 is not built, the majority of the region's air travelers will continue to suffer from unreliable and inefficient air travel at Logan Airport.

3 Alternatives

Key Points

In the *Airside Improvements Planning Project Draft Environmental Impact Statement/ Environmental Impact Report* (Airside Project Draft EIS/EIR), Chapter 3 provided a detailed description of the improvement concepts. In this Supplemental DEIS/FEIR, these alternatives are reviewed again, but in more summary form. In addition, this chapter discusses demand management strategies at US and international airports, including previous Massport efforts at Logan, for relevance to the current Peak Period Pricing concept.

- The following improvement concepts designed to reduce congestion and delays and enhance safety at Logan Airport were evaluated in the Airside Project Draft EIS/EIR prior to selection of the Preferred Alternative:
  - **Unidirectional Runway 14/32** was designed to address delays during northwest winds and to provide a third active runway during conditions that now require Logan to operate on two or fewer runways. All arriving and departing flights using Runway 14/32 would occur over Boston Harbor. This additional three-runway configuration with proposed unidirectional Runway 14/32 would enable better conformance with the PRAS runway use goals designed to more equitably distribute noise impacts among affected communities.
  - **Taxiway improvements** were designed to reduce taxiway congestion and enhance safety, facilitating more efficient movement of aircraft between terminal areas and runways during takeoff and landing operations. By reducing congestion and simplifying the taxiway system, the taxiway improvements will reduce the potential for runway incursions and wingtip conflicts.
  - **Reduced approach minimums** for Runways 15R, 22L, 27 and 33L will increase the availability of these runways, reducing reliance on Runway 4R in low visibility and enhancing safety under adverse operating conditions. The Runway 22L and Runway 27 minimums will be reduced to levels consistent with the capabilities of the existing navigational equipment, while approaches to Runways 15R and 33L will be upgraded to Category III Instrument Landing Systems (ILSs). Reduced minimums will also increase the opportunity to achieve short- and long-term Preferential Runway Advisory System (PRAS) goals.
  - **Peak Period Pricing** designed to reduce delay by eliminating flights during periods when demand exceeds the airfield's capacity for a sustained period of time.

- A runway length (exclusive of safety areas) of 5,000 feet was selected for unidirectional Runway 14/32 based on the finding that this runway length would accommodate a greater proportion of the regional carrier fleet than the alternative 4,500 foot length and therefore was more effective in reducing delay.[1]

- An illustrative peak period fee of $150 per operation was selected in a screening process, based on the finding that this fee would be effective in reducing delay in a future High Fleet scenario with airline overscheduling during the peak hours.[2]

- The alternatives evaluated consist of the following combinations of improvement concepts:

  - Alternative 1 – All improvement concepts
  - Alternative 1A – Preferred Alternative -- All improvement concepts, except Peak Period Pricing
  - Alternative 2 – All improvements concepts, except Runway 14/32
  - Alternative 3 – No Build, operational improvements and Peak Period Pricing only
  - Alternative 4 – No Action

- Alternative 1A was selected as the Preferred Alternative because it significantly reduces delays without imposing the economic costs on regional carriers and small communities associated with Peak Period Pricing. The Preferred Alternative achieves certain environmental benefits that include improved air quality and a reduction in noise for the most severely impacted communities, while causing minimal environmental impacts that would be mitigated.

- As discussed in Chapter 2, regional alternatives (including development of the regional airports and high speed rail services) will play an important role in the emerging regional transportation system by diverting from Logan a portion of its short- and medium-haul demand. Logan, however, will remain the region's major airport for long-haul domestic and international travel and continue to serve as a primary point of access to the national air transportation system for passengers from small- and medium-sized New England communities. The proposed airfield improvements for reducing delay are necessary for Logan to operate reliably and efficiently in the regionalized transportation system.

In response to the Secretary of the Executive Office of Environmental Affairs (EOEA) Certificate on the Airside Project Draft EIS/EIR (May 7, 1999), additional analyses were performed to assess the impact of previous differential pricing programs at Logan. While it was not a Peak Period Pricing program, Logan's 1988 Program for Airfield Capacity Efficiency (PACE) increased landing fees for operators of small aircraft, including

▼

1 A runway longer than 5,000 feet was analyzed earlier. It would require construction into the harbor and was therefore considered impractical.

2 The fleet forecasts include High Fleet and Low Fleet operations scenarios for each passenger level. The Low Fleet scenarios assume more large jet operations than non-jet operations, similar to current conditions, while the High Fleet scenarios assume a greater proportion of smaller non-jet aircraft and thus a higher level of total operations for the same passenger level. The higher number of small aircraft in the High Fleet scenarios reflects airline overscheduling conditions.

regional carriers and general aviation. During the six-month period when PACE was in effect, flight activity levels within these segments did decline, but it would be incorrect to attribute these changes to PACE alone. A review of factors influencing Logan flight activity during this period indicates that consolidation within the regional carrier industry and a general downturn in general aviation demand may have had equal or greater responsibility for the observed changes.

3.1 Introduction

A range of Logan-specific alternatives to reduce congestion and delay and enhance safety at Logan have been considered in the Logan Airside Improvements Planning Project (Airside Project). Phase I of the project was initiated in 1993 as a feasibility study that examined the nature of delays at Logan and evaluated the potential delay savings and safety enhancements for a range of individual improvement concepts.[3] The concepts evaluated in the Phase I study evolved from alternatives considered in previous studies, most notably the FAA's *Boston Logan International Airport Capacity Enhancement Plan (CEP),* published in October 1992. Additional sources for the concepts included the *Logan Runway Incursion Mitigation Plan/ Taxiway Relocation Study* (December 1993), and recommendations by Massport staff, airlines, and the Air Transport Association (ATA).

Based on the results of the *Phase I Feasibility Study*, the Massport Board in July 1995, selected seven improvement concepts for more detailed operational and environmental analysis through a joint federal and state EIS/EIR. These concepts were presented in the Environmental Notification Form (ENF) for the Airside Project and further developed during the federal and state EIS/EIR scoping process. Consistent with the scope issued by the EOEA and the January 1996 EIS Scope issued by the FAA, the Airside Project Draft EIS/EIR assessed the following improvement concepts:

- Construction of a unidirectional Runway 14/32;
- Construction of a Centerfield Taxiway;
- Extension of Taxiway Delta;
- Realignment of Taxiway November;
- Optimization of taxiways in the Southwest Corner of the airfield;
- Reduction in approach minimums on Runways 22L, 27, 15R, and 33L; and,
- Implementation of Peak Period Pricing.

3 Logan Airside Project improvements Feasibility Study, Phase I Report, prepared by Jason M. Cortell and Associates Inc. for the Massachusetts Port Authority, July 20, 1995.

The analytical framework was structured to evaluate five distinct packages of improvement concepts, or Alternatives. Alternative 1 includes the full package of feasible improvements (see Figure 3.1-1) and Alternative 1A includes all improvement options except for Peak Period Pricing. Alternative 2 includes all actions except the construction of Runway 14/32 (see Figure 3.1-2). Alternative 3 is a No Build Alternative, employing only the operational and administrative improvement concepts (reduced minimums and Peak Period Pricing). For comparison, Alternative 4 is a No Action Alternative, evaluating the impacts of doing nothing (see Table 3.1-1).

Sections 3.2 through 3.5 discuss each individual improvement concept, and its role in reducing current and projected levels of congestion and delay at Logan. An expanded description of the Alternatives is included in Section 3.6.

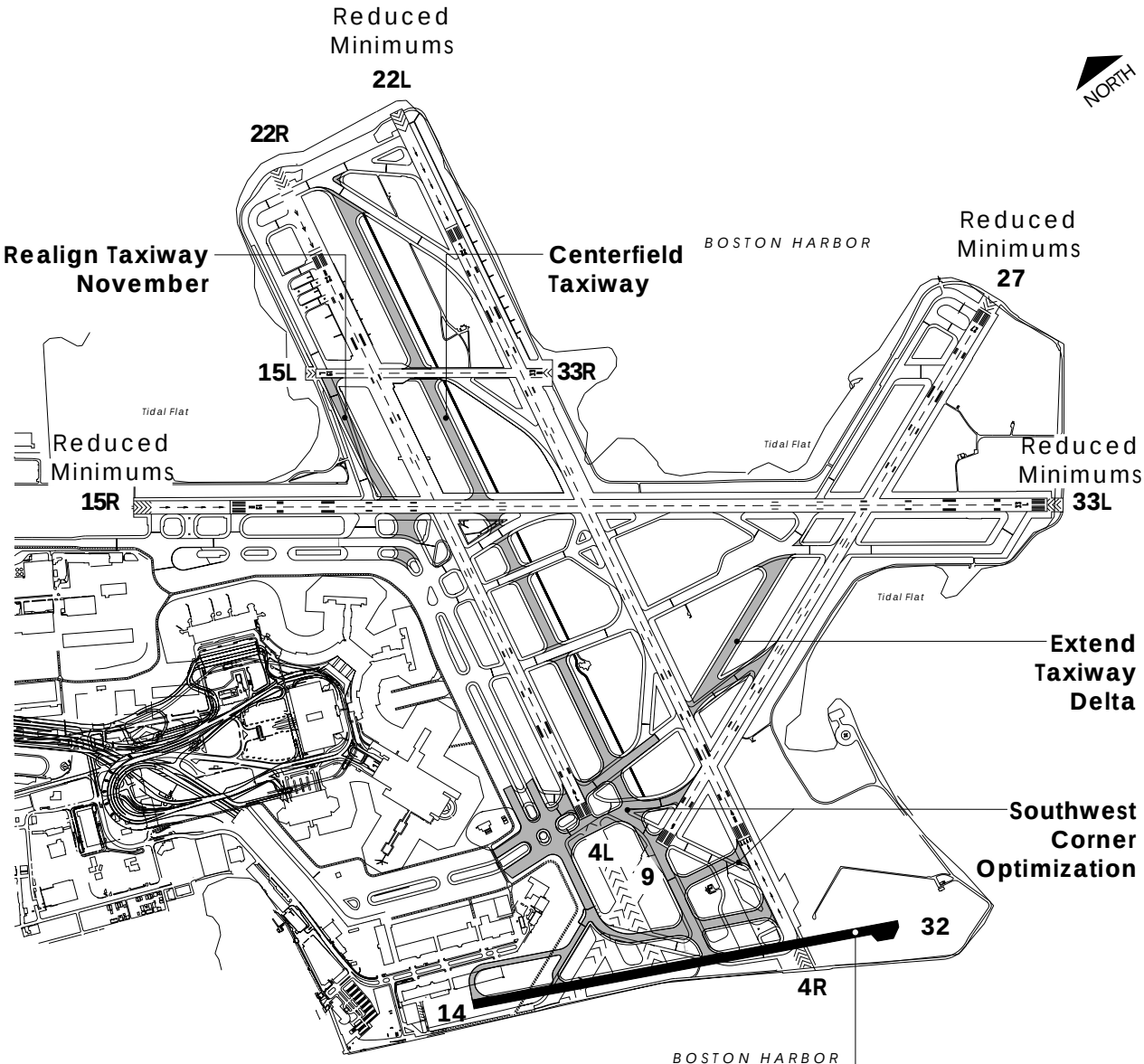
The comparative benefits and impacts of the different Alternatives were fully described in Chapters 4 and 8 of the Airside Project Draft EIS/EIR.

After careful review of the extent and causes of delays at Logan and the comparative benefits of each Alternative, FAA and Massport selected Alternative 1A as the Preferred Alternative because it significantly reduces delays without imposing the economic costs on regional carriers and small communities associated with Peak Period Pricing. Peak Period Pricing was not selected because an overscheduling condition does not exist at Logan today.

Alternative 1A achieves certain environmental benefits that include improved air quality and a reduction in noise for the most severely impacted communities, while causing minimal environmental impacts. These minimal impacts would be mitigated as described in Chapter 8.

Table 3.1-1
Logan Airside Improvements Project Alternative Packages

Improvement Concept	Alternative 1 All Actions	Alternative 1A All Actions Except Peak Period Pricing	Alternative 2 All Actions Except Runway 14/32	Alternative 3 No- Build	Alternative 4 No Action
Runway 14/32	■	■			
Taxiways					
Centerfield	■	■	■		
Extend Delta	■	■	■		
Realign November	■	■	■		
Southwest Corner Optimization	■	■	■		
Operational					
Reduced Minimums	■	■	■	■	
Peak Period Pricing	■		■	■	



ALTERNATIVE 1

All Actions
Runway 14/32
Taxiways:
Centerfield TW
Extend TW Delta
Realign TW November
Southwest Corner Optimization
Operational:
Reduced Minimums
Peak Period Pricing (PPP)

ALTERNATIVE 1A

All Actions Except Peak Period Pricing
Runway 14/32
Taxiways:
Centerfield TW
Extend TW Delta
Realign TW November
Southwest Corner Optimization
Operational:
Reduced Minimums

LEGEND

Proposed Taxiways
Proposed Runway

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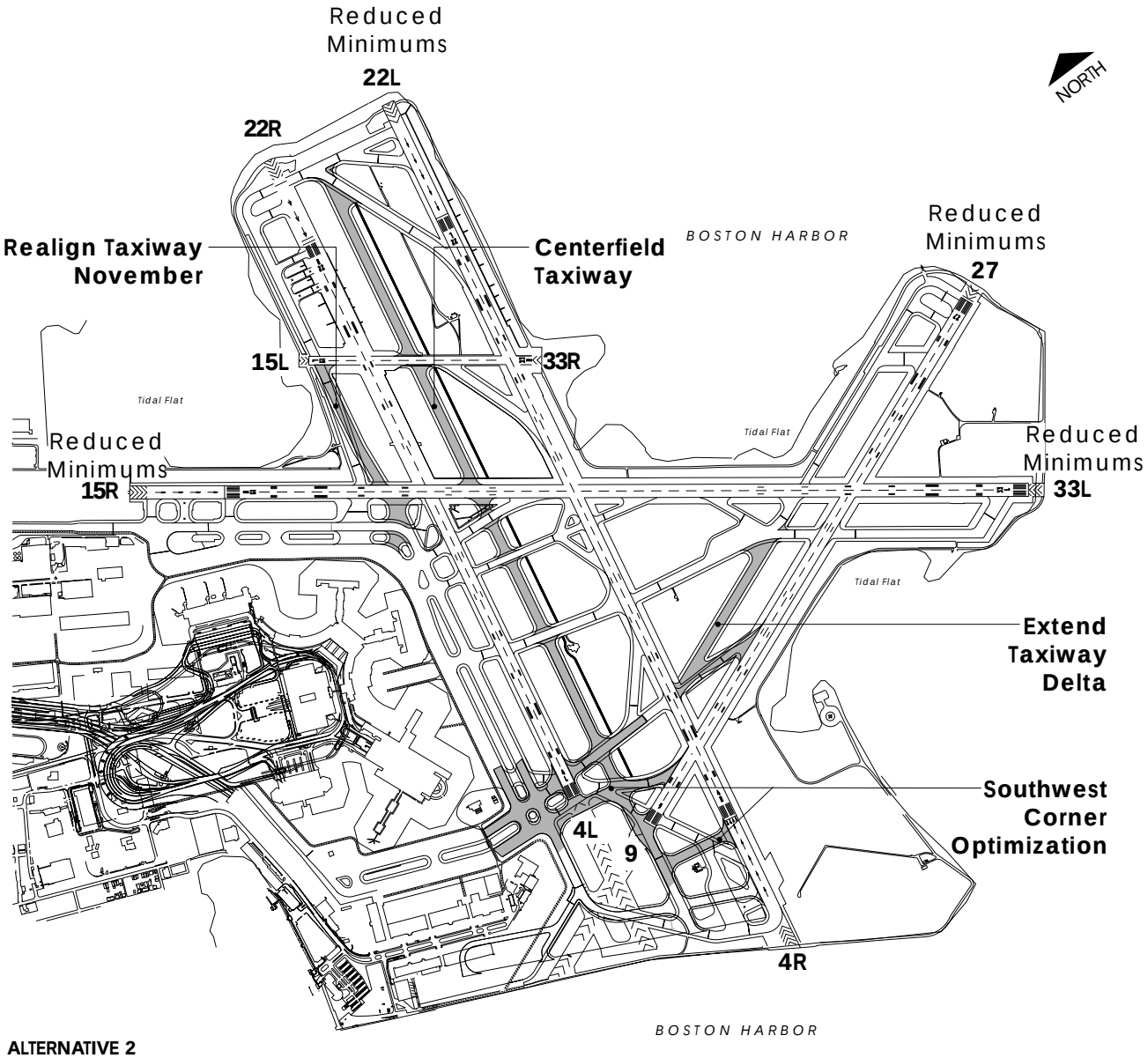
Figure 3.1-1

Potential Airfield Improvements - Alternatives 1 and 1A



ALTERNATIVE 2

All Actions Except the Runway
Taxiways:
- Centerfield TW
- Extend TW Delta
- Realign TW November
- Southwest Corner Optimization

Operational:
- Reduced Minimums

Peak Period Pricing (PPP)

LEGEND

Proposed Taxiway

Figure 3.1-2

Potential Airfield Improvements - Alternative 2

3.2 Unidirectional Runway 14/32

This section describes proposed unidirectional Runway 14/32 (illustrated in Figure 3.1-1), including the purpose of this improvement, the process used to screen various runway lengths and layouts, a physical description of the preferred layout, and a brief assessment of technical and environmental issues associated with it.

Unidirectional Runway 14/32 would be located along the southwestern edge of the airport. All arrivals would be from the southeast over Boston Harbor and would touch down at the Runway 32 end and taxi toward the Runway 14 end. All departures would leave from the Runway 14 end, with jets climbing out and heading southeast over the harbor.

Runway 14/32 would address delays at Logan that occur when wind and weather (particularly moderate to strong northwest winds) limit Logan to two-runway configurations and sometimes to single-runway configurations, a major cause of delay. With three runways in visual flight rule (VFR) weather conditions, Logan's capacity is approximately 120 operations per hour. Two runways can accommodate up to 90 hourly operations and a single runway provides 60 or fewer hourly operations. The high proportion of smaller, regional aircraft in the fleet at Logan also contributes to delay, because the separation distances required between larger and smaller aircraft using the same runway are often greater than between two aircraft of the same size. When greater separation distances are required, the time needed to complete each aircraft operation (e.g., landing or takeoff) increases, which can result in additional delay for subsequent operations. Along with the taxiway improvements, the new runway would also enhance operational safety at Logan (e.g., separating large and small aircraft operations, and reducing the potential for runway incursions or wingtip conflicts) by reducing congestion in the air and on the ground.

In addition, Runway 14/32 would provide the FAA with greater flexibility to shift operations among the different primary operating directions in order to be more consistent with the runway use goals embodied in the Preferential Runway Advisory System (PRAS) at Logan. PRAS attempts to reduce the areas subject to the highest noise exposure levels, distribute noise impacts evenly in the long term, limit sustained impacts in the short term by regularly shifting operations when possible, and maximize use of over-the-water procedures.[4] By providing capacities similar to those available in the north/south configurations, Runway 14/32 would allow a more equitable distribution of jet operations.

3.2.1 Runway Length Screening

An initial screening analysis was carried out in the Airside Project Draft EIS/EIR to determine the Runway 14/32 length to be carried through the detailed operational and environmental analysis process. Alternative runway lengths for a unidirectional Runway 14/32 were screened for their ability to reduce delay, to conform to the PRAS

4 PRAS is described in more detail in Chapter 4, Section 4.3.

goals, and to reduce noise impacts. The purpose of the screening process was to identify the feasible runway length that best achieves these objectives.

The proposed unidirectional Runway 14/32 is intended principally to serve the regional/commuter airlines, which typically operate turboprops and small jets. Therefore, the screening process examined runway lengths (exclusive of safety areas) of 4,500 and 5,000 feet.[5] A discussion of the screening process and results can be found in Section 3.2.1 of the Airside Project Draft EIS/EIR.

Because a 5,000-foot runway would accommodate a greater proportion of the forecast regional carrier fleet than a 4,500-foot runway, it would provide a greater reduction in aircraft delay, as illustrated in Table 3.2-1. Although the effect of each runway on the achievement of the PRAS goals and on noise impacts varies somewhat depending upon whether the 37.5M Low or 45M High Fleet scenarios are employed, the overall improvements in both criteria favor the 5,000-foot runway.[6] Therefore, the 5,000-foot runway was selected for further analysis in the Airside Draft EIS/EIR.

Table 3.2-1
Summary Comparison of the Impact of Runway Length on Aircraft Delay

	Runway 14/32 Length	
	4,500 feet	**5,000 feet**
Percent of Forecast Regional Carrier Fleet Able to Land on Runway 32 or Depart From Runway 14		
Low Fleet Scenario (37.5 million passengers)	69%	98%
High Fleet Scenario (45 million passengers)	68%	98%
Percent Reduction in Aircraft Delay		
Low Fleet Scenario (37.5 million passengers)	20%	22%
High Fleet Scenario (45 million passengers)	26%	33%

Runway 14/32 at either length would improve conformance to the PRAS goals, designed to equitably distribute noise among impacted communities, but 5,000 feet is the preferred runway length based on both the long- and short-term PRAS goals. Because the 5,000-foot runway would accommodate a greater variety of aircraft, it would provide better performance relative to the annual goals than the 4,500-foot runway. It would also produce a greater reduction in the total annual hours of persistence exceedence.[7] The performance of the two runway lengths varies by fleet scenario with respect to the PRAS dwell criteria,[8] but the differences are very small.

5 A runway longer than 5,000 feet was analyzed earlier. It would require construction into the harbor and was therefore considered impractical.
6 The screening analysis used the 37.5 million passenger Low Fleet and the 45 million passenger High Fleet. The Low Fleet scenarios assumes a high proportion of large jet operations, similar to current conditions, while the High Fleet scenario assumes a greater proportion of smaller non-jet aircraft.
7 Persistence is defined as the prolonged utilization of one runway combination between the hours of 7:00 AM and midnight in a period of three consecutive days.
8 Dwell is defined as the duration of continuous operations during each day between the hours of 7:00 AM and midnight.

Noise analysis of both runway lengths yielded similar results; generally the 5,000-foot runway produced greater improvements. For the average Day-Night Sound Level (DNL) 65 decibel (dB) and greater criteria, the effect on noise impacts varied by fleet. Population levels exposed to the average day-night noise levels of 70 dB or greater are smaller for the 5,000-foot runway than for the 4,500-foot version under each fleet scenario. For the 75 dB or greater day-night noise level, the 5,000-foot runway exposes a lower population under the 45M High Fleet scenario, while the two runway lengths are equivalent under the 37.5M Low Fleet scenario.

The proposed 5000-foot unidirectional Runway 14/32 is expected to result in a certain fleet utilization percentage, and it is this utilization that drives the environmental impacts of the runway. The initial screening for runway length anticipated a regional fleet dominated by turboprop aircraft, where a 5,000 foot runway was clearly adequate to accommodate all existing and anticipated turboprop aircraft. The emergence of the regional jet called into question the adequacy of a 5,000 foot runway, and resulted in additional analysis using the 37.5M High RJ Fleet in this Supplemental Draft EIS/Final EIR.

According to the airframe manufacturers' specifications and the FAA type certifications, the regional jet types in the Logan fleet are able to land in less than 5,000 feet under standard conditions.[9] However, the conditions of each flight operation are different. Based on discussions with airlines and airports and the FAA consultant's analysis included in Appendix C, most of the regional jet types forecast to use Logan in the future are capable of landing on a 5,000 foot runway.

The analysis of the runway with the 37.5M High RJ Fleet considers a range of utilization assumptions for specific regional jet aircraft (see Section 4.7.5). Therefore, this Supplemental DEIS/FEIR analyzes the full range of environmental impacts generated by aircraft likely to use Runway 14/32, whether derived from a fleet with a large percentage of turboprop aircraft or from a fleet dominated by regional jets.

3.2.2 Layout Options

FAA-specified runway design criteria and standards were applied to develop three layout options for a 5,000-foot unidirectional Runway 14/32. Descriptions of the applicable FAA criteria and standards are presented below, followed by a physical description of the runway, presentation of the layout options and the results of a qualitative assessment of the three options. Detailed descriptions of the criteria, the runway, the layout options and the assessment procedures are provided in Sections 3.2.2.1 through 3.2.2.4, respectively, of the Airside Project Draft EIS/EIR.

3.2.2.1 FAA Runway Design Criteria and Standards

The FAA has issued Advisory Circulars (AC) governing the layout and design of runways, taxiways and associated safety areas. These Advisory Circulars generally fall within the AC 150/5300 Series.

9 Standard conditions in this case include landing over a 50-foot obstacle when the aircraft is at maximum gross weight, the runway is dry, there is no wind, and the temperature is below 60 degrees Fahrenheit.

FAA Advisory Circular 150/5300-13 Airport Design

The key Advisory Circular is AC 150/5300-13 *Airport Design*, which specifies minimum design and layout standards to be utilized at all airports receiving FAA funding. Runway design requires the identification of a design aircraft category and the lowest designated or planned approach visibility minimums, and then application of the appropriate criteria contained in *Airport Design*. In the Airside Project Draft EIS/EIR, an Airport Reference Code (ARC) of C-III was designated for Runway 14/32, based on the aircraft approach speed and airplane wingspan to be accommodated. The category of aircraft upon which this design is based is regional jets.

The design parameters for Runway 14/32 and an ARC of C-III are defined below and summarized in Table 3.2-2.

- **Runway Safety Area (RSA).** The RSA is a defined surface surrounding the runway that is suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. For Runway 14/32, the RSA is 500 feet wide centered on the runway centerline, and extends 1,000 feet beyond each end of the runway. *Airport Design* requires that the RSA be cleared and graded and have no potentially hazardous surface variations. The RSA shall be free of all objects, unless required for controlling and directing aircraft. The grading shall prevent the accumulation or ponding of water within the RSA, and under dry conditions, the ground within the RSA shall be capable of supporting the occasional passage of an aircraft or aircraft rescue and fire fighting equipment without causing any damage to the equipment or aircraft.

- **Runway Object Free Area (ROFA).** The ROFA is an area on the ground centered on a runway centerline. It is provided to enhance the safety of aircraft operations by having the area free of objects, except for those needed for air navigation or aircraft for ground maneuvering purposes. The ROFA for proposed Runway 14/32 is 800 feet wide, centered on the runway centerline, and extends 1,000 feet beyond each of the runway ends, similar to the RSA.

- **Runway Protection Zone (RPZ).** FAA defines the RPZ as "an area off the runway end to enhance the protection of people and property on the ground." The RPZ is a trapezoidal area, starting 200 feet beyond the threshold of the operational runway and centered on an imaginary extension of the runway centerline for arrivals and departures. Since operations will only occur to or from the Runway 32 end of unidirectional Runway 14/32, the RPZ applies only to the Runway 32 end. The dimensions of RPZs vary depending upon the visibility minimum and the ARC code for the design aircraft. For the Runway 32 end, the length of the RPZ is 1,700 feet with an inner width of 1,000 feet and an outer width of 1,510 feet.[10]

10 FAA Advisory Circular 150/5300-13, Chapter 2, Table 2-4.

Table 3.2-2
Design Criteria for Runway 14/32 with an Airport Reference Code of C-III

Item	Design Criteria (feet)
Runway Width	100
Runway Shoulder Width	35[1]
Runway Safety Area Width	500
Runway Safety Area Length Beyond Runway End	1,000
Runway Obstacle Free Zone Length Beyond Runway End and Width	200
Runway Obstacle Free Zone Width	400
Runway Object Free Area Width	800
Runway Object Free Area Length Beyond Runway End	1,000
Taxiway Safety Area Width	118
Taxiway Object Free Area Width	186
Runway Protection Zone	Length 1,700 / Inner Width 1,000 / Outer Width 1,510

1 Massport extends the 20-foot FAA minimum runway shoulder width to 35 feet for additional safety and operational benefits.
Source: Tables 3-3 and 4-1 in FAA AC 150/5300-13 *Airport Design,* November 10, 1994.

- **Obstacle Free Zone (OFZ).** The OFZ is the airspace along the runway and extended runway centerline, which is required to be clear of all objects, (except for frangible visual navigational aids (NAVAIDs), which need to be located in the OFZ because of their function). The purpose of the OFZ is to provide clearance protection for aircraft landing or taking off from the runway and for missed approaches. The OFZ is defined as a three-dimensional surface centered above the runway centerline and extending 200 feet beyond each end of the runway. The height of the OFZ is defined as 150 feet above the established airport elevation. The width of the OFZ varies with aircraft and visibility minimums for the runway. For the proposed Runway 14/32, the OFZ is 400 feet wide centered on the runway.

- **Taxiway Safety Area (TSA).** The TSA is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. The TSA for a C-III taxiway is 118 feet wide centered on the taxiway centerline.

- **Taxiway Object Free Area (TOFA).** The TOFA has controlling criteria similar to that of the ROFA described above. For the proposed Runway 14/32, the TOFA is 186 feet wide centered on the taxiway centerline.

FAR 14 CFR Part 77 Objects Affecting Navigable Airspace

A second listing of key design criteria is contained within the body of the Federal Aviation Regulations (FAR) at 14 CFR Part 77. These criteria, under the heading "Objects Affecting Navigable Airspace," address the goals of safe and efficient use of airspace, and define limits around a runway in which objects are considered to interfere with the safe use of the runway.

FAR Part 77 criteria address the protection of the airspace around a given runway. The phrase "FAR Part 77 surfaces" is frequently used in reference to the several "imaginary surfaces" surrounding a runway, which are used to depict the protected airspace and are defined by the technical criteria of FAR Part 77. The basic purpose of FAR Part 77 is to identify objects extending vertically through or above these imaginary surfaces, which may pose a hazard to air navigation.

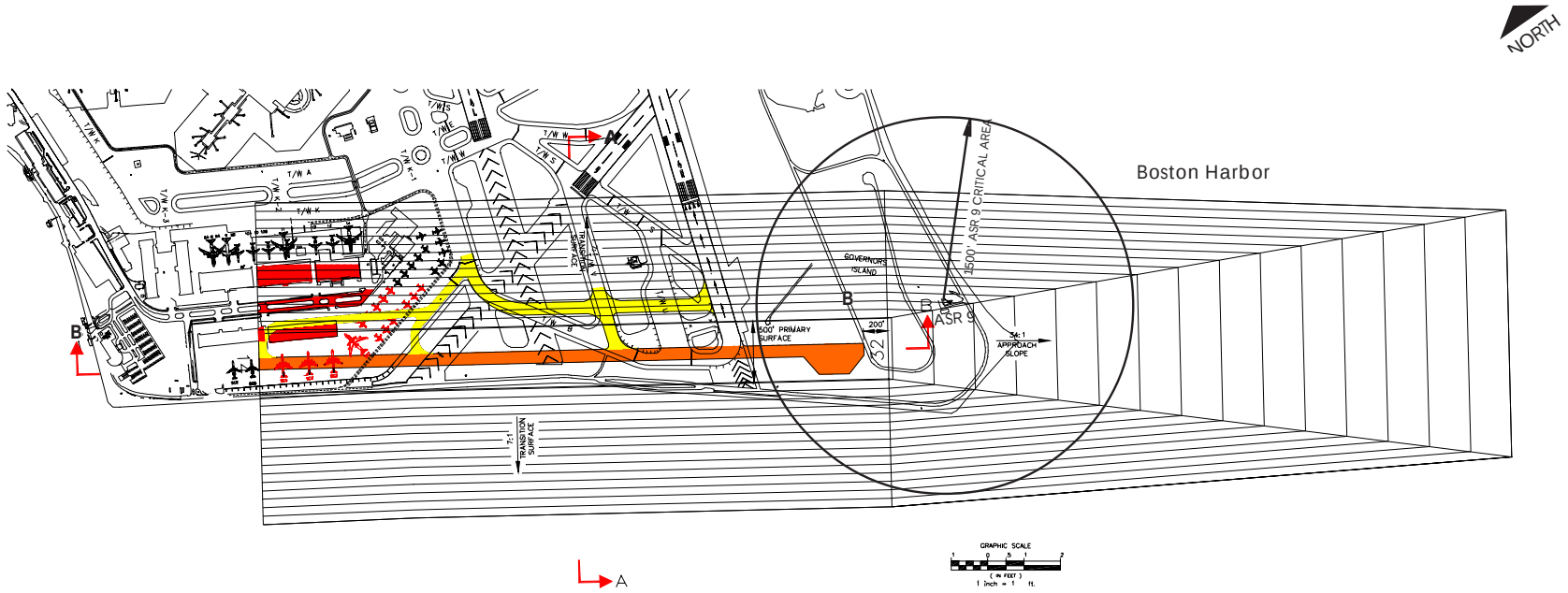
FAR Part 77 surfaces are defined generally below. FAR Part 77 surfaces for Runway 14/32 are listed in Table 3.2-3 and illustrated in Figure 3.2-1.

- **Primary Surface**. This surface is a rectangular surface centered along the runway and at the same elevation as the surface of the runway. The length of this surface extends 200 feet off each paved runway end and the width is dependent upon the characteristics and use of the runway.
- **Approach Surface**. This surface is an inclined trapezoidal plane beginning at the narrow end of the Primary Surface and extending outward and upward. The inner, (starting) edge of the Approach Surface is the same width as the Primary Surface; the approach widens at a uniform rate and the outer edge varies with the runway approach minimums. Since approaches only will occur to the 32 end of unidirectional Runway 14/32, the Approach Surface requirements only apply to the 32 end.
- **Transition Surface.** This surface extends upward and outward from the long sides of the Primary Surface at a slope of 7:1 and meets the Approach Surfaces. Since there is no approach surface for the Runway 14 end, the Transition Surface was assumed to "cut off" at the Runway 14 end, terminating the 7:1 slope.

Table 3.2-3
FAR Part 77 Surfaces for Runway 14/32

Type of Surface and Geometric Parameters	Runway 14 End	Runway 32 End
Primary Surface		
Total width (in feet)	500[1]	500
Distance from centerline on each side (in feet)	250	250
Approach Surface[2]		
Inner width (in feet)	Not Applicable	500
Outer width (in feet)		4,000
Horizontal Length (in feet)		10,000
Slope (horizontal: vertical)		34:1
Transition Surface		
Slope (horizontal: vertical)	Not Applicable	7:1

1 Future use of a Global Positioning System for this runway could require up to a 1,000 foot wide Primary Surface (centered on the runway).
2 Runway 32 end only because approaches will only be permitted to the Runway 32 end of the unidirectional runway.



LEGEND

- Conflict with Runway Safety Area/or Runway Object Free Area
- Aircraft Parking Position Eliminated Because It is in the Proposed Runway/ Taxiway OFA or RSA

massport

Figure 3.2-1

Runway 14/32 FAA Design Surfaces

A good way to visualize the shape of each of these surfaces is to imagine an oval soccer stadium, which is closed at both ends, and with the runway running down the middle of the field. The Primary Surface may be envisioned as the flat, grassy surface of the playing field, including and extending out on each side of the runway. The stadium rows behind the goal posts represent the approach surfaces. The stadium rows along the length or sidelines of the field represent the transition surfaces.

It should be noted that the location of the Hyatt Hotel precludes the use of Runway 14 for arrivals, because the hotel penetrates the Part 77 approach surface for a VFR runway.

3.2.2.2 Physical Description of Runway

Proposed unidirectional Runway 14/32 would have a length of 5,000 feet and a width of 100 feet, with 35-foot paved shoulders on either side. At either end of the runway, 1,000-foot long paved runway safety areas (RSAs) would be provided. Since the runway would only be used in one direction, no taxiway to the Runway 32 end is necessary. A small paved turnout area would be provided to allow an aborted departure to be moved off the runway and to reverse direction before returning to the terminal area.

The lighting for Runway 14/32 would include runway edge, end and thresholds lights, and Runway End Identifier Lights (REIL). These lights will be low to the ground and will be placed in accordance with FAA regulations for spacing and intensity. Because Runway 14/32 is slated to be a non-precision runway, an approach lighting system is not necessary. Markings will consist of centerline, edge line, threshold, and runway designator markings. Touchdown zone and aiming point markings would be applied for the Runway 32 end.

3.2.2.3 Runway Layout Options

Three layout options for a 5,000-foot unidirectional Runway 14/32 were developed based upon alternative treatments for the RSA on the Runway 32 end. With the exception of the RSA, each option includes identical design parameters as discussed in the previous section. Each option has been developed in sufficient detail to identify preliminary impacts, and thereby, selection of a preferred layout option. The options are designated A, B and C and are described below.

Option A

Option A, which is illustrated in Figure 3.2-2, meets all FAA runway design criteria and standards. Both runway ends have full 1,000-foot by 500-foot RSAs per the guidelines of FAA's Advisory Circular 150/5300-13 *Airport Design*. A portion of the RSA south of the runway would extend over water.

Option B

Option B, which is illustrated in Figure 3.2-3**,** is shifted approximately 260 feet to the east of Option A. The RSA centerline at the Runway 32 end is placed at the most easterly point of land. To accommodate the full 500-foot width of the RSA of the runway ends, a deck would be constructed or fill would be placed into Boston Harbor (affecting an area of approximately 62,000 square feet). Both runway ends would have full 1,000-foot by 500-foot RSAs, thereby meeting FAA's RSA design guidelines. A portion of the RSA south of the runway would extend over water.

Option C

The alignment of Option C is identical to that of Option B; however, a deck or fill would not be constructed. Instead, a determination of acceptance of the level of safety will be sought from the FAA for the two small, triangular corners of the Runway 32 end RSA and the portion of the RSA south of the runway, which lie over water. The revisions to the runway safety area standard can be adopted if it is determined that it will provide an acceptable level of safety. The Runway 14 end will have a standard 1,000-foot by 500-foot RSA. Option C is illustrated in Figure 3.2-4.

Based on the preliminary engineering conducted in this phase, it is expected that the FAA will agree that it is not feasible and practical (based on cost, engineering and environmental conditions) to develop the areas needed to provide a full RSA. The FAA will determine that the Runway 32 RSA would provide an acceptable level of safety.

Terminal En Route Procedures

Preliminary analysis of the proposed unidirectional Runway 14/32 indicates that the FAA will be able to develop procedures in accordance with Terminal En Route Procedures (TERPs). Appropriate procedures consistent with TERPs standards for approaches and departures can and will be incorporated in the final design process for the runway.

3.2.2.4 Assessment of Technical and Environmental Issues

This section summarizes an assessment of the layout options that was conducted as part of the Airside Project Draft EIS/EIR. This assessment was performed in sufficient detail to discern relative differences among the options and to lead to the selection of a preferred design option, Option C, which was analyzed in detail in the Airside Project Draft EIS/EIR.

Technical issues were assessed by applying the FAA design criteria and standards described above. Environmental issues assessed include impacts to marine habitat in Boston Harbor, and as a general measure of environmental impacts, identification of the local, state and federal wetlands and water resources permits required. All impacts of each alternative are presented in Table 3.2-4.

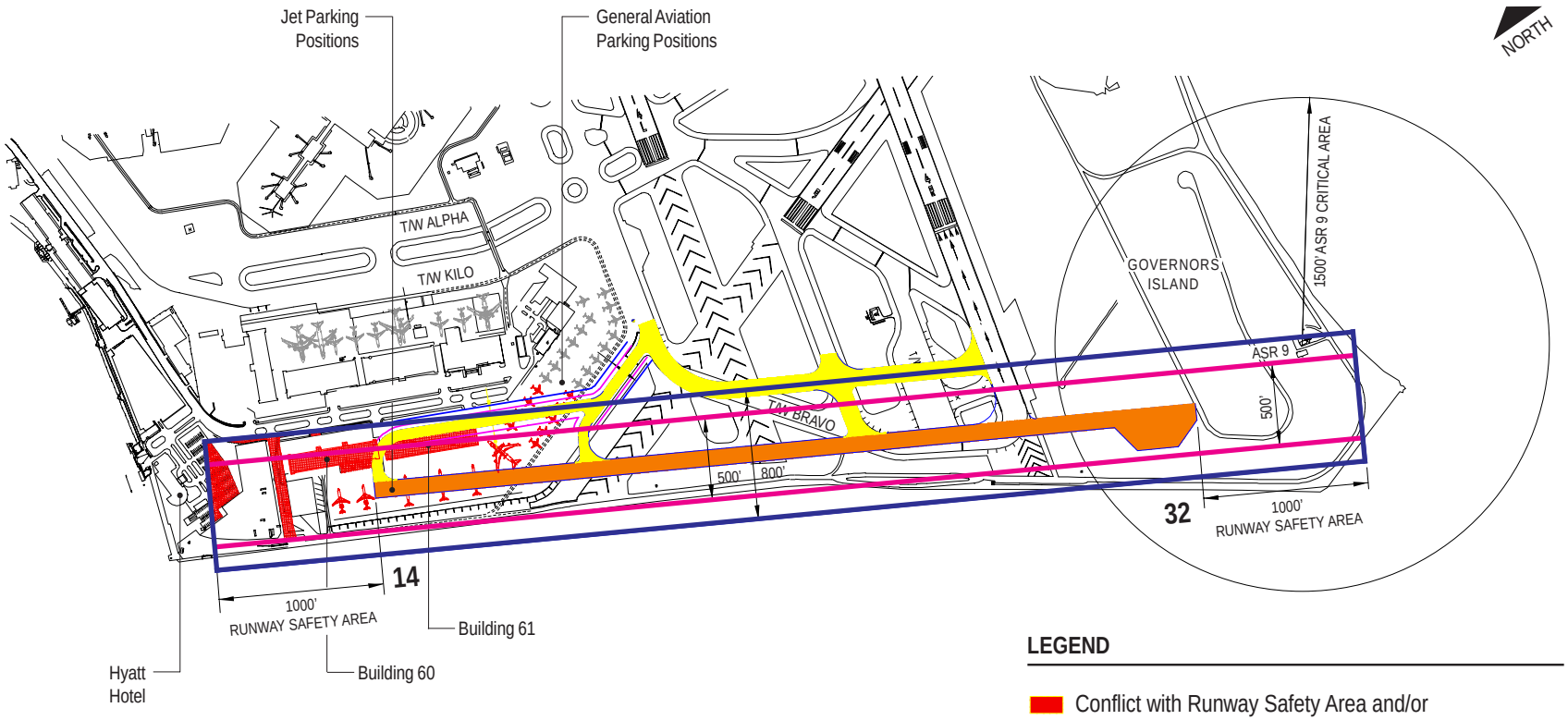


Figure 3.2-2

Runway 14/32 Layout Option A - Standard RSA

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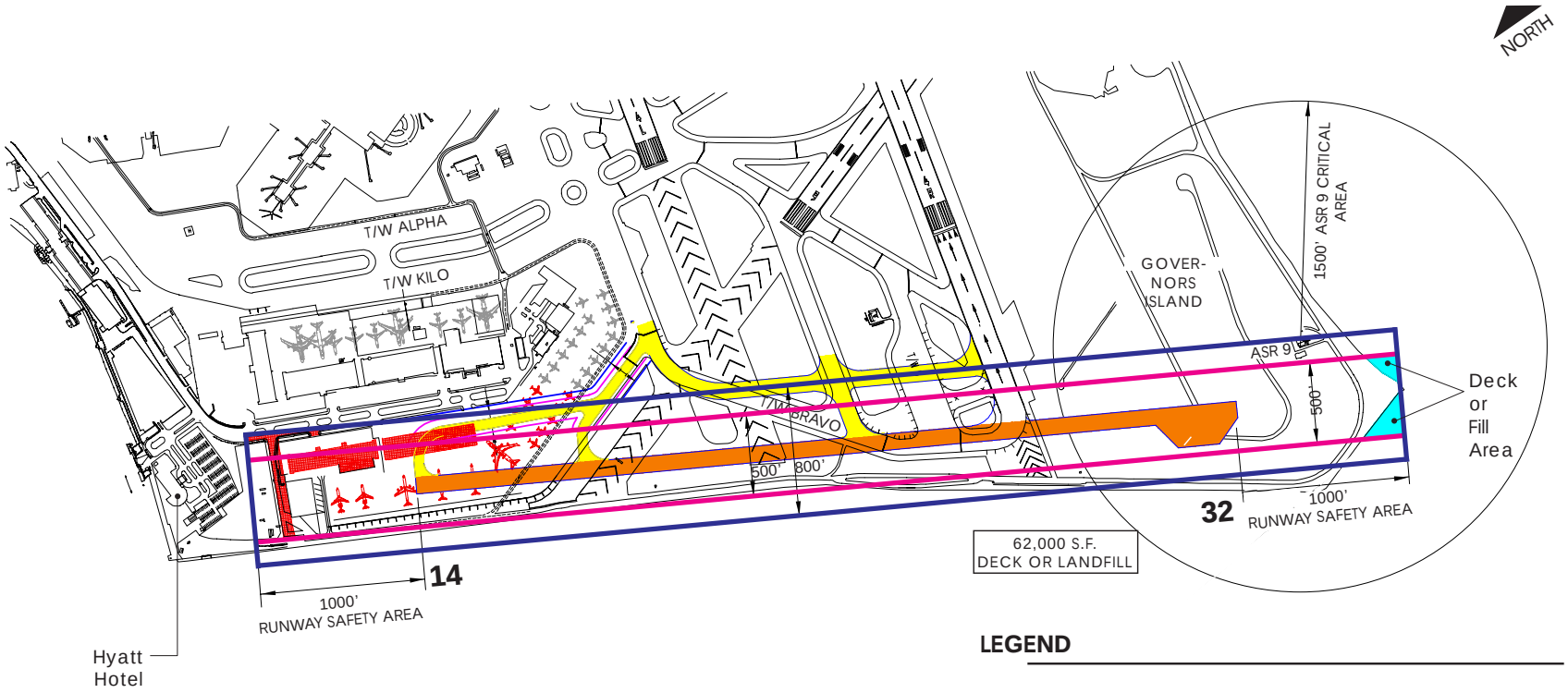

Figure 3.2-3

Runway 14/32 Layout Option B - 12% of RSA Over Water with Deck or Fill

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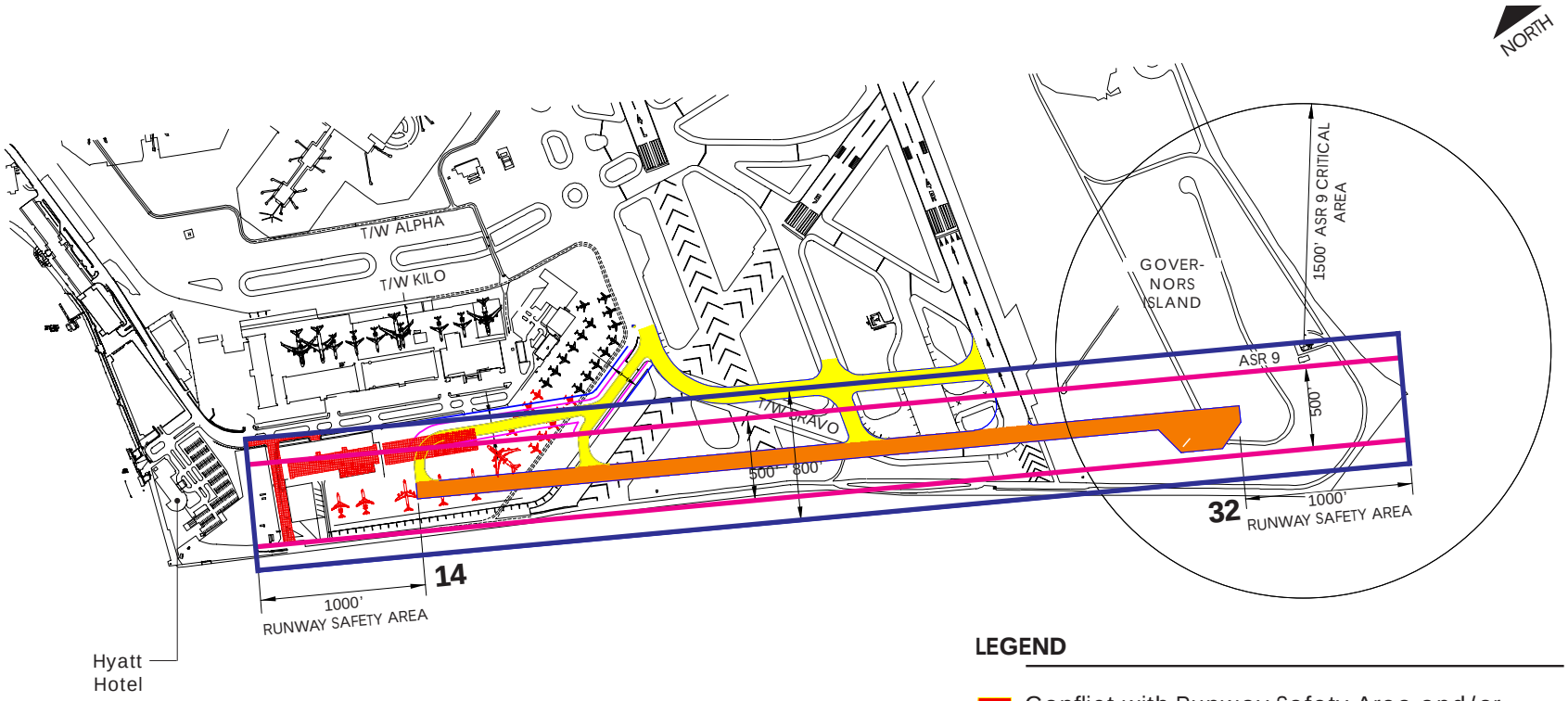


Figure 3.2-4

Runway 14/32 Layout Option C - RSA Centerline on Land with Edges Over Water

7466-FIG-3.2-4.pm65

Table 3.2-4
Summary of Impacts of Runway Layout Options

Impact Type	Impact of Layout Option		
	Layout Option A	Layout Option B	Layout Option C
Building Demolition[1]	Demolish Building 60 which falls within the Runway Safety Area and Runway Object Free Area.	Same as Option A	Same as Option A
Aircraft Parking[1]	Relocate 4 jet and 8 general aviation parking positions elsewhere on the airport.	Same as Option A	Same as Option A
FAA Technical Standards[1]	Runway 14 FAR Part 77 and Taxiway Object Free Area Penetrations[3]	Same as Option A	Same as Option A
FAA Technical Standards	N/A	N/A	Runway 32 Safety Area would not meet standard[4]
Elimination of Vehicular Parking	174 spaces associated with Harborside Hyatt Hotel (71 percent of all parking at Hyatt), with no comparable relocation options.	None	None
Marine Impacts	None	62,000 square feet of deck or fill over Boston Harbor at estimated cost of $8 million	None
Environmental Permits Required	Coastal Zone Consistency Review	Same as Option A	Same as Option A
	Order of Conditions, NPDES Permit for Construction Activities	Same as Option A	Same as Option A
	Air and Water Quality Certification from the Governor (USC 47106 (c(1)(B))	Same as Option A	Same as Option A
		Section 404 Permit, Water Quality Certificate, Chapter 91 License	

1 Impacts common to all three layout options.
2 Building 61 is slated for demolition as part of a separate project.
3 Minimal impact with installation of obstruction hazard lights – all obstructions are located on edge of "unused" Runway 14 end (no arrivals).
4 Two corners totaling 12 percent of the RSA would lie over the water. A request for a determination of an acceptable level of safety will be requested from the FAA.
5 NPDES - National Pollutant Discharge Elimination System Permit

Impacts Common to All Layout Options

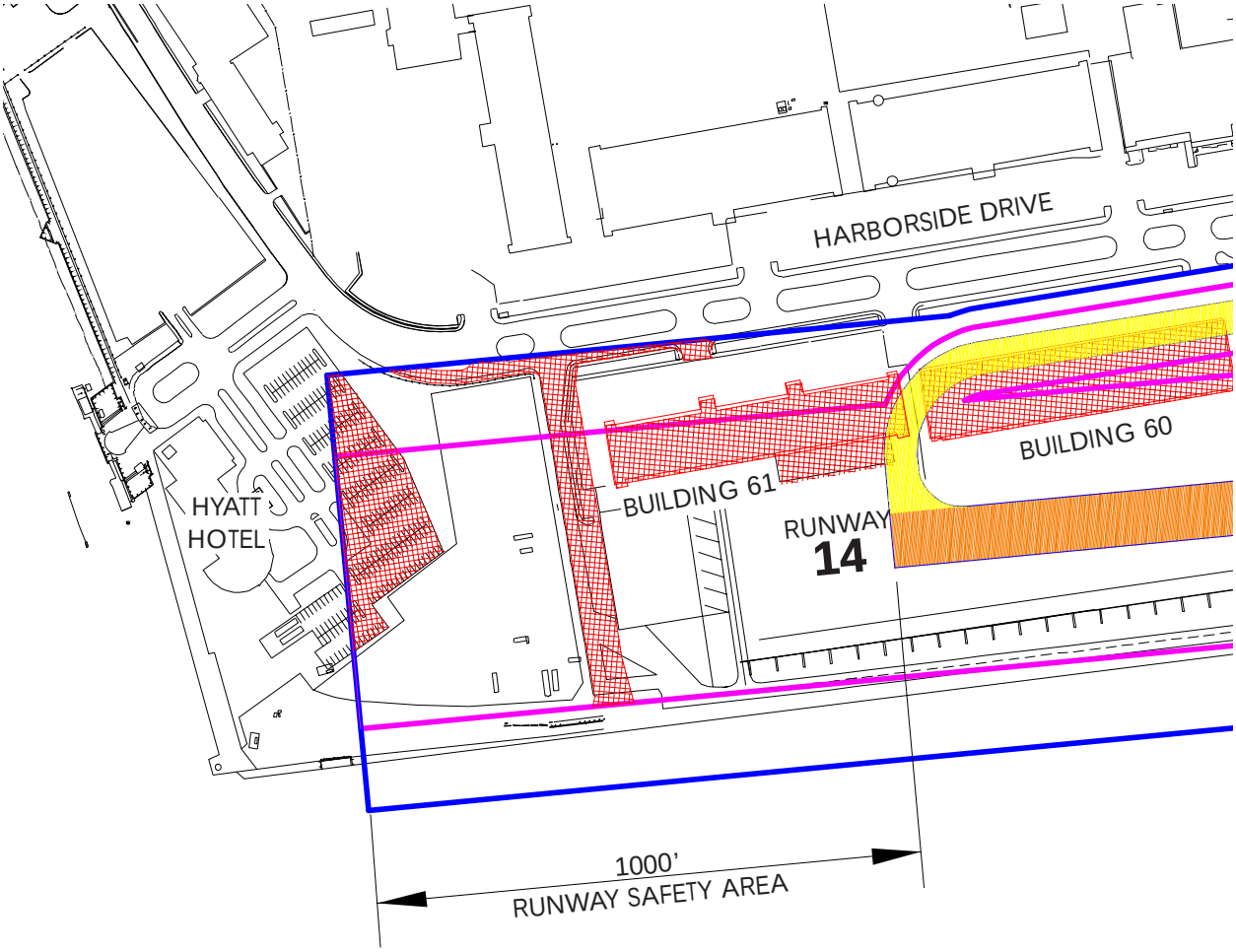
There are several technical and environmental impacts common to all three options. Since these impacts do not serve to discern relative differences between the layout options, they are listed here briefly. Section 3.2.2.4 of the Airside Project Draft EIS/EIR provides a more detailed description of these impacts.

- Two cargo buildings located off of Harborside Drive in the Bird Island Flats area, Buildings 60 and 61, fall within the RSA and ROFA of each layout option, and must be demolished; however, Building 61 is planned to be demolished as part of another project and therefore is not an impact of Runway 14/32. (see Figure 3.2-2)
- Four jet parking positions and eight general aviation daytime positions near Building 60 must be relocated elsewhere on the airport (see Figure 3.2-3).
- Harborside Drive falls within the edge of the FAR Part 77 Primary Surface and a corner of the ROFA at the Runway 14 end. Vehicles traveling on Harborside Drive would intrude on these areas. In addition, the Hyatt Harborside Hotel (Hyatt) and Buildings 56 and 57, located to the northeast of Harborside Drive, penetrate the FAR Part 77 Transition Surface. All of these obstructions are located on the edge of the Runway 14 end that will not be used for arrivals. In accordance with FAA regulations, obstruction hazard lights will be installed on the buildings.
- A portion of the RSA to the south of the runway would extend over the water (approximately 86,000 square feet). The FAA has conducted preliminary analysis of the RSA along the south side of the runway and has concluded that they would be able to make a determination that it provides an acceptable level of safety.
- Permit requirements include an Order of Conditions from the Boston Conservation Commission and a National Pollutant Discharge Elimination System (NPDES) permit for construction activities from the US Environmental Protection Agency (EPA)/MA Department of Environmental Protection (DEP).

Impacts Specific to Individual Layout Options

Option A

Option A places Runway 14/32 furthest to the west of the options under consideration and would eliminate 174 parking spaces associated with the Harborside Hyatt Hotel, at the Runway 14 end. Of the 174 affected spaces, 162 spaces are directly impacted, since parking is not allowed within the RSA and the Runway Object Free Area (ROFA). Twelve additional spaces would be lost as a result of reconfiguring driveways to maintain access to existing spaces. The 174 lost spaces represent 71 percent of the existing 241 spaces at the Harborside Hyatt (see Figure 3.2-5). No comparable relocation options exist. Consequently, acquisition of the affected 174-parking space area by negotiation is highly unlikely and acquisition by eminent domain would likely not be resolved without costly and protracted litigation.



LEGEND

- Conflict with Runway Safety Area and/or Runway Object Free Area
- Runway and Taxiway Object Free Area (OFA)
- Runway and Taxiway Safety Area (SA)

Figure 3.2-5
Runway 14/32 Layout Option A - Potential Impacts to Parking Associated with the Hyatt

7466-FIG-3.2-5.p65

While no modification of FAA standards for the Runway 32 end RSA is required by this option, the impacts on the Hyatt and related costs could potentially be avoided through a modification of RSA and ROFA standards.

Option B

Option B shifts the runway and RSA 260 feet to the southeast (i.e., further away from the Harborside Hyatt) to avoid the Hyatt Hotel's parking lot. As a result, the outer corners of the Runway 32 end RSA are pushed out over the water. Option B includes construction of a deck over the water or fill that covers approximately 62,000 square feet of the harbor, in order to provide the full safety area on the Runway 32 end. Preliminary cost estimates indicate that a deck would cost approximately $8 million (1996 dollars).

The deck or fill may generate direct impacts to marine life and indirect impacts due to the loss or alteration of intertidal habitat. This activity would require the following environmental permits: U.S. Army Corps of Engineers Section 404, Coastal Zone Consistency Review, Water Quality Certificate, Chapter 91 license, NPDES permit, and an Order of Conditions from the Boston Conservation Commission. In addition, since this options requires work in the Harbor, a "Reasonable Assurance letter for Water Quality" from the Governor of the Commonwealth would be required.

Option C

Option C has the identical layout / alignment as Option B, except that no structures would be constructed to accommodate the two small corners of the Runway 32 RSA that lie over the water. Instead, a determination of an acceptable level of safety, would be requested from the FAA. The two corners represent approximately 12 percent of the full RSA area at the Runway 32 end.

In considering a determination, the test is whether an acceptable level of safety can be maintained with the proposed conditions. Three factors are considered:

- An analysis of aircraft accident locations off runway ends based on national statistics;
- The types of aircraft reasonably expected to operate on the runway; and,
- The conditions of use and practical constraints for the runway RSA based on environmental, physical, or cost factors.

Based on an evaluation of these factors, which is discussed in detail in Section 3.2.2.4 of the Airside Project Draft EIS / EIR, the proposed determination for the Runway 32 RSA will not compromise safety because:

- The proposed Runway 32 RSA is a full 1,000 feet long on the centerline.
- The NAVAIDS to be installed would provide added glide path and alignment guidance in Instrument Meteorological Conditions (IMC).

- Available statistical data show that the small over-water corners of the RSA will not significantly affect the safety of operations to Runway 14/32, even for larger group C-III aircraft.[11] Historically, reported undershoots under the conditions for which Runway 14/32 would be used have been on the centerline and within 1,000 feet of the Runway.

The FAA has conducted a preliminary analysis of the RSA on the southeast (Runway 32) end and along the south side of the runway, and has concluded that it would be able to issue a determination that it provides an acceptable level of safety.

3.3 Taxiway Improvements

Four proposed taxiway improvements are described in this section. For each taxiway, the purpose and general effects of the improvement on Logan's airfield operations are summarized. All four of the taxiway improvements would be included in each of the build alternatives: Alternatives 1 and 1A, which include Runway 14/32, and Alternative 2, which does not include Runway 14/32. Each of the taxiway improvements would improve Logan's airfield efficiency, with or without Runway 14/32. Each proposed taxiway has a paved width of 170 feet, which includes a 100-foot wide taxiway and two 35-foot paved shoulders.

3.3.1 Centerfield Taxiway

A new 9,300-foot Centerfield Taxiway would be located between Runways 4L/22R and 4R/22L, as shown in Figure 3.3-1.[12] The purpose of the Centerfield Taxiway is to provide alternative taxi routings for more efficient movement of aircraft between runways and terminal areas. Improved taxi routes will reduce ground delays for both arriving and departing aircraft. By diminishing delays, particularly north of Runway 15R/33L, the Centerfield Taxiway would reduce both ground noise and air quality impacts associated with ground operations. The Centerfield Taxiway would also alleviate congestion in the vicinity of Terminals B and C, and it would enhance the general safety of airside operations. Specifically, a Centerfield Taxiway would have the following operational benefits:

- **Reduce taxiing delay for Runway 4R arrivals**. Instead of queuing on Runway 33R to cross Runway 4L and then all taxiing single-file down taxiway November, many aircraft could immediately proceed southbound between the runways and then cross Runway 4R at one of several taxiways nearer their gates.

11 DOT/FAA/AOV 90-1 " Location of Commercial Aircraft Accidents/Incidents Relative to Runways," FAA Office of Safety Oversight, July 1990.

12 A Centerfield Taxiway, positioned between Runways 4L/22R and 4R/22L, was initially proposed in 1990 as part of Massport's annual airfield improvements program. An ENF was filed for that program and a Scope for a Draft EIR was issued by the Secretary of the EOEA, pursuant to MEPA. That project (EOEA No. 8108) was later withdrawn by Massport. The layout of the Centerfield Taxiway concept as proposed in this Supplemental Draft EIS/FEIR differs from the 1990 proposal in that the current proposal extends south to Taxiway Bravo to incorporate reconfiguration of the Southwest Corner taxiway system (see Section 3.3.2). The earlier concept terminated at Taxiway Whiskey.

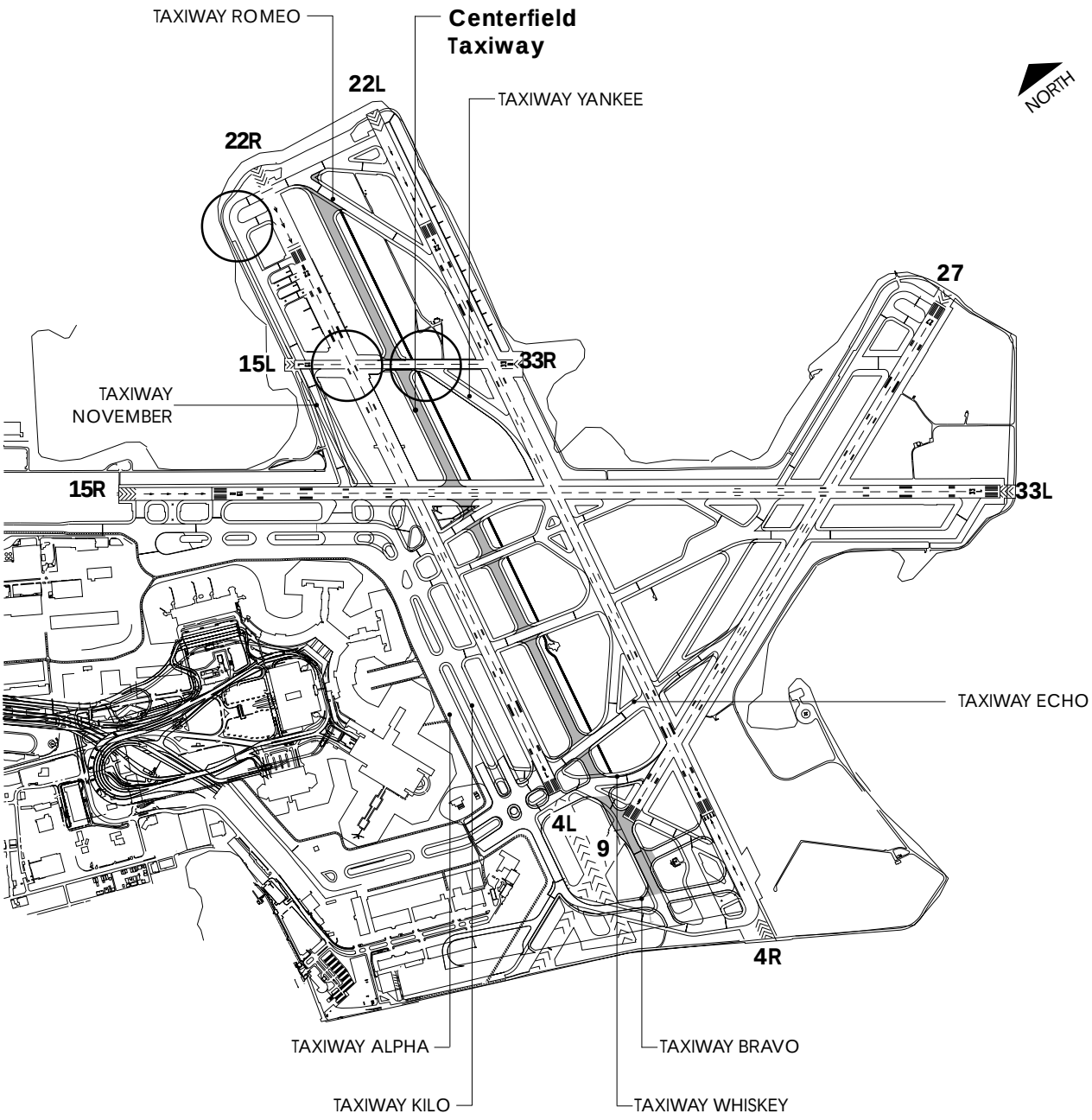


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Figure 3.3-1
Centerfield Taxiway

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- **Reduce taxiing delays for Runway 22L departures**. Currently, aircraft needing the greater departure length of Runway 22L must queue up on Taxiway November with the rest of the departures using Runway 22R. This causes delays for aircraft using both runways during heavy traffic periods. The Centerfield Taxiway would permit the Runway 22L departures to cross Runway 22R near the terminals and proceed directly to the runway, where they would be ready for takeoff as soon as a gap occurs in the Runway 22L arrival stream. Although some comments have argued that this would increase the "stacking" of aircraft in the northern section of the airfield, it would in fact reduce the total delay experienced by both Runway 22R and 22L departures.

- **Decrease taxiing delays for Runway 22L and Runway 27 arrivals**. Similar to the Runway 4R arrivals discussed above, the Centerfield Taxiway would enable many of these arrivals to proceed northbound to a taxiway nearer their gate, and then several could cross Runway 22R simultaneously.

- **Ease congestion near Terminals B and C**. Due to its proximity to these terminals, aircraft using Taxiway Alpha are frequently delayed by aircraft entering or leaving their gates in this area. This congestion would be reduced by using parallel paths on Taxiway Kilo and the Centerfield Taxiway instead of Kilo and Alpha, thereby freeing Taxiway Alpha for pushbacks.

- **Reduce the potential for wing-tip clearance conflicts on Taxiways Alpha and Kilo**. The large wingspan of the newer generation of heavy jets prevent them from passing on the closely spaced taxiways Alpha and Kilo. Using Taxiway Kilo and the Centerfield Taxiway would avoid such problems.

The Centerfield Taxiway would not change the total number of aircraft operations which cross an active runway, but it would substantially reduce the delays experienced by these aircraft, particularly for arrivals. Instead of forming a single queue to cross Runway 4L/22R single-file, they could be dispersed to multiple crossing points where several could cross the active runway at the same time.

In general, a Centerfield Taxiway would decrease taxiing distances and taxiing times for most airfield operating configurations, and would also move points of congestion away from residential areas. The Taxiway would reduce the potential for runway incursions, would enhance safety by decreasing congestion on the taxiway system, and would provide controllers with greater flexibility to improve the efficiency of airport ground operations.

3.3.2 Southwest Corner Taxiway System Reconfiguration

Changes to the taxi layout in the Southwest Corner of the airport near the ends of Runways 4L, 4R and 9 will simplify a confusing jumble of taxiways, reduce the opportunities for runway incursions, and expedite ground movements in this area. Reconfiguring the existing taxiways will improve the access of departures to Runways 4L, 4R and 9, and will provide a more logical and streamlined flow for inbound and outbound aircraft when Runways 27 and 33L are active (see Figure 3.3-2).

The Southwest Corner reconfiguration would enhance safety and operating efficiency by simplifying runway crossings and access in a section of the airfield that may be confusing to some pilots, particularly at night or during reduced visibility. It would also allow Runway 14/32 to be used as a taxiway in some runway configurations to improve flexibility and ground movement efficiency.

3.3.3 Taxiway Delta Extension

Taxiway Delta would be extended 2,000 feet between Taxiway Charlie and Runway 4R/22L (see Figure 3.3-3). The completion of Delta would provide an alternate path for departures on Runways 27 and 33L, thereby reducing congestion on Taxiway Charlie that now is the sole access to these runways. This would improve efficiency by separating jets taxiing to Runways 27 and 33L from non-jets using Taxiways Charlie and Golf for Runway 33L intersection departures.

3.3.4 Taxiway November Realignment

Approximately 2,200 feet of Taxiway November would be realigned between Runway 15L/33R and Runway 15R/33L to simplify its connection to Taxiways Kilo and Alpha which provide the main flow around the terminal areas (see Figure 3.3-4). In addition, this improvement would eliminate the confusing simultaneous intersection of Taxiway Tango with both Runways 33L and 22R. These changes would not only improve efficiency but also enhance safety by reducing the potential for runway incursions, especially at night and during reduced visibility.

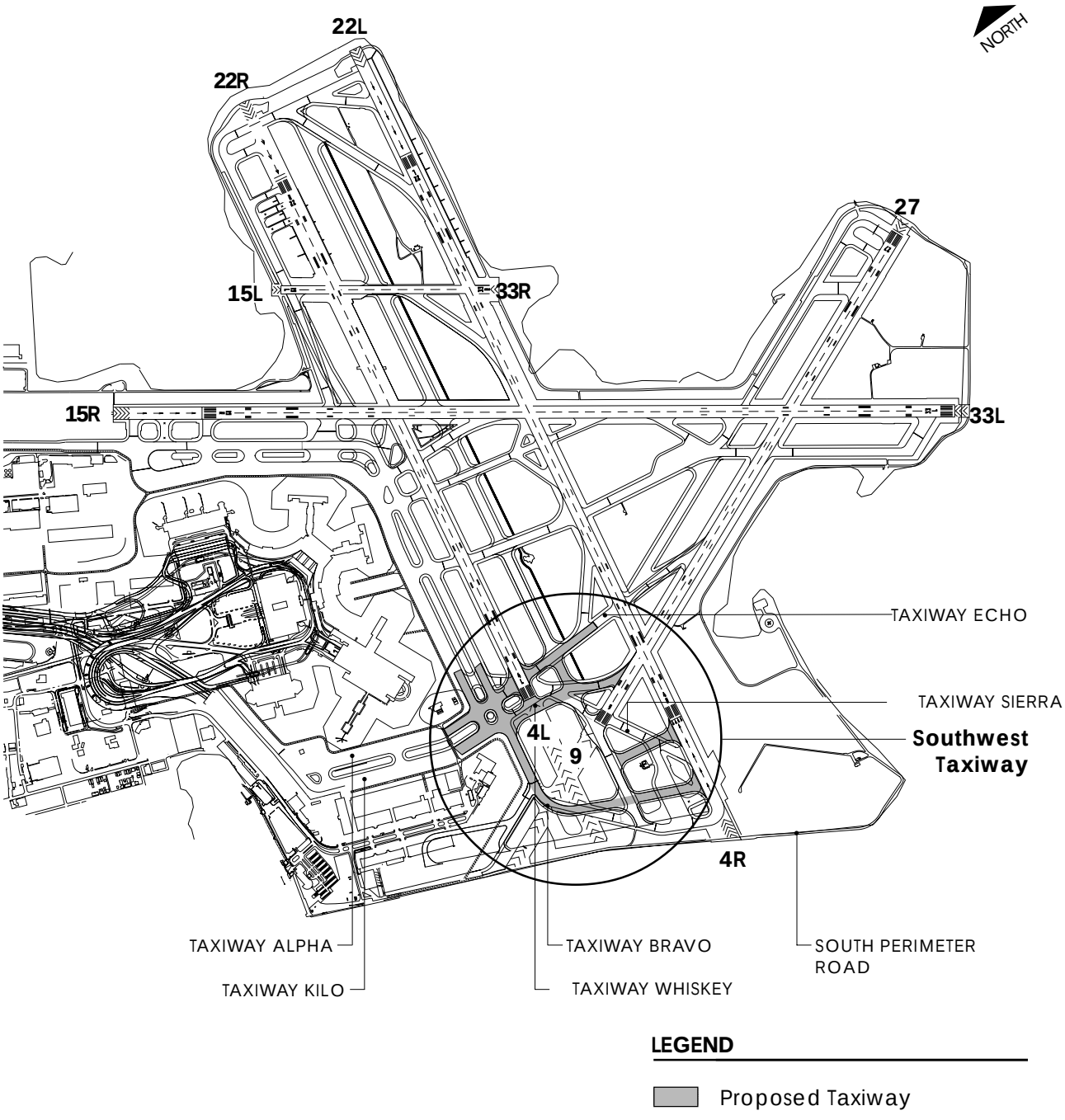

Figure 3.3-2
Southwest Taxiway System Reconfiguration

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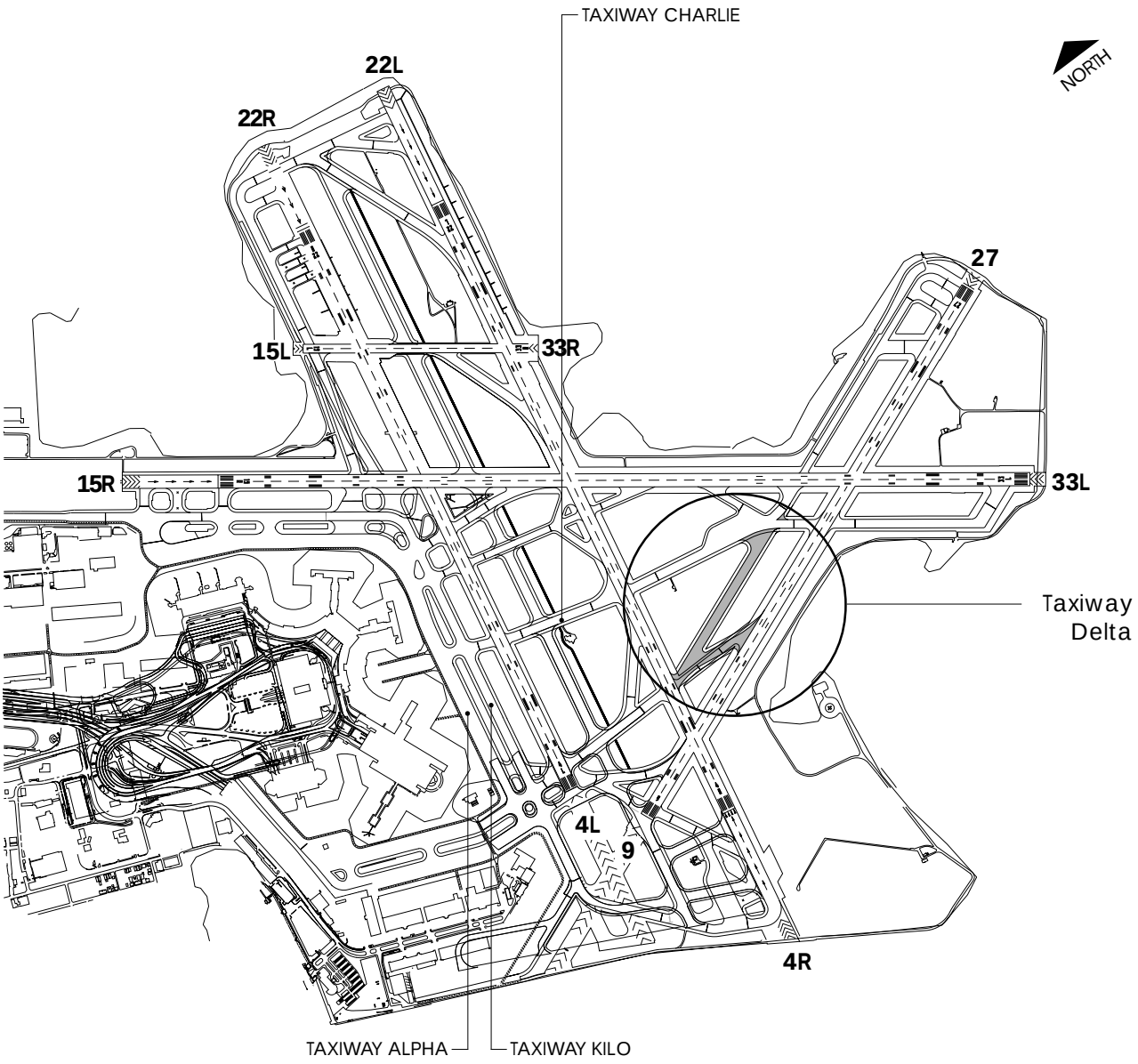

Figure 3.3-3
Taxiway Delta Extension

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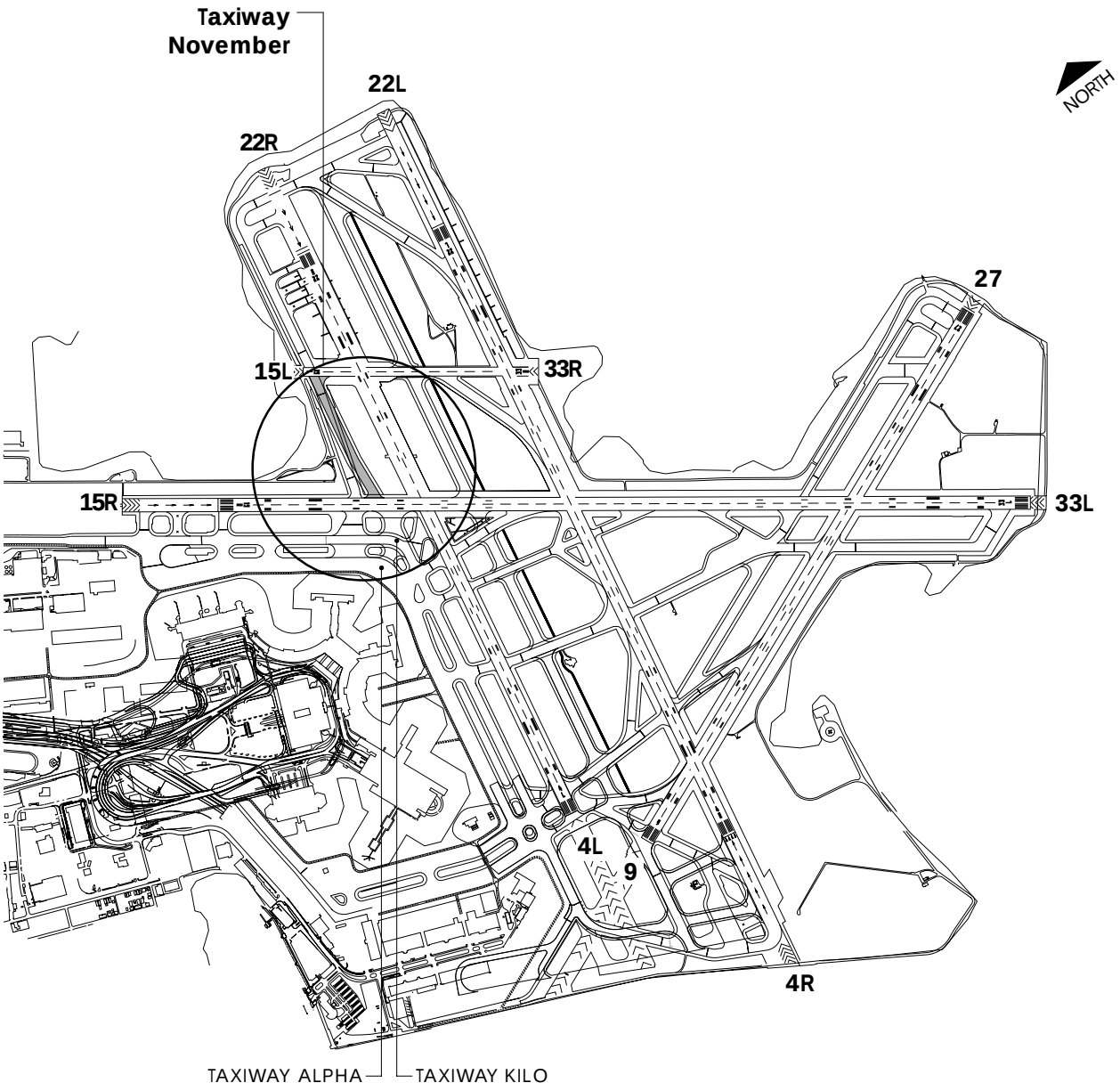


Figure 3.3-4
Taxiway November Realignment

3.4 Reduced Approach Minimums for Runways 15R, 22L, 27, and 33L

This improvement concept proposes to reduce the current approach minimums on four existing runways at Logan to FAA values which are provided at most other airports in the nation. The "approach minimum" is the lowest point along the existing glide slope during the approach (landing) at which the pilot must make a decision whether to land or to execute a missed approach procedure, when the visibility is low. The approach minimum for each runway is established by the FAA based upon the type of navigation equipment available, the existence of obstacles in the approach area, and performance of the aircraft. The approach minimums are established and published for each runway by the FAA. Lowering the minimums would not change the altitudes at which aircraft operate, but just the distance from the runway where the missed-approach decision is made.

Five of Logan's runway ends are equipped with precision electronic navigation systems (Instrument Landing Systems - ILS) and approach lighting systems, which enable aircraft to land under low visibility weather conditions. At the present time, only Runway 4R, which is equipped with a Category III ILS, is approved for the lowest approach minimum established by FAA. This adds to greater use of and dependence on Runway 4R under poor weather conditions. This section summarizes proposed changes to the approach minimums at the other four runways, which are also described in Section 3.4 of the Airside Project Draft EIS / EIR.

Although Runways 15R, 22L, 27 and 33L are each equipped with a precision Category I ILS, those on Runways 22L and 27 currently have approach minimums that are artificially constrained and are significantly higher than the capabilities of the existing electronic equipment permit. When the ILSs were installed on Runways 22L and 27 several years ago, the FAA agreed to retain the existing non-precision approach minimums until the appropriate new values could be addressed in an EIS. Reduction of the approach minimums on Runways 22L and 27 to ILS Category I values that are consistent with current FAA standards is included in all improvement alternatives. The existing and proposed ILS minimums are shown in Table 3.4-1.

The existing ILS approaches to Runways 15R and 33L are also proposed to be improved. The planned action includes upgrading these approaches to Category III ILSs, which would permit landings on these runways down to the same approach minimums as on Runway 4R. The availability of additional precision navigation equipment on these two runways would provide improved operational flexibility to air traffic controllers and enhance safety during adverse weather conditions.

Lowered minimums on these four runways would extend the range of weather conditions under which they could be used and would thereby reduce reliance on Runway 4R during low visibility. This would provide improved operational flexibility and thereby reduce delays as well as increase the opportunity to achieve PRAS goals, particularly the short-term dwell and persistence.

Table 3.4-1
Existing and Proposed ILS Minimums* for Runways 15R, 22L, 27, and 33L

Runway		Cloud Ceiling		Visibility	Distance of Decision Height Point from Touchdown		Runway Availability
		Feet Above Ground Level	Mean Sea Level Elevation (feet)	Statute Miles)	Feet	Nautical Miles	Annual Hours, 1980 – 1990 Weather
15R	Existing	250	268	3/4	4,800	0.79	5,356
	Proposed	0	18	1/8	0	0.00	5,495
22L	Existing	403	420	1-1/4	7,700	1.27	6,835
	Proposed	200	217	1/2	3,800	0.63	6,929
27	Existing	443	460	1-1/2	8,500	1.39	6,972
	Proposed	200	217	1/2	3,800	0.63	7,055
33L	Existing	200	217	1/2	3,800	0.63	7,173
	Proposed	0	17	1/8	0	0.00	7,249

* Lowest minimums possible. Some may be gradually achieved.

Table 3.4-1 shows the change in availability of each runway due to reduced minimums. An analysis of the 37.5M Low Fleet demonstrated that reduced minimums alone provide an annual delay reduction of approximately 6,000 hours as a result of greater runway availability under poor weather conditions. Appendix D of the Airside Project Draft EIS/EIR provides additional discussion of reduced minimums and their associated delay benefits.

3.5 Peak Period Pricing

Peak Period Pricing is a demand management tool that is intended to reduce delays caused by situations where flight demand exceeds airfield capacity over a sustained period. Peak Period Pricing works by raising the price of using the airfield during designated peak hours. As a result, some existing aircraft operations would be discontinued if the cost of using Logan during the peak would exceed the value of the economic return to the carrier.

Peak Period Pricing was chosen from alternative demand management strategies because it has been effective in other industries and because it is excluded from review under Part 161 of the Federal Aviation Regulations, which sets standards for airports that wish to restrict access for Stage 3 aircraft. Other demand management tools, such as slots or caps, are discouraged under current federal guidelines and would require extensive analysis under Part 161. The current environment where Congress has moved to eliminate slots at High Density Airports suggests that imposing slot controls would not be approved.

Current flight activity levels at Logan do not exceed available airfield capacity during VFR conditions. Airline overscheduling has not been a significant cause of delays at Logan since 1993. Nonetheless, the effect of Peak Period Pricing on delay was evaluated for its potential to reduce delay under future conditions should airline overscheduling re-emerge.

Chapter 3 of the Airside Project Draft EIS/EIR provided descriptions of previous Logan programs, the procedural requirements for implementing Peak Period Pricing, and the screening analysis used to determine the Peak Period fee that was tested across all future fleet scenarios. This section discusses alternative demand management practices, their use at other airports, and previous initiatives at Logan.

3.5.1 Demand Management Policies at Other Airports

The FAA requested that the Supplemental Draft EIS/Final EIR identify demand management strategies that are in use or have been proposed by other airports. Presently there are few examples of demand management policies employed at other United States airports. The most notable example of demand management in the United States was the imposition of slot restrictions at several of the nation's most congested airports in 1969.

Demand management techniques can be generally classified as either regulatory or economic. The former establishes a limit on the number of flights that can be accepted at an airport, i.e., slots, while the latter charges airfield users a higher fee during the busiest periods in order to reduce demand. Sometimes a combination of the two is employed.

3.5.1.1 Regulatory Approaches

These are the most common techniques used by airports worldwide to control airport demand, but have seen relatively limited application in the United States. In the United States, under FAA guidelines, a regulatory approach would be construed as an airport access restriction, and would therefore require an airport to conduct a Part 161 Study.

Slots

Most of the world's major international airports outside the United States use slot controls to limit traffic to an acceptable level. The slots are negotiated by a Slot Committee which meets periodically to review and revise the allocation of landing slots at the major airports. Each participating airport is represented on the committee, often by the home country's flag carrier. The number of slots for a given airport is set by the airport management or local government authority, and a prescribed number are usually reserved for the local carriers.

In the United States, slots are used at only four High Density airports (Chicago O'Hare, Washington Reagan National, New York JFK and New York LaGuardia). The number of slots per hour is set by the FAA for air carriers, commuter operators and general aviation. At LaGuardia, for example, access was restricted to 68 hourly operations between 6:00 A.M. and midnight. Of these, 48 were allocated to air carriers, 14 to commuter carriers,

and six to charter operators, general aviation, military, or airline extra-section operations. Until the passage of slot reforms in April 2000, the number of slots has changed only slightly at these airports since the program commenced in 1969.

Passenger Caps

This method is used occasionally in the United States, generally at smaller airports. It can restrict the annual volume, or set a short-term (e.g. half-hourly) limit on passengers carried. Examples include Orange County in California and Westchester County in New York.

Perimeter Rules

This technique controls demand by placing a limit on the originating or destination airports that can be served from the constrained airport. Washington Reagan National and New York LaGuardia are the primary examples of perimeter rules in the United States. These perimeter rules pre-dated Part 161 requirements.

Gate Use Standards

This method attempts to maximize airfield efficiency by placing a limit on the number of daily seats that a carrier operates through each gate. It is implemented via the airport-airline lease agreement, and forces the carrier to use the gate for its most valued flights and usually larger aircraft. Chicago Midway is a successful example of this approach in operation. Seattle-Tacoma Airport considered this program in 1995, but eventually dropped it due to complications with existing long-term lease agreements.

Aircraft Size Limits

This approach is similar to the gate use standards, but explicitly limits the minimum seat-size of aircraft using the airfield to increase efficiency. It was recently proposed at San Francisco to reduce weather-related delays for flights to / from Western United States cities, but a formal policy was never implemented.

3.5.1.2 Economic Approaches

These methods apply higher fees for flights operating during the peak periods to use the law of supply and demand for controlling activity. The concept often applies differential pricing for different types of users, and usually changes the fee structure by time of day. Several examples are provided below.

London Heathrow

Heathrow Airport has implemented a flat fee per operation (no traditional weight-based landing fee) during peak hour operations for several years. The fee is higher during the hours from 7:00 to 10:59 A.M. and 5:00 to 7:59 P.M. during the summer season. During the off-peak hours, two weight-based aircraft categories are used to calculate landing fees.

New York Minimum Landing Fee / GA Surcharge

In August 1968, the Port Authority of New York and New Jersey (PANYNJ) instituted a minimum landing fee on general aviation during peak periods at the three New York airports. The minimum fee for GA operators was progressively increased and eventually changed to a $100 surcharge (in addition to the traditional weight-based fee). The same minimum fee was subsequently imposed on commuter operators.

Boston Logan Minimum Daily Landing Fee

In 1982, Massport implemented a minimum daily landing fee of $50, applied against the conventional weight-based fee from 8:00 A.M. to 8:00 P.M.. The effect of the minimum was to discourage individual GA flights without penalizing multiple daily flights by small commuter / air taxi operators. Resistance to this program was strong, however, and in less than a year Massport rescinded it.

Boston Logan PACE Program

In July 1988, Massport implemented the Program for Airfield Capacity Efficiency (PACE). PACE represented a modification to Logan's landing fee structure that redistributed costs between users, while maintaining revenue neutrality (i.e., maintaining total airfield revenues at a level that does not exceed total airfield costs). The landing fee formula was changed to include a $91 fixed cost per landing plus $0.45 per 1,000 lbs. As a result of PACE, the cost of using Logan increased substantially for smaller aircraft, and declined somewhat for larger aircraft.

PACE was challenged by operators of small aircraft in US District Court and in an administrative proceeding before the US Department of Transportation (DOT). Summary Judgement upholding PACE was issued by the US District Court. However, the PACE fee structure was found to discriminate against smaller aircraft users by the DOT and, therefore, to be in violation of federal aviation statutes. The US Circuit Court of Appeals upheld the DOT. As a result, PACE was discontinued after only six months of use.

In terms of the instructiveness of PACE to a Peak Period Pricing program, it is important to understand that PACE did not relate to the peak hour at all. Rather, the increased fee applied across the entire day. While many are under the misconception that PACE was effective because of a subsequent decline in Logan regional carrier and general aviation operations, this decline was experienced at other airports in the region and was more related to market factors than PACE. The restructuring of the regional carrier industry at Boston and in New England continued well after PACE was rescinded.

1993 Boston Logan Peak Period Pricing Concept

During 1992-1993, high and increasing levels of delay caused Massport to revise the PACE proposal to reflect the DOT decision. In the modified approach, peak hour fees applied only to the most congested period of the day, and the method of airfield cost allocation was carefully calculated using the utility industry as a model. The resulting peak hour fee proposal had three components: (1) an operations charge for all aircraft

irrespective of weight, (2) a weight based charge, and (3) a peak hour fee between 2:00 PM and 8:00 PM (for both landings and takeoffs). The proposal was designed to be revenue neutral, but the effect on individual users differed. Smaller aircraft would pay more than under the traditional method, and larger aircraft would pay less. The peak hour pricing proposal was taken through the analytical phase and an informal public process with a wide range of interest groups, as well as briefings for the FAA and the DOT Office of the Secretary. In 1993, Massport determined that it was appropriate to reexamine the Logan delay problem from a more detailed perspective, particularly in light of fleet mix changes. The Logan Airside Improvements Feasibility Study was initiated which examined the nature of the delay problem and a broader range of potential delay reduction mechanisms. Peak Hour Pricing was one of the options studied.

Sydney Australia Peak Hour Pricing

In 1989, the Federal Airports Corporation in Australia implemented one of the few true demand management policies at Sydney Airport. The components of this pricing mechanism meet the economic and practical standards for peak hour pricing theory: access to the airport was not controlled by slots or any other regulatory mechanism; the charge was related to the airport's peak congestion period; and the charges applied to both arrivals and departures. The program was initially applied only to general aviation, but extended to all flights in 1991. A flat A$250 fee was charged for each landing or takeoff during peak periods in both morning and evening; during shoulder periods on either side of the peaks, the fee was A$200 per landing and A$100 per takeoff. The Sydney pricing resulted in a 28 percent reduction in peak period flights (all by non-jets), while actually increasing the passenger seat capacity.

Seattle Congestion Management Study

As part of the decision process on a new runway for Sea-Tac airport in 1995, a study of various Peak Period Pricing structures concluded that fees as high as $200 would remove at most seven percent of the peak hour operations.

3.5.1.3 Federal Slot Reforms

In the interests of promoting airline competition and service to underserved communities, the federal government enacted slot reforms through passage of the Federal Aviation Investment Act for the Twenty-First Century ("AIR-21") in April 2000. AIR-21 provides for the phased elimination of slots at the New York airports and Chicago O'Hare. Slot-restrictions at LaGuardia and J.F. Kennedy International will be lifted after January 1, 2007 and slot-restrictions at Chicago O'Hare will be terminated after July 1, 2002. At Washington Reagan National Airport, AIR-21 created 24 new slots.

AIR-21 also created interim slot exemptions for the LaGuardia, J.F. Kennedy International, and Chicago O'Hare Airports. The interim slot rules effectively lifted slot restrictions for carriers wanting to serve small or non-hub communities with small aircraft (under 71 seats) and for new entrant or limited incumbent carriers (carriers with 20 or fewer slots). Although the interim exemptions applied to three of the High Density

airports, the overwhelming majority of airline exemption requests were for LaGuardia. Carriers filed exemption requests for more than 600 additional daily flights at LaGuardia, which would have increased daily scheduled operations by more than 50 percent. Carriers proposed to operate two-thirds of the additional flights with regional jet aircraft and one-third with turboprop aircraft.

By November 2000, airlines were operating more than 200 of the proposed AIR-21 services at LaGuardia, representing a 26 percent increase in scheduled operations over the prior year. The substantial increases in aircraft activity resulted in unprecedented levels of delay at LaGuardia. In September 2000, the FAA OPSNET database showed that LaGuardia experienced more than 9,000 flight delays compared to 3,100 delayed flights a year earlier. The FAA estimates that 25 percent of flight delays in the United States in September 2000 occurred at LaGuardia, compared to approximately 12 percent before AIR-21.

In response to the substantial increases in activity and delays, the Port Authority of New York and New Jersey ("PANYNJ"), which operates LaGuardia, sought voluntary measures from the airlines to minimize airport congestion. In August 2000, the PANYNJ requested that air carriers schedule AIR-21 eligible service outside of the airport's most congested operating hours. The airlines did not respond the PANYNJ's request. Subsequently, the PANYNJ announced a moratorium on new services until a demand management measure could be adopted.

The FAA did not sanction the moratorium and began immediate discussions with the PANYNJ to devise a short-term demand management strategy for the airport. The FAA and the PANYNJ agreed to allocate a limited number of AIR-21 slot exemptions to airlines through a slot-lottery. The allocation of AIR-21 services is an interim measure intended to mitigate the air service disruptions and delays brought on by the AIR-21 slot exemptions. The lottery was conducted in January 2001, and it increased the total number of hourly operations at LaGuardia, which has just two runways, from 68 to 81. As a result, the number of AIR-21 slot exemptions was limited to 150 daily operations. In its decision to allocate flights authorized by AIR-21, the FAA made clear that the lottery was a Federal action and that the PANYNJ could not have acted on its own to limit airport operations.

The FAA is currently in the process of developing a long-term demand management policy that will become effective at LaGuardia in September 2001. Through this process the FAA intends to articulate demand management measures that would be available to all airport operators. It is expected that any demand management policy promulgated by the FAA will be shaped by two recent forces in the aviation industry, the AIR-21 slot reforms and the widespread introduction of regional jet aircraft. The pending FAA decision is expected to result in updated federal guidance for other airports, such as Logan, on the appropriate structure for demand management programs, including Peak Period Pricing.

3.6 Alternative Packages

For analytic purposes, the various airside improvement concepts identified previously were grouped into different packages of alternatives. The alternatives have been structured to provide a clear basis for assessing the operational benefits and environmental impacts of the proposed improvements as compared to each other and the No Action Alternative.

The following sections describe the range of alternatives considered in the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR.

3.6.1 Alternative 1 – All Actions

Alternative 1 would involve implementation of all recommended concepts (see Figure 3.1-1). This would include construction of unidirectional Runway 14/32, construction of the Centerfield Taxiway, realignment of Taxiway November, extension of Taxiway Delta, and reconfiguration of the Southwest Corner taxiway layout. In addition, reduced minimums for Runways 22L, 27 and 15R would be implemented and a Category III ILS would be operational for Runway 33L. A Peak Period Pricing surcharge would also be implemented.

In addition to the full analysis of this alternative, several individual case studies for Runway 14/32 were conducted to examine the runway's effectiveness under specific operating and weather conditions. Descriptions and results of these specialized case studies are presented in Appendix H and I of the Airside Project Draft EIS/EIR.

3.6.2 Alternative 1A - All Actions Except Peak Period Pricing

Alternative 1A is a subset of Alternative 1, and includes all improvements except Peak Period Pricing (see Figure 3.1-1). Massport added this alternative to the analysis in response to public comment on the alternatives presented in the Airside Project ENF. Since the initial on-airfield alternatives included Peak Period Pricing in all but the No Action scenario, there was no opportunity to gauge the specific impact of a Peak Period Pricing scenario independent of the runway.

In response to these comments, Alternative 1A was developed by eliminating Peak Period Pricing from Alternative 1. In this manner, by comparing the operational, environmental, and socioeconomic impacts of Alternative 1 with those of Alternative 1A, an understanding of the incremental benefits of Peak Period Pricing is possible.

During the public scoping period and through the Airside Review Committee and SDEIS Panel processes, certain commenters suggested that there was considerable potential for significant adverse economic impacts associated with Peak Period Pricing. To more clearly evaluate and identify the individual effects of a Peak Period Pricing program, specialized case studies which focus on regional carriers and affected markets were also

conducted. Details and findings of these case studies are presented in Appendices E and F of the Airside Project Draft EIS/EIR.

3.6.3 Alternative 2 - All Actions Except Runway 14/32

A second "Build" Alternative was developed to facilitate a clear understanding of how the airfield might operate if all the improvement concepts were implemented except a unidirectional Runway 14/32 (see Figure 3.1-2). Accordingly, Alternative 2 combines all recommended actions other than the runway. All proposed taxiway improvements are included. Comparison of Alternatives 1 and 2 provides insight into the incremental benefit of the proposed unidirectional Runway 14/32 in reducing congestion and delay and the associated environmental impacts.

3.6.4 Alternative 3 - No Build

Alternative 3 is considered to be the No Build alternative in that it consists only of the operational and administrative improvement concepts: i.e., reduced minimums for Runways 22L, 27, 15R, and 33L (includes CAT III ILS), and Peak Period Pricing. Implementation of this alternative would not involve construction of any physical improvements. Comparison of Alternative 3 with Alternative 2 provides insight into the operational and environmental impacts of the taxiway modifications.

3.6.5 Alternative 4 - No Action

The No Action Alternative (Alternative 4) evaluates the impacts of not implementing any Airside Project improvements. It is assumed, however, that routine maintenance and minor annual improvements would be ongoing. Alternative 4 serves as the baseline for evaluating the effectiveness of all alternatives, and provides additional context for assessing the Preferred Alternative.

4 Delay Analysis

Key Points

Logan suffers from a serious aircraft delay problem and is consistently ranked among the most delayed airports in the country. In 2000, Logan was the 6th most delayed airport in the United States in terms of total delays. Logan fared even worse in arrival delays, ranking as the 2nd worst airport in the nation. This is Logan's lowest ranking in the last decade. If no improvements are made, delays will become significantly worse, especially those that the Airside Improvements Planning Project (Airside Project) improvements can alleviate, i.e., those occurring under Visual Flight Rule (VFR) conditions when wind levels (particularly from the northwest) reduce existing runway capacity. If no action is taken to address this situation, total annual delays (runway and taxiway) will increase from an estimated 142,000 hours to as much as 363,000 hours under the 37.5 million passenger High Fleet scenario. The average delay would increase from 17 to 36 minutes per flight.

This chapter reviews the activity forecasts, the delay modeling methodology and the results of the airfield delay analysis with the Preferred Alternative (Alt 1A). While the Airside Project Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) provided a discussion of all Alternatives and all fleets, this Supplemental Draft EIS/Final EIR focuses the discussion on the results of the Preferred Alternative compared to the No Action Alternative for the 29 million passenger Low Fleet (29M Low Fleet) and the 37.5 million passenger High Fleet (37.5M High Fleet). These fleets reflect the range of likely future passenger and activity levels. The remaining fleets and Alternatives are described in Appendix C.

In response to the FAA directive resulting from the SDEIS Panel process, this chapter presents a third fleet. This fleet assumes that the 37.5 million passengers will use more regional jets (RJs) and fewer non-jet aircraft than previously forecast, and is called the 37.5M High RJ Fleet. This scenario examines the delay reduction utility of all of the proposed improvements including unidirectional Runway 14/32 and Peak Period Pricing.

The principal findings of this section are as follows:

- Based on the modeling of current conditions, Logan incurs an estimated 120,000 annual hours of runway delay. With the availability of unidirectional Runway 14/32 and the other recommended improvements comprising the Airside Project Preferred Alternative, delays could have been reduced by 32 percent, with a 69 percent reduction in Visual Flight Rules (VFR) delays. Delays during northwest wind conditions would have been reduced by nearly 90 percent.

- The lack of a third available runway in the east-west operating direction causes an unbalanced geographic distribution of jet operations at Logan Airport. Approximately three-quarters of Logan's current jet flights overfly communities impacted by the north/south runway configurations. Under the 37.5M High Fleet scenario, Logan's reliance on north/south runways will increase to over 90 percent. The proposed Runway 14/32 will allow for a more balanced distribution of operations, reducing reliance on the north/south runway configurations to 41 percent.

- The proposed Runway 14/32 will also permit a substantial increase in use of the preferred arrival and departure routes over the water. Under the 29M Low Fleet scenario, approximately 52,000 jet operations, or 17 percent of total jet operations, would shift from flight paths over communities to flight paths over the water. Under the 37.5M High scenario, 89,000 jet operations would shift to flight paths over the water.

- Taxiway improvements will reduce ground delays by 47 percent with the 29M Low Fleet and 26 percent with the 37.5M High Fleet (Alternative 2 vs. Alternative 3) by eliminating constraints and inefficiencies in the taxiway system. The proposed runway also makes a positive contribution to reducing Logan's taxiway delays. With the Preferred Alternative, including the runway, taxiway delays are reduced by 65 to 70 percent (Preferred Alternative vs. No Action).

- A reduction in approach minimums for Runways 15R, 22L, 27 and 33L provides modest delay reduction but significantly enhances safety by increasing runway availability in Instrument Flight Rules (IFR) weather conditions. Reducing minimums does not change the flight path of arriving flights, but moves the decision point for missed approaches towards the airport and, in most cases, within the airport boundary. This will allow the principal noise impacts from go-around operations to occur over the airport, rather than closer to residential areas.

- Peak Period Pricing is designed to reduce delays that occur when airlines schedule flights beyond the airfield's capacity. Overscheduling has not been a significant factor in delays at Logan since 1993, but could reoccur in the future. However, Massport intends to put in place a process that will allow for a timely response to airline overscheduling. Massport has designed an airline schedule monitoring system, and is committed to implementing Peak Period Pricing if airline overscheduling should emerge in the future as a source of delays.

- Peak Period Pricing produces only limited delay reduction benefits under near- and long-term Low Fleet scenarios. For example, under the 29M Low Fleet scenario, Peak Period Pricing would incrementally reduce runway delays by 2 percent or less, while imposing over $6 million in additional costs on Logan's regional carriers and potentially impacting access to Logan from small communities. However, under the long-term High Fleet scenario which is characterized by airline overscheduling, Peak Period Pricing provides meaningful delay reduction benefits.

- Incorporating an exemption program for small communities would reduce the expected degree of service disruption resulting from Peak Period Pricing. With a limited number of exemptions, the delay reduction benefits of Peak Period Pricing could generally be maintained under the High Fleet scenario where airline overscheduling is a significant cause of Logan delays.

- An additional future fleet scenario was developed and evaluated for this Supplemental DEIS/FEIR, the 37.5M High RJ Fleet. This fleet is characterized by a substantial volume of regional jet aircraft and a reduced level of non-jet operations.

- Independent FAA analysis examined the probable utilization of the 5,000-foot runway by regional jets and determined that the runway length would be acceptable for most of the regional jet types projected to operate at Logan.

- Based on the runway utilization assumptions provided by the FAA consultant, approximately 70 percent of the regional jet aircraft in the 37.5M High RJ fleet will be able to land on Runway 32. Operational analysis of the 37.5M High RJ Fleet found that the Preferred Alternative would reduce annual delays by 109,000 hours, or 29 percent when compared to the No Action Alternative.

- Placing a northwest wind restriction on Runway 14/32 would limit the increase in jet departures on Runway 27 that results from the availability of a third three-runway configuration at Logan. However, this restriction would sacrifice a portion of the delay reduction benefits provided by Runway 14/32, and would also limit the level of the relief provided to communities impacted by the north/south runway configurations which are already the most heavily utilized at Logan.

- The illustrative Peak Period Pricing program with a $150 surcharge was ineffective at reducing delays under the 37.5M High RJ Fleet scenario. A higher peak fee would be required to provide meaningful delay reduction under this scenario, principally due to the higher revenue and profitability of regional jet services as compared with non-jets. An effective Peak Period Pricing program that would eliminate overscheduling in the 37.5M High RJ Fleet was projected to reduce runway delays by approximately 68,000 annual hours or 18 percent (Alternative 2/3).

- Since the original 1983 version of the Preferential Runway Advisory System (PRAS), two major enhancements have been installed in the FAA control tower. The PRAS enhancements have led to significant improvements in PRAS conformance, despite increasing levels of flight activity at Logan.

- Massport has designed protocols to assess achievement of PRAS goals and is committing to: (1) publish results on a more regular basis, (2) broaden its distribution list, and (3) expand the set of reported data to provide a more complete representation of PRAS conformance.

4.1 Overview

Logan suffers from a serious aircraft delay problem and is consistently ranked among the most delayed airports in the country. The airfield's VFR capacity of approximately 120 operations per hour is sufficient to accommodate current levels of aircraft demand. However, delays accrue when weather conditions, particularly strong northwest winds, lower airfield capacity to levels well below normal operating conditions. If effective measures for dealing with delays are not implemented, the disproportionate level of delays at Logan will continue to worsen.

While Massport and the FAA cannot entirely eliminate delays at Logan, the proposed runway will improve Logan's reliability and reduce delays by preventing the decline in airfield capacity that now occurs in northwest winds. The proposed improvements will also enhance the safety and efficiency of Logan's runway and taxiway systems and provide increased operating flexibility, particularly during periods of low visibility.

This chapter describes the delay and operational analyses that were used to evaluate the proposed improvements and analyze the impacts of the Preferred Alternative. The evaluation considered a range of forecast passenger and aircraft activity levels at Logan to provide a full understanding of the potential benefits and impacts of the recommended improvements.

In the Airside Project Draft EIS/EIR, historic Logan activity from 1993 was used to provide historical context to the assessment of aircraft delays and environmental impacts. For this Supplemental DEIS/FEIR, these 1993 conditions were supplemented and updated with an analysis of Logan operating conditions during 1998. By including this analysis, the Supplemental DEIS/FEIR provides an assessment of more recent delays at Logan and quantifies the delay reduction benefits that would occur with the recommended Preferred Alternative. The 1993 and 1998 analysis conditions are described in Section 4.2.

Since the Airside Project Draft EIS/EIR forecasts were originally developed in 1995, Section 4.2 also analyzes recent changes in passenger demand, airline fleets, and airline scheduling. Based on these trends, an additional fleet forecast, the 37.5M High RJ scenario, was developed to ensure that the airside analysis considered an appropriate range of future conditions.

Some comments received on the Airside Project Draft EIS/EIR expressed a concern that the Preferred Alternative could stimulate an increase in passenger traffic and/or aircraft operations. Therefore, this section also includes a discussion of induced demand, explaining that implementation of the Preferred Alternative will not cause growth in Logan passengers or operations or impact the timing of expected growth.

While delay reduction is a principal objective of the recommended Airside Project improvements, proposed Runway 14/32 enables air traffic controllers to better achieve the goals of the Preferential Runway Advisory System (PRAS) or any other preferential runway system where a more equitable distribution of noise is the objective. Section 4.3 of this chapter provides a thorough discussion of PRAS, including its history at Logan, recent enhancements to the PRAS system, and the improvement in historic PRAS conformance facilitated by those enhancements.

In response to the Executive Office of Environmental Affairs (EOEA) Secretary Certificate on the Airside Project Draft EIS/EIR (May 7, 1999), this section also includes discussions of improved monitoring and public reporting of PRAS conformance and of the potential for extending the current nighttime overwater routing preference beyond the existing midnight to 6:00 AM period.

Each of the five alternatives was evaluated through state-of-the-art computer modeling. Comparisons between the various improvement alternatives and the No Action Alternative show the reduction in delay levels and environmental impacts that would be produced with each improvement package. The delay analysis is based on detailed simulations of aircraft operations at Logan, including the flow of aircraft in surrounding airspace, the selection and utilization of various runway configurations, and the movement of arriving and departing aircraft between gates and runways on the airport taxiway system. The analytical approach is described in Section 4.4, and it provides a direct linkage between the models that calculate delays and the models that measure environmental impacts.

Peak Period Pricing was not recommended for immediate implementation as part of the Preferred Alternative. However, Massport does recognize the delay reduction benefits associated with this demand management strategy under potential future conditions of airline over scheduling. As part of the Final EIR, the Secretary instructed Massport to conduct additional analyses to provide a more thorough evaluation of Peak Period Pricing. Section 4.5 describes these three analyses.

First, Massport defines the overscheduling conditions that would lead to implementation of Peak Period Pricing, and designs a monitoring system to determine when these conditions will materialize. Next, a tightly crafted exemption program is developed to protect “greatly affected communities” from losing connections to the national air transportation system. Finally, the section discusses the potential for alterations in the regional airline fleet mix at Logan and/or increased utilization of alternative regional airports that may result from Peak Period Pricing.

In Section 4.6, the results of the airfield delay and operational analysis are described. This section includes an evaluation of how Logan delays will grow in the future without improvements to the airfield, and demonstrates how the Preferred Alternative will limit the growth in delays. The delay analysis has been expanded to include 1998 operating conditions at Logan. This analysis quantifies the current level of Logan delays and identifies the delay reduction benefits that would have been realized if the Preferred Alternative had been available in 1998.

In Section 4.7, operational and delay results for all improvement alternatives with the 37.5M High RJ Fleet are presented. While the 37.5M High RJ Fleet analysis modeled regional jet use of Runway 32 based on the regional jet utilization estimates from an independent FAA analysis, a range of assumptions regarding regional jet use of Runway 32 was also tested. This section also discusses the effect of restricting the use of Runway 32 to northwest wind conditions only. The analysis of various wind restrictions using the 37.5M High RJ Fleet is presented, and the impacts of a restriction on delays, runway use and PRAS performance are discussed.

4.2 Historic Conditions, Recent Trends, and Forecast Passengers and Operations

This section describes the various passenger and operations scenarios that were used in the analyses of the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR. Historic and current conditions are described, recent trends are analyzed, and the future forecast scenarios are presented. The development of the 37.5M High RJ Fleet is explained in detail, and the issue of induced demand is also addressed.

4.2.1 Historic Conditions

In the Airside Project Draft EIS/EIR, modeled delay and environmental analyses were presented based on 1993 Logan activity levels and five future operating scenarios. In many instances, 1993 was referred to as the base year because it provided historic context for the analysis presented in the Airside Project Draft EIS/EIR. The EOEA Certificate requested that Massport clarify the use of 1993 in the airside analysis and, if appropriate, provide more current information to supplement the base year analysis.

It is important to understand that the recommendations advanced by Massport in the Airside Project Draft EIS/EIR were based on the comparative delay reduction, environmental, and economic impacts of the various improvement alternatives under the various future operating scenarios. Benefits and impacts were determined through comparisons of each improvement alternative (Alternatives 1, 1A, 2, and 3) with Alternative 4 (the No Action Alternative). In this regard, Alternative 4 represented the effective "base case" under each future operating scenario.

The year 1993 was a peak year for small aircraft operations at Logan Airport, and the demand profile exhibited a relatively high degree of hourly peaking compared to the current profile. It was originally chosen since it represented the most recent data available at the beginning of the Logan Airside Improvements Feasibility Study. It also illustrated operational and environmental conditions during a period of airline overscheduling and high delays. To supplement the 1993 historic analysis, 1998 conditions have been examined in this Supplemental Draft EIS/Final EIR to provide a more recent point of reference for the operational and environmental results. While 1998 exhibited a level of overall demand similar to that in 1993, the 1998 operations exhibited less hourly peaking and included fewer non-jet aircraft. In addition to providing an updated historic context, 1998 conditions

were also analyzed to determine the delay reduction benefits that would have been realized had the Preferred Alternative been implemented in 1998.

4.2.2 Recent Trends

The forecasts presented in the Airside Project Draft EIS/EIR were developed in 1995 at the beginning of the Airside Project. Since these forecasts were developed through the analysis of historic trends and expected future conditions at a particular point in time, it is appropriate to examine recent trends to ensure that the forecasts of future activity still encompass a reasonable range of future scenarios. There were three key developments in the last six years that could impact future activity at Logan:

- Passenger growth at Logan has slowed due to service expansion at New England's regional airports.
- Regional jet aircraft have entered the fleet and services have expanded rapidly.
- Logan's demand profile has become less peaked as airline schedules have smoothed and spread out more evenly over the day.

4.2.2.1 Slower Passenger Growth

Logan passenger growth has slowed significantly, averaging 2.4 percent per year since 1995 and growing only 1.3 percent from 1999 to 2000. This can be compared to the average annual growth rate of 3.1 percent between 1980 and 2000. As explained in Chapter 2 of this Supplemental DEIS/FEIR, this slower growth is primarily due to air service expansion at New England's regional airports. In October 1996, Southwest Airlines entered the New England market, opting to serve Providence (and later Manchester) instead of Logan Airport. This air service expansion and the introduction of competitive fares have resulted in significant growth at both Manchester and Providence. In addition, increased efforts to market the regional airports and the introduction of air travel alternatives, such as Amtrak's Acela service to New York, have also helped develop regional transportation options for New England travelers. This regionalization has effectively dampened Logan's passenger growth rate to a level below that expected when the forecasts for the Airside Project Draft EIS/EIR were originally developed.

4.2.2.2 Rapid Growth in Regional Jets

Regional jets were just entering service when the Airside Project Draft EIS/EIR forecasts were finalized, and while the fleet forecasts accounted for growth in regional jets, they did not anticipate how quickly or extensively airlines would incorporate regional jets into their fleets. In October 1995, there were only 340 regional jets in service worldwide, but by October 2000, carriers had over 1,100 regional jets in service and almost 2,600 on order or option. These regional jets are now serving Logan, and have represented the fastest growing segment of Logan flight demand in recent years.

Logan's regional airlines have traditionally operated non-jet aircraft and have served markets within 400 miles of Boston. The regional jet has expanded the radius of

destinations accessible with small aircraft to approximately 1,000 miles and permitted new nonstop service in medium volume markets such as Richmond, Norfolk, Greensboro, Nashville, Indianapolis, and others. These regional jets have also allowed carriers such as American and Delta to develop competitive jet service patterns in high-volume markets dominated by other carriers. A prime example is the Boston-Philadelphia market, where both American and Delta have initiated high-frequency regional jet services in competition with US Airways (which provides 17 daily round trips with full-size jets).

4.2.2.3 Smoother Demand Profile

The third development that may impact future activity is the smoothing of Logan's demand profile. Figure 4.2-1 shows how the shape of Logan's demand has changed over the last five years. While there have been a number of changes in the characteristics of Logan's demand, the flatter profile can be attributed to three main factors:

- Increased off-peak activity with less activity during the peak;
- Increased frequencies in jet markets; and
- The decline in Logan non-jet activity.

Over the past several years, airlines have increased their off-peak activity at Logan, with a significantly higher percentage of arrivals and departures occurring in the early morning and late evening (see Table 4.2-1). The total growth between 1995 and 2000 was 56 scheduled weekday operations; however, all of that growth occurred in the early morning and late night hours. Early morning operations grew by over 25 percent, with much of the growth in short-haul East Coast markets such as Philadelphia and New York. Over 80 percent of that growth occurred between the hours of 6:00 AM and 8:00 AM. Late-night operations grew by a similar amount, with increases in a wide range of medium- and long-haul markets. Operations during the daytime periods, and even during the peak afternoon period, declined even as the total operations increased, and this pattern was observed in all scheduled market sectors: North American Jet, International Jet, and Non-Jet.

Figure 4.2-1
Comparison of August Weekday Peaking Patterns – 1995 vs. 2000

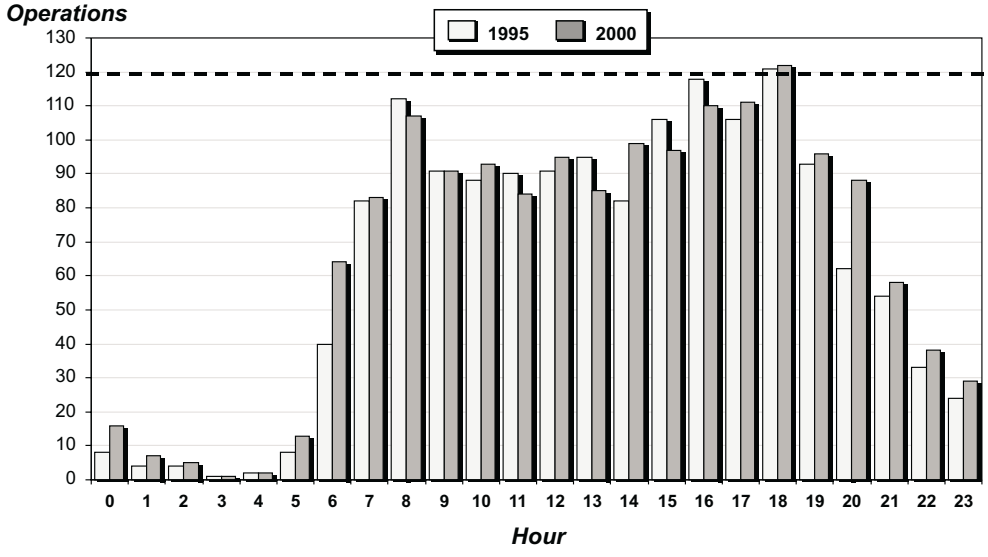


Table 4.2-1
Scheduled August Weekday Passenger Operations by Period: 1995 vs. 2000

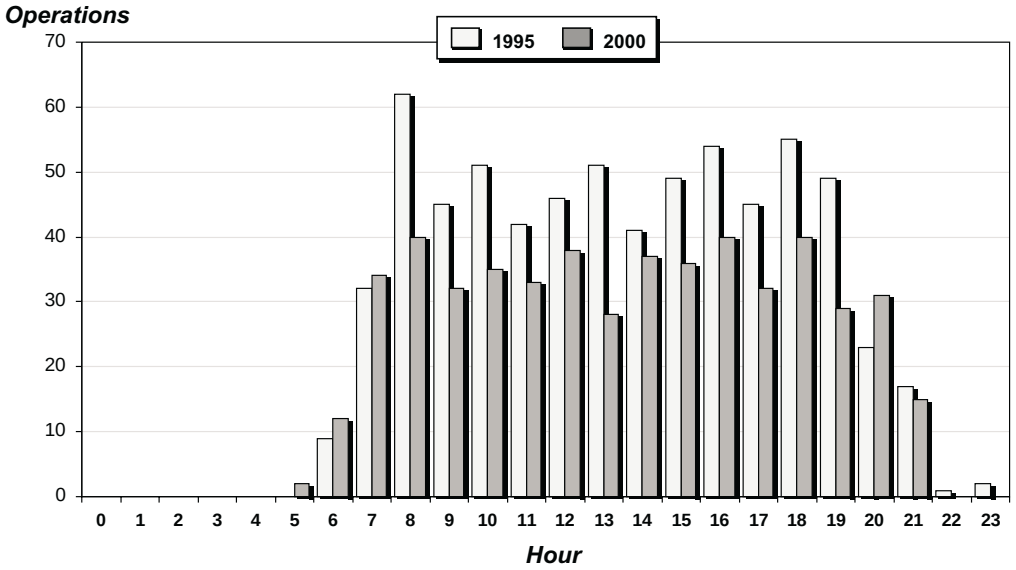
	Operations			Percentage	
Period	1995	2000	Change	1995	2000
Midnight – 4:00 AM	3	15	12	0.2%	1.1%
4:00 AM – 8:00 AM	106	134	28	7.8%	9.4%
8:00 AM – 12:00 PM	356	345	(11)	26.1%	24.3%
12:00 PM – 4:00 PM	352	349	(3)	25.8%	24.5%
4:00 PM – 8:00 PM	404	396	(8)	29.6%	27.8%
8:00 PM – Midnight	145	183	38	10.6%	12.9%
Total	1,366	1,422	56	100.0%	100.0%

Source: OAG Schedule Tapes

Along with the increased off-peak activity, increased jet frequencies also tend to flatten the demand profile by providing a steady level of operations all day long. In August 1995, Logan had non-stop service to 61 jet destinations with an average frequency of 5.7 round trips per weekday. In August 2000, Logan had nonstop service to 64 jet destinations with an average frequency of 7.1 round trips per weekday. Furthermore, the average frequency to Logan's top ten jet destinations increased from 17.8 daily round trips to 21.4 daily round trips. As frequencies to an individual destination increase, operations tend to become less concentrated during the peak periods.

The changes in Logan's non-jet fleet have also played a role in flattening the demand profile. Figure 4.2-2 compares the scheduled non-jet activity at Logan in 1995 and 2000. Non-jets have historically been the most peaked market segment at Logan, but over the last several years, non-jet activity at the airport has declined in both total and peak hour activity. Logan served 40 non-jet destinations in August 1995 but only 27 non-jet destinations by August 2000. Non-jet carriers pulled out of markets such as Hartford, Lebanon, and Manchester, even though each had at least six daily round trips in August 1995. In addition to the market reduction, the number and distribution of non-jet operations has changed. In August 1995, Logan averaged 49 hourly non-jet operations between 8:00 AM and 8:00 PM with a peak hour level of 62 operations. By August 2000, Logan averaged only 35 hourly non-jet operations over the same twelve-hour period, reaching a peak level of only 40 hourly operations.

Figure 4.2-2
August Weekday Scheduled Non-Jet Demand: 1995 vs. 2000



4.2.2.4 Summary of Recent Trends

It is reasonable to expect that the recent trends observed at Logan will continue into the future: 1) slower passenger growth, 2) increased regional jet activity, and 3) a smoother demand profile. Ongoing efforts towards regionalization will cause passenger growth to continue at a slower rate, consistent with the growth predicted in the FAA Terminal Area Forecasts. Regional jets have operational and economic advantages for serving medium density markets within 1,000 miles and for allowing competitive entry into high-volume markets. These aircraft are therefore likely to play a significant role for Logan carriers well into the future. Finally, the less-peaked demand is expected to continue. In general, peaks tend to spread as demand grows and frequencies increase. Also, the move from turboprop aircraft to regional jets ensures a continued decline in the Logan market segment with the most peaked demand.

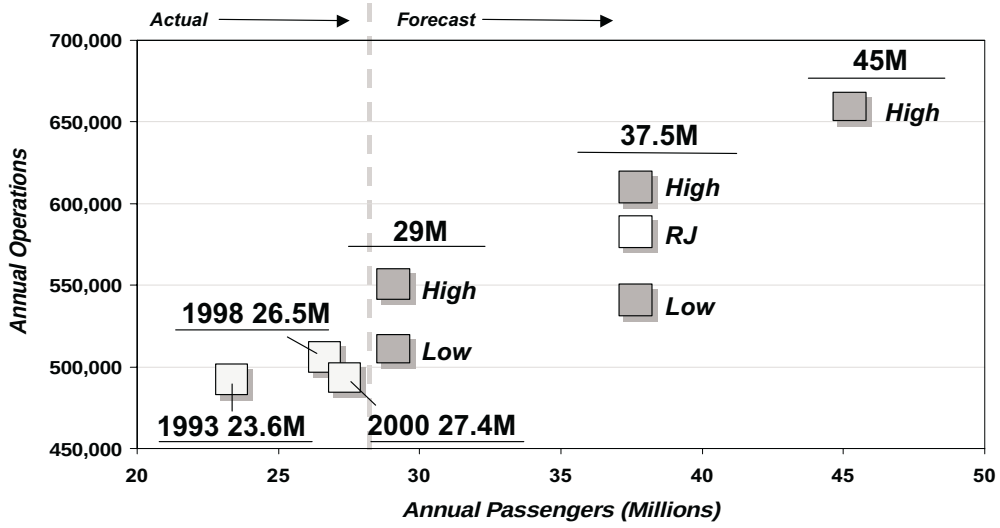
The forecasts presented in the Airside Project Draft EIS/EIR covered a wide range of passenger levels and fleet mixes, and they continue to represent an appropriate range of future activity for the purposes of this analysis. However, in light of the more recent trends and the likelihood that they will continue, an additional future scenario was developed for this Supplemental DEIS/FEIR to ensure that all reasonable forecast conditions were addressed.

4.2.3 Passenger Forecasts

In order to evaluate the Airside Project Alternatives under a variety of future scenarios, Massport has developed a range of near- and long-term passenger forecasts. As shown in Figure 4.2-3, three different passenger volumes (29 million, 37.5 million, and 45 million) were evaluated for a range of operations levels. Based on the slower passenger growth due to regionalization discussed in the previous section, the airport is expected to reach 29 million passengers within a few years, 37.5 million passengers around 2015, and 45 million passengers sometime after 2020. These projections reflect more conservative growth than the forecasts presented in the Draft EIS/EIR, which assumed that Logan would reach 29 million passengers in 1999 and 37.5 million by 2010.

While the time frames associated with the forecasts in the Airside Project Draft EIS/EIR have been adjusted to reflect the growth at regional airports, the aircraft fleet forecasts, the delay modeling, and the environmental analyses associated with the passenger levels are still appropriate near- and long-term term scenarios. By adjusting the time frame associated with each of the passenger levels rather than adjusting the passenger levels themselves, the 29 million, 37.5 million, and 45 million passenger scenarios in this Supplemental DEIS/FEIR can still be compared with similar scenarios examined in other Logan analyses.[1] Furthermore, these revised forecast dates are consistent with the FAA's most recent Terminal Area Forecasts which project that Logan will handle 33.6 million passengers in 2010 and 37.1 million in 2015. By examining historic 1993 conditions, recent demand (1998), and near- and long-term planning values of 29, 37.5, and 45 million passengers, the airside analysis has incorporated a comprehensive set of past, present, and future demand levels that provide a broad context for the evaluation of the proposed Airside Project improvement alternatives.

Figure 4.2-3
Logan Airside Passenger and Fleet Forecasts



1 Previous Logan Airport Generic Environmental Impact Reports (GEIRs) and Annual Updates, as well as the 1999 Environmental Status and Planning Report (ESPR), published in December 2000, have all examined future passengers levels of 29M, 37.5M, and/or 45M.

4.2.4 Operations Forecasts

While the various passenger forecast scenarios represent near- and long-term passenger demand for airport services, the aircraft operations forecasts tie that demand to the airside modeling process. The forecast variables that impact the operations and environmental analysis include:

- The demand level in terms of aircraft operations;
- The mix of aircraft types; and
- The demand profile, or the distribution of operations by hour across the operating day.

The Airside Project Draft EIS/EIR included six forecasts of future activity (five of which were carried through the detailed analysis process)[2], with a Low Fleet and High Fleet operations scenario for each of the three forecast passenger levels (29M, 37.5M, and 45M). These Low Fleet and High Fleet scenarios represent two different ways that a single future passenger volume could be satisfied. The Low Fleet forecasts reflect the assumption that commuter aircraft will make up a smaller share of the fleet serving Logan, while the High Fleet forecasts reflect the greater use of small aircraft and the resulting need for more flights to carry a given number of passengers.

To incorporate the recent Logan trends discussed previously in this section, an additional analysis scenario, referred to as the 37.5M High RJ Fleet, has also been developed. The 37.5M High RJ Fleet assumes slow passenger growth due to regionalization, reaching 37.5 million passengers circa 2015. To reflect the smoother demand profile, the hourly distribution of demand is based on the current demand profile rather than the more peaked profile from FY1995 that was used to develop the profiles for the Airside Project Draft EIS/EIR forecasts. The 37.5M High RJ Fleet also assumes significant growth in regional jet activity.

By developing a forecast that represents relatively high regional jet growth, the operational and environmental impacts of regional jets are bounded by the lower level of regional jets in the Airside Project Draft EIS/EIR forecasts and by the higher level in the 37.5M High RJ Fleet. Table 4.2-2 presents the full range of operations forecasts analyzed in the Airside Project. These alternatives are designed to ensure that the airfield analysis includes an appropriate range of future conditions at Logan. The delay results for the 29M High, 37.5M Low and 45M High Fleets are summarized Appendix C, while the operational results for the 29M Low, the 37.5M High, and the 37.5M High RJ Fleets are presented in the following sections.

▼

2 The 45M Low Fleet forecast was initially evaluated with the runway capacity and delay models but was not carried through the detailed taxiway and environmental analysis process because of its similarity to the 37.5M High Fleet scenario.

Table 4.2-2
Logan Near- and Long-Term Operations Forecasts

Forecast Scenario (Passenger Level and Fleet)	Aircraft Operations
29M Low	510,000
29M High	552,000
37.5M Low	543,000
37.5M High RJ	585,000
37.5M High	608,000
45M Low	580,000
45M High	656,000

Notes: The 37.5M High RJ Forecast was not analyzed in the Airside Project Draft EIS/EIR and has been added as an additional scenario in this Supplemental Draft EIS/Final EIR.
The 45M Low operations forecast was initially evaluated with the runway capacity and delay models, but was not carried through the detailed taxiway and environmental analysis process because of its similarity to the 37.5M High Fleet scenario.

4.2.4.1 Near-Term Planning Forecasts

The development of the near-term 29M Low and High Fleets is explained in detail in Chapter 4 and Appendix E of the Airside Project Draft EIS/EIR. Table 4.2-3 compares the major features of the 29M High and Low Fleet operations scenarios, but this Supplemental DEIS/FEIR focuses on the 29M Low Fleet for the operational and environmental analyses. Both alternatives are based on 29 million annual passengers, but non-jet aircraft carry 11 percent of the passengers in the High Fleet scenario compared to 9.5 percent in the Low. This difference, combined with a higher average load factor in the Low Fleet scenario, increases the average number of passengers per operation in the Low Fleet scenario and allows Logan carriers to handle the same number of passengers with 42,000 fewer flights.

Table 4.2-3
Near-Term Operations Forecasts

	29M Low	29M High
Operations		
Mainline Jet	259,000	264,000
Regional Jet	15,000	3,000
Regional Non-Jet	197,000	246,000
Subtotal - Passenger Operations	472,000	513,000
Cargo	13,000	13,000
General Aviation	25,000	25,000
Total	510,000	552,000
Distribution of Passengers		
Jet (Mainline and Regional Jets)	90.5%	89.0%
Regional Non-Jet	9.5%	11.0%
Average Passengers per Flight		
Jet (Mainline and Regional Jets)	96.4	95.6
Regional Non-Jet	13.6	12.5

4.2.4.2 Long-Term Planning Forecasts

The discussion in this Supplemental DEIS/FEIR focuses on the 37.5M High Fleet and the 37.5M High RJ Fleet, but all of the long-term forecasts are presented in Table 4.2-4 for comparison purposes (the 37.5M Low, 37.5M High, and 45M High Fleets were described in Chapter 4 and Appendix E of the Airside Project Draft EIS/EIR). The 37.5M High RJ scenario was developed using the same basic methodology used for the other fleets, but it incorporates the recent Logan trends towards slower passenger growth, increased regional jet activity, and less-peaked demand. The major forecast assumptions for the 37.5M High RJ fleet are summarized below:

- Airport passenger traffic was assumed to grow at 2.1 percent per year, reaching 37.5 million passengers by 2015, consistent with the FAA Terminal Area Forecasts.

- Operations were forecast to grow at 1.3 percent per year, resulting in an operations level between the 37.5M Low and High Fleet scenarios.

  - Regional jet aircraft were projected to replace most turboprops and a portion of conventional narrowbody jets with less than 120 seats. High growth in regional jet operations was assumed so that the fleet tests an appropriate upper range of regional jet activity.

  - The general aviation and cargo forecasts were updated to reflect recent Logan trends. General aviation operations were forecast to reach an annual level of 41,000 operations since Logan handled approximately 40,000 general aviation operations in fiscal year 2000. Cargo operations were forecast to grow at two percent per year based on historic growth trends at the airport.

Table 4.2-4 compares the four alternative long-term forecasts. The 37.5M High Fleet requires 608,000 annual operations to handle 37.5 million passengers, while the 37.5M Low Fleet requires only 543,000 annual operations due to the higher average number of passengers per flight. The 37.5M High RJ scenario represents a mid-range 37.5 million passenger scenario in terms of both total operations and passenger operations, but the mix of passenger operations varies dramatically when compared to the 37.5M Low and High Fleets.

The Low and High scenarios have roughly three times as many non-jet operations as the High RJ Fleet, while the High RJ scenario offsets this difference with a much greater level of regional jet operations. While this seems like a large difference, the total number of annual regional carrier operations in the 37.5M High RJ scenario, including both regional non-jets and regional jets, is 249,000. This falls between the 37.5M Low value of 223,000 and the 254,000 regional carrier operations in the 37.5M High scenario. Because of the large number of regional jets in the High RJ scenario, a much higher percentage of passengers travel on jet aircraft; however, the number of passengers per jet operation is significantly lower.

Table 4.2-4
Long-term Operations Forecasts

	37.5M Low	37.5M High RJ	37.5M High	45M High
Operations				
Mainline Jet	281,000	279,000	310,000	335,000
Regional Jet	24,000	184,000	19,000	25,000
Regional Non-Jet	199,000	65,000	235,000	253,000
Subtotal - Passenger Operations	505,000	528,000	564,000	612,000
Cargo	13,000	15,000	19,000	19,000
General Aviation	25,000	41,000	25,000	25,000
Total	543,000	585,000	608,000	656,000
Distribution of Passengers				
Jet (Mainline and Regional Jets)	91.5%	97.5%	90.9%	91.0%
Regional Non-Jet	8.5%	2.5%	9.1%	9.0%
Average Passengers per Flight				
Jet (Mainline and Regional Jets)	111.9	78.7	103.2	113.6
Regional Non-Jet	16.0	14.2	14.5	16.0

While Logan has been following a Low Fleet development path since 1993/94, the recent growth in regional jets and carrier plans to develop individual regional carrier networks may suggest a shift towards a High Fleet scenario. To capture the full range of probable near- and long-term operating conditions at Logan, the operational analysis described in this Supplemental DEIS/FEIR focuses on the No Action and Preferred Alternative analysis of the 29M Low and 37.5M High scenarios. This Supplemental Draft also includes the complete analysis of the 37.5M High RJ Fleet for all improvement alternatives. Chapter 4 of the Airside Project Draft EIS/EIR compared the operating benefits of all improvement alternatives against the full range of future fleet scenarios, and these comparisons are also summarized in Appendix C of this Supplemental DEIS/FEIR.

4.2.5 Induced Demand

Some of the public comments received on the Airside Project Draft EIS/EIR suggest that implementation of unidirectional Runway 14-32 and the other proposed airside improvements will stimulate an increase in passenger traffic and/or aircraft operations at Logan Airport. However, for a series of reasons, the Preferred Alternative will not induce additional aircraft operations or passenger demand at Logan.

Implementation of the Preferred Alternative, and specifically the construction of unidirectional Runway 14/32, does not increase Logan's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan approximately 80 percent of the time. Runway 14/32 will allow Logan to maintain this capacity during

periods of strong northwest winds that now require controllers to operate on two, and sometimes only one runway, compared to Logan's typical three-runway configurations. Runway 14/32 will increase Logan's reliability, but will not increase the airport's normal operating capacity.

The situation at Logan contrasts with runway projects at other airports where a new runway can increase airfield capacity, sometimes by a significant margin. In many cases, new runways are constructed with the specific objective of increasing capacity to accommodate higher levels of demand. For example, when Dallas-Ft. Worth International Airport commissioned a new runway (35R/17L) in 1996, its hourly arrival capacities increased from 102 to 146 under VFR conditions, and from 66 to 108 under IFR.

In addition, Logan is not a connecting hub airport and has no single dominant carrier. A connecting hub operation depends on efficient connections between arriving and departing flights. The hub carrier has a vested interest in maintaining schedule reliability, and has the ability to directly influence delays through its own scheduling decisions, due to the high percentage of total airport activity that its own flights represent. This is not the case at a highly competitive airport such as Logan.

Logan is principally an O&D airport, not a connecting hub facility, and no single airline at Logan maintains a dominant share of total airport flight activity. As a result, the scheduling decisions of any individual carrier will have only limited impact on overall airport delays, and it is therefore unlikely that carriers are currently suppressing flight schedules due to delays at Logan. Comparatively low passenger load factors at Logan provide further evidence that flight schedules are not being artificially depressed by delay conditions.

Unlike the Dallas-Ft. Worth runway project and others, the proposed unidirectional Runway 14/32 will not increase Logan's normal operating capacity. It will, however, substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a benefit to the passengers and airlines that currently experience them. However, these wind conditions and the associated aircraft delays are not regular or predictable, and cannot be readily anticipated by airlines or passengers. Therefore, preventing these delays will not stimulate growth in Logan passenger demand above and beyond the rates that would have occurred absent proposed Runway 14/32.

Total door-to-door trip time for an average Logan passenger is more than 6 hours, including airport access and egress, waiting time before the flight, and actual flight time. The average delay savings that would result from the implementation of the Preferred Alternative are not of a magnitude that would induce passengers to make trips that they would otherwise not have taken.

For the reasons described above, the Preferred Alternative will not result in induced passenger or flight demand at Logan. Instead, growth in demand will be principally driven by local and national economic conditions and by competition and pricing within the airline industry. In any event, the broad range of forecasts considered in the Airside Project operational and environmental analyses encompass the impacts that would be associated with any growth scenario.

4.3 Preferential Runway Advisory System (PRAS)

Logan's Preferential Runway Advisory System (PRAS) goals underlie the delay and environmental modeling of the No Action (Base Case) and Action alternatives presented in the Airside Project Draft EIS/EIR. The EOEA Secretary requested that Massport broaden the discussion of PRAS in the Final EIR to demonstrate that the PRAS objectives provide a valid basis for the operational and environmental analyses. Logan's PRAS program is a set of recommended targets for FAA runway assignments. The objectives of PRAS are: a) to reduce noise exposure for the most highly impacted communities (i.e., those within the 70 and 75 dB DNL contours) by distributing noise impacts in accordance with runway utilization goals established jointly by Massport, the FAA, and community representatives; (b) to provide short-term relief from continuous aircraft operations over neighboring communities; and (c) to maximize use of overwater aircraft routings.

This section responds to the comments of the Secretary and other reviewers by presenting the historical context of the development of PRAS. This section also examines current and historic land use patterns and residential densities among the affected communities to determine whether they have remained relatively unaltered since the PRAS Program was initially developed. Finally, this section reviews historic levels of PRAS achievement to support its utility as the basis for projecting future runway utilization at Logan.

4.3.1 History of Preferential Systems at Logan

In 1968, the FAA authorized formal and informal runway use programs for noise relief. Following FAA authorization, preferential runway procedures with simple priority selection methods were initiated at Logan. Since that time, Massport, in conjunction with the FAA and representatives of surrounding communities, has continued to study and refine the goals and methodology for implementing PRAS.

Between 1980 and 1983, formal PRAS goals were established by the PRAS Advisory Committee. This committee was composed of representatives from Massport, the FAA, airlines, and 12 neighboring communities. The first computerized PRAS system was installed at Logan in 1983. Since that time, two major enhancements to the PRAS computer

system have been implemented at Logan: Enhanced PRAS in 1993 and Revised PRAS in 1996. These enhancements were designed to improve the conformance and use of the PRAS system by FAA controllers, and ultimately lead to improved achievement of the PRAS goals. As described later in this chapter, the PRAS enhancements have been accompanied by improvements in PRAS conformance at Logan.

4.3.2 PRAS Objectives and Goals

The PRAS Advisory Committee established the objectives of the system at the beginning of the original development between 1980 and 1983:

- Reduce noise exposure on populations residing in the most highly impacted communities, without significantly increasing the impact on any populated area within the day-night sound level (DNL) contour of 65 dB; and

- Maximize the use of runway 15R for overwater departures and 33L for overwater arrivals.

The PRAS goals are one of the criteria used for runway selection. The committee determined that the PRAS goals should provide a more equitable distribution of aircraft noise over the long-term (i.e. annually), and offer short-term relief from excessive operations over individual neighborhoods.

4.3.2.1 Long-Term Goals

To quantify the long-term noise goals, the committee reached a consensus on annual runway end use percentages in terms of equivalent jet operations. Equivalent operations include all daytime (7:00 AM to 10:00 PM) jet flights, plus nighttime (10:00 PM to 7:00 AM) jet operations multiplied by a factor of ten. This is consistent with the methodology for computing DNL, in which 10 dB are added to nighttime operations. The annual runway end use goals are shown in Table 4.3-1.

PRAS maintains a continuous count of the jet operations on each runway end for the most recent twelve-month period. Whenever a new recommendation is needed, it checks the wind and weather conditions and the expected demand level, and then identifies runway combinations which are available to meet these requirements. If there is more than one choice available, the combination that will produce the best match with the annual and short-term goals is recommended.

Table 4.3-1
PRAS Goals for Effective Jet Aircraft Runway Use

	PRAS Effective Usage Goals	
Runway End	**Arrivals**	**Departures**
4R/L	21.1%	5.6%
9	0.0%	13.3%
15	8.4%	23.3%
22L/R	6.5%	28.0%
27	21.7%	17.9%
33	42.3%	11.9%

Note: PRAS goals are stated in terms of effective jet operations which exclude non-jet flights, but which multiply each nighttime (10:00 PM to 7:00 AM) operation by a factor of 10. Each nighttime jet operation is therefore equivalent to ten daytime jet operations.

4.3.2.2 Short Term Goals

In order to provide temporary relief to neighborhoods impacted by regular overflights during single or multi-day periods, the PRAS Advisory Committee established two short-term goals for the system in addition to the annual goals:

- Provide relief from excessive dwell (more than seven hours of operations over a given area during any day between the hours of 7:00 AM and midnight); and

- Provide relief from excessive persistence (more than 23 hours of operations over an area between 7:00 AM to midnight during a period of three consecutive days).

In contrast to the annual goals that count the number of equivalent operations on a runway, dwell and persistence are measured by the number of hours that a given area is subjected to jet aircraft overflights. The PRAS Advisory Committee designated eight runway combinations for computing the effects of dwell and persistence on the communities. The dwell and persistence areas are defined by community as shown in Table 4.3-2.

Table 4.3-2
PRAS-Defined Dwell and Persistence Areas

Runway	Areas
4L&R Arrivals	South Boston (Farragut Street), Dorchester, Quincy, Milton, and Braintree
33L Arrivals	Boston Harbor, Hull
15 Departures	Boston Harbor
22 L&R Departures	South Boston (Farragut Street), Boston Harbor
27 Departures	South Boston (Fan Pier), Roxbury, and Jamaica Plain
4L&R Departures Plus 22L&R Arrivals	East Boston (Bayswater, Orient Heights), Winthrop (Court Road), and Revere
9 Departures plus 27 Arrivals	Winthrop (Point Shirley), and Boston Harbor
33 Departures plus 15 Arrivals	East Boston (Eagle Hill), Chelsea, Everett

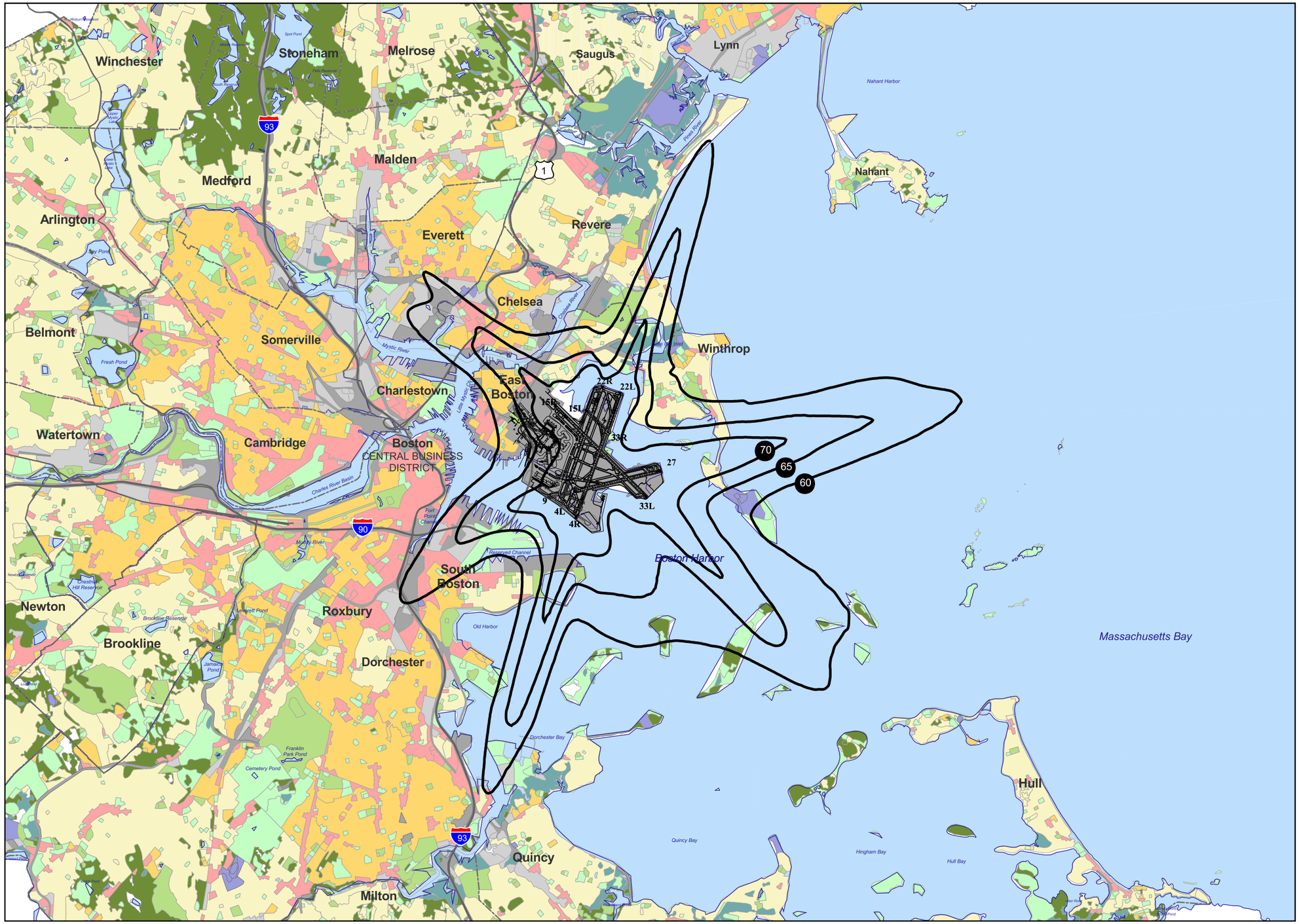
4.3.2.3 PRAS Nighttime Routing Preference

One of the primary objectives of the PRAS system is to maximize the use of Runway 15R for overwater departures and 33L for overwater arrivals. While the annual goals alone attempt to maximize these operations, PRAS has additional nighttime preferences. Between the hours of 12:00 AM and 6:00 AM, the noise abatement procedures followed by the FAA controllers specify set runway priorities. Whenever possible, controllers will simultaneously use 33L for arrivals and 15R for departures. This opposite direction configuration is available only under VFR conditions with clear runways, and long separation requirements limit capacity; however, this configuration directs all operations over the water, reducing noise impacts and increasing PRAS goal achievement. Dwell and persistence are ignored at night so that this configuration can be used extensively, and when weather permits, controllers typically use this configuration for the full six-hour period.

4.3.3 Continued Validity of PRAS Goals

Although PRAS's long- and short-term goals were first developed nearly 20 years ago, land use patterns and population growth during the intervening years provide no evidence to support any change in the established preferences.[3] For example, Figures 4.3-1 and 4.3-2 depict major land use categories within the project study area at the approximate time when the goals were established and for a more recent period, respectively.

3 In 2000, the Citizens Advisory Committee (CAC) voted to withdraw its support of the PRAS goals.



Legend

No Action Alternative 29M Low

60, 65 and 70 DNL

1985 Land Use

- Single Family Residential
- Multi-family Residential
- Commercial
- Industrial
- Golf, Playgrounds, Stadiums
- Open Land, Urban Open
- Forest
- Wetland
- Water
- Transportation
- Various

N

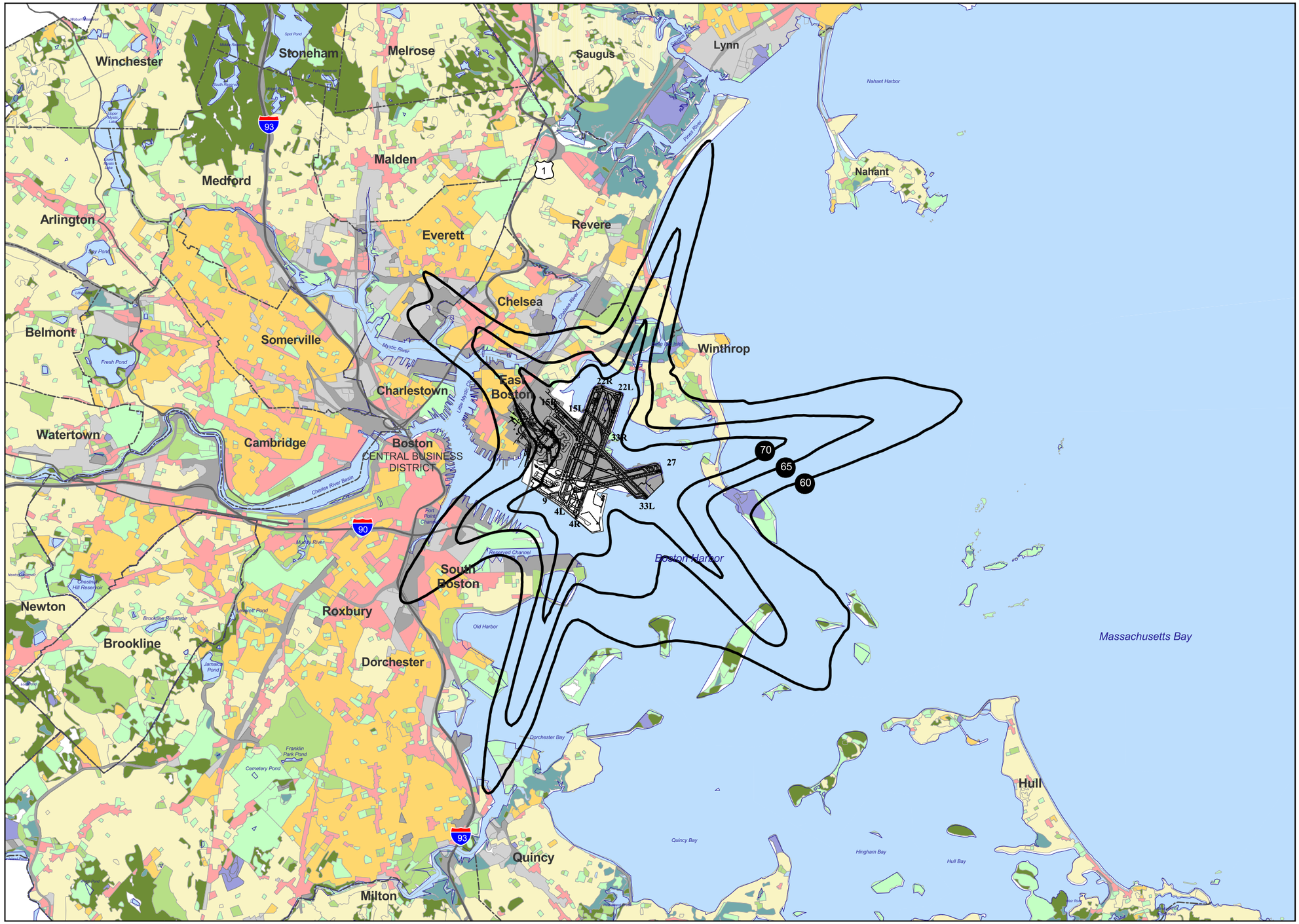
0 0.5 1 1.5 Miles

massport

Figure 4.3-1

1985 Land Use

Source: Harris Miller Miller & Hanson



Legend

No Action Alternative 29M Low

60, 65 and 70 DNL

1991 Land Use

- Single Family Residential
- Multi-family Residential
- Commercial
- Industrial
- Golf, Playgrounds, Stadiums
- Open Land, Urban Open
- Forest
- Wetland
- Water
- Transportation
- Various

N

0 0.5 1 1.5 Miles

massport

Figure 4.3-2

1991 Land Use

Source: Harris Miller Miller & Hanson

The information was obtained from MassGIS, a state organization that collects land use data and updates when it is feasible. A comparison of the two figures shows there has been little if any conversion to or away from residential use. Thus, the major residential areas that were of concern to the communities and Massport when PRAS goals were first adopted in the early 1980's are still of concern today. There have been no shifts of major residential areas.

Supplementing this information is Table 4.3-3, which shows how residential population within different noise-impacted communities has changed over time. Using US Census data and a single set of noise contours from the Airside Project Draft EIS/EIR to define a fixed area, the table compares the numbers of people, by community, that reside within 5 dB increments of exposure. The earlier population data reflect the distribution of people around Logan when PRAS goals were first adopted; the later population data reflect a more current distribution.

While the counts show a modest overall increase in population within the DNL 60 contour over a ten-year period, the changes do not always occur uniformly by community. What they do show, however, is that no major redistribution of population has occurred. Not one community has changed its ranking relative to the others over the ten-year period. Collectively, these unchanged land use patterns and population distributions support the continued validity of the original PRAS goals.

4.3.4 Historic PRAS Conformance

Statistics on the conformance of the PRAS system have been collected since the original system was installed in 1983. In order to interpret those statistics, it is important to understand the fundamental changes that have occurred in the PRAS system in the 16 years since the original installation.

4.3.4.1 PRAS Revisions

While there have been numerous minor improvements, there are three primary versions of PRAS that have been used at Logan over the years:

- **Original PRAS:** This version of the program, installed in 1983, incorporated the original goals and simple runway selection logic.

- **Enhanced PRAS**: This version of the program, installed in 1993, was designed to try to improve PRAS goal achievement.

- **Revised PRAS:** This version of PRAS, which is currently in use, incorporates automated data input to greatly enhance usability.

Table 4.3-3
Comparison of Population Counts for the 29M Low and the No-Action Alternative Using 1980 and 1990 Census Data[1]

Noise-exposed Community	1980 Census Counts			
	DNL greater than 60 dB	DNL greater than 65 dB	DNL greater than 70 dB	DNL greater than 75 dB
East Boston	25,404	7,235	595	0
Winthrop	12,700	4,686	1,182	155
Chelsea	7,997	2,828	0	0
South Boston	6,215	945	0	0
Revere	5,596	3,669	0	0
Deer Island[2]	499	0	0	0
Everett	215	0	0	0
Total	58,626	19,363	1,777	155

	1990 Census Counts			
	DNL greater than 60 dB	DNL greater than 65 dB	DNL greater than 70 dB	DNL greater than 75 dB
East Boston	26,035	7,117	437	58
Winthrop	11,799	4,291	1,084	199
Chelsea	10,232	3,056	0	0
South Boston	6,010	66	0	0
Revere	5,227	3,001	0	0
Everett	220	0	0	0
Deer Island[2]	0	0	0	0
Total	59,523	17,531	1,521	257

1 Communities are ordered from highest to lowest according to the number of residents within the 60 dB DNL noise contour.
2 Deer Island's prison population was included in the 1980 Census but in light of impacts under 65 dB was never considered a major factor in developing PRAS goals. Its inmates have since been relocated to accommodate the new Boston Harbor wastewater treatment facility.

4.3.4.2 Original PRAS

The original PRAS at Logan was installed in 1983 and was based on conditions that existed in 1981 or before. These conditions included aircraft activity levels and fleet mix, FAA procedures, and technology (both aviation and computer). Although the system represented the state-of-the-art at the time it was designed, the FAA and Massport recognized in the late 1980s that it had limitations.

To be effective PRAS must be able to identify runway configurations that are capable of serving given levels of demand and decide which one among the eligible configurations to recommend. The original PRAS had only limited technical flexibility to perform these tasks effectively. In particular, it was designed with a fixed daily demand schedule from 1980-82

operations, and it had no automatic capability to update this schedule to adjust to the changes in demand that accompanied the large growth in commuter operations.

4.3.4.3 Enhanced PRAS

The enhanced PRAS was installed in 1993 to address the limitations in the original PRAS and to provide flexibility to accommodate changes in airport operations and / or FAA procedures. It was designed as a forward-looking system to assist the FAA in planning operations throughout a shift. It operated 24 hours per day, and provided a choice of recommended eight-hour configuration plans to the FAA operator, who could modify the plan as needed. The enhanced PRAS incorporated an estimate of the controller workload required to change configurations into its planning logic.

Enhanced PRAS was tested for approximately nine months by the FAA in the Logan Control Tower. While Enhanced PRAS addressed many of the concerns the FAA raised about the original system, the new system required controllers to manually enter and continually update data on current weather conditions, weather forecasts, traffic demand, runway closures, and runway surface conditions. This data entry imposed additional controller workload on top of already demanding primary air traffic control activities.

4.3.4.4 Revised PRAS

The current system, revised PRAS, was installed in 1996 to reduce the effort required for controllers to use the system. Revised PRAS was linked to the Systems Atlanta Information Display System (SA-IDS), and the inputs for traffic demand, current weather, weather forecasts, runway closures, and runway conditions were provided automatically. This automated data entry has led to better system conformance and PRAS goal compliance.

4.3.4.5 Historic Achievement of PRAS Goals

This section examines historic PRAS conformance at Logan from three perspectives:

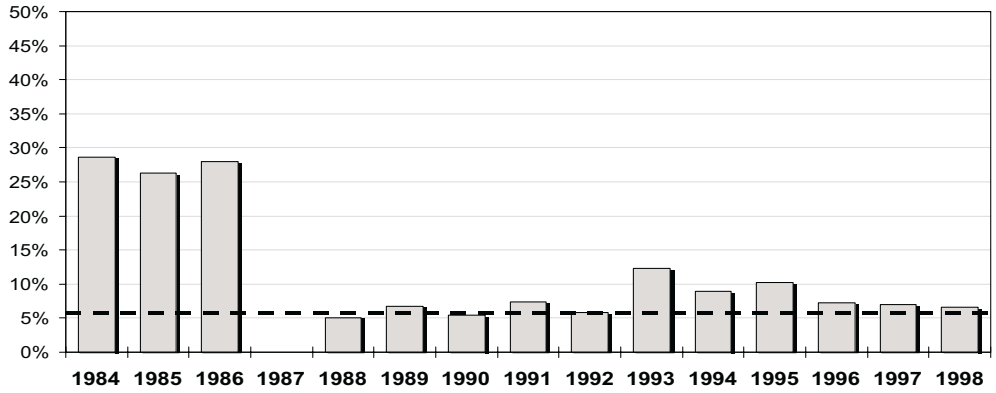
- Individual runway utilization compared to the PRAS annual goals;
- A PRAS performance index that measures the aggregate achievement of annual goals across all runways; and
- Comparisons of historic runway utilization to the predicted usage based on the model.

Historic Utilization of Individual Logan Runways Compared to PRAS Goals

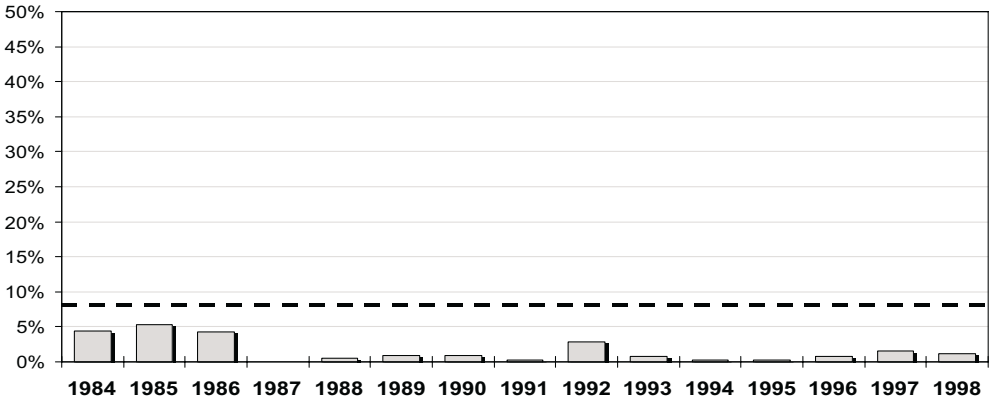
Figures 4.3-3 and 4.3-4 summarize the historic levels of PRAS achievement relative to the annual goals for individual Logan runways from 1984 through 1998. While there is a wide variation in conformance relative to the goals, this is expected due to variations in weather conditions, fleet mix, and FAA operational techniques (i.e., Land and Hold-Short Operations, or LAHSO, on 22L and 27) from year to year. Other factors such as airfield construction and airline scheduling also have an impact. Still, a number of conclusions can be drawn.

Figure 4.3-3
Equivalent Jet Arrival Operations by Runway and Year

Arrive 4 (Goal = 21.1%)



Arrive 15 (Goal = 8.4%)



Arrive 22 (Goal = 6.5%)

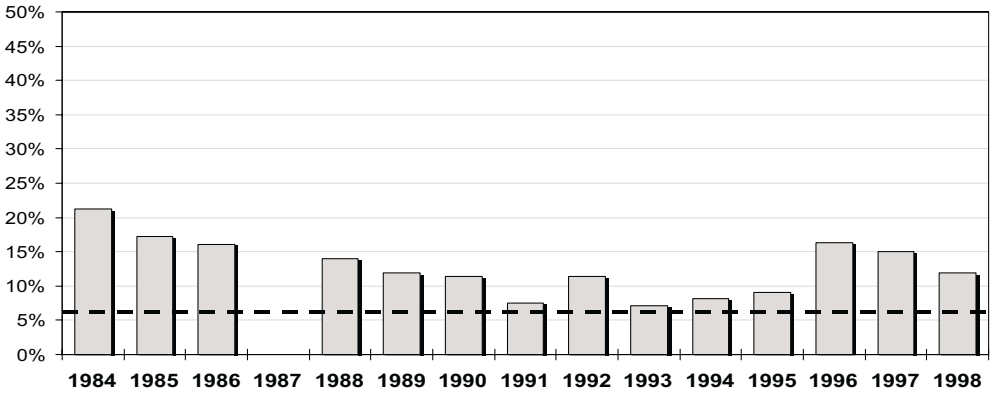
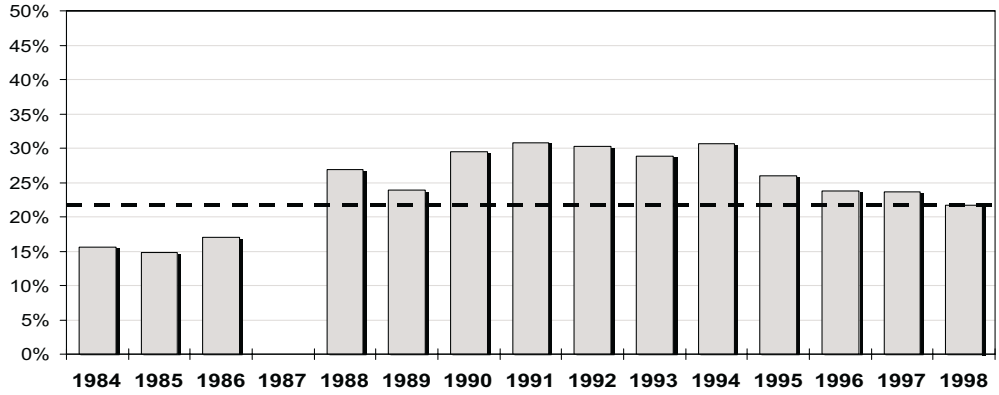
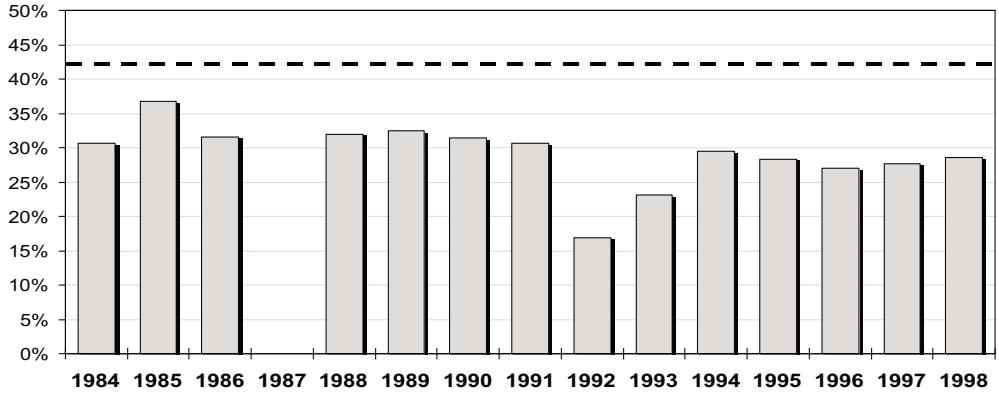


Figure 4.3-3 (Cont'd.)
Equivalent Jet Arrival Operations by Runway and Year

Arrive 27 (Goal = 21.7%)



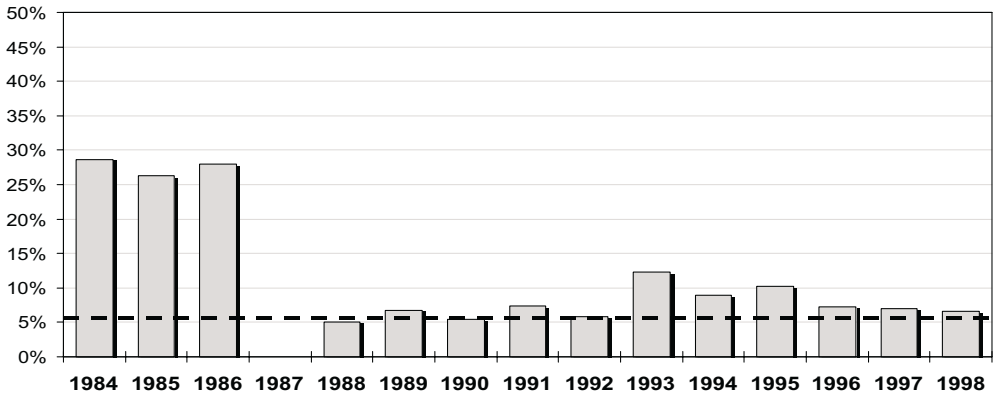
Arrive 33 (Goal = 42.3%)



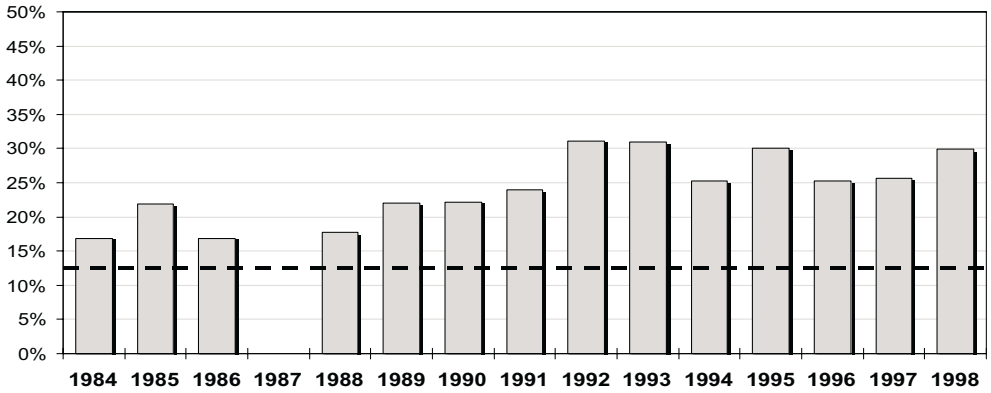
Note: 1987 data unavailable

Figure 4.3-4
Equivalent Jet Departure Operations by Runway and Year

Depart 4 (Goal = 5.6%)



Depart 9 (Goal = 13.3%)



Depart 15 (Goal = 23.3%)

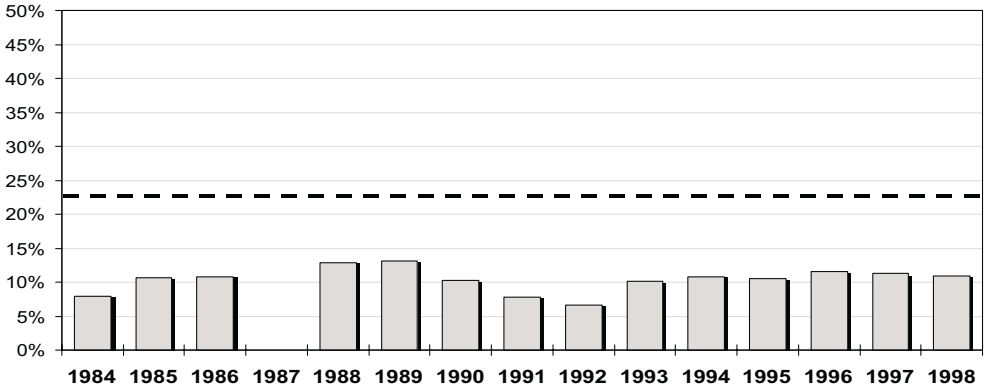
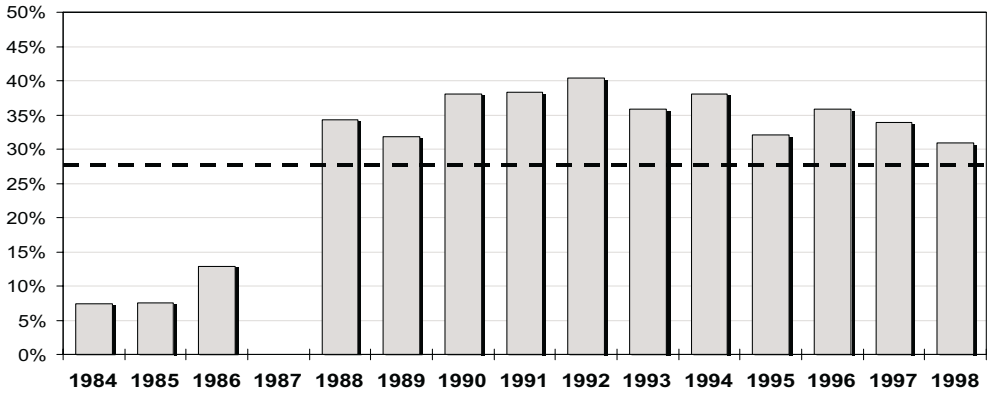
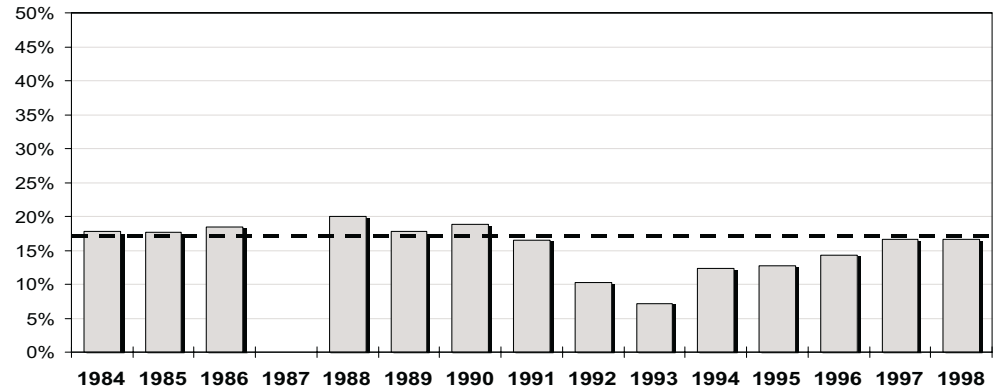


Figure 4.3-4 (Cont'd.)
Equivalent Jet Departure Operations by Runway and Year

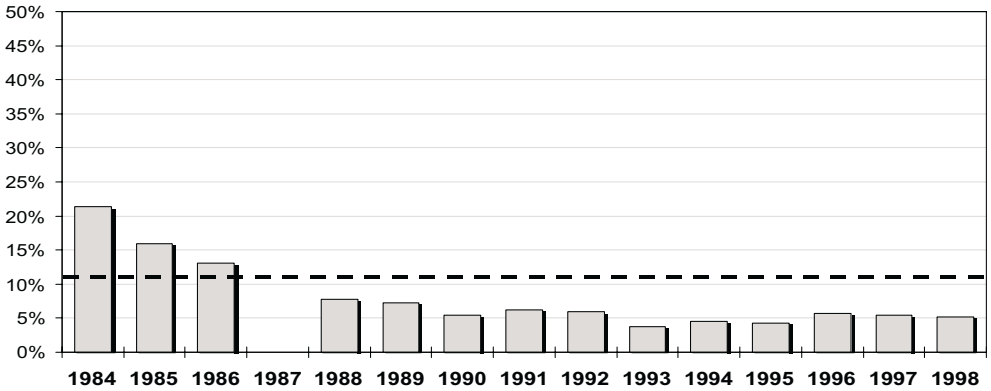
Depart 22 (Goal = 28.0%)



Depart 27 (Goal = 17.9%)



Depart 33 (Goal = 11.9%)



[redacted]

For arrivals, it is clear that Runway 4 arrivals have always exceeded the goal, and that conformance with the goal declines with higher demand and peaking, as in 1993. This is expected since Runway 4 arrivals correspond to the highest capacities at Logan. Conversely, arrivals on Runway 15 and Runway 33 have always been well short of the goals as these runways exhibit lower operational capacities. Since 1988, Runway 27 arrivals have been above the goal whereas they were formerly below it. This change is due to the FAA implementation of land-and-hold-short operations (simultaneous landings on Runway 22L and Runway 27 while departing on Runway 22R), which increased the capacity of the configuration while operating under Visual Meteorological Conditions (VMC).

For departures, Runway 9 departures have always exceeded the goals, due to that runway's simultaneous use with Runway 4L/R arrivals. Runway 22 departures began to exceed the goals in 1988 with implementation of land-and-hold-short operations. Runway 4 and 27 departures have remained near the goals for the most part, but Runway 4 departures increased and Runway 27 departures declined during the highly peaked conditions around 1993. For the past ten years, both Runway 15 and Runway 33 departures (much like the arrivals) have been below the target levels.

Aggregate PRAS Achievement Across All Logan Runways

While it is useful to view the individual runway end use over time, overall PRAS conformance may also be judged by examining all runways simultaneously, especially considering the variability of weather, demand, and other factors. In order to evaluate overall PRAS achievement over time, a PRAS Performance Index (PPI) was developed that represents the performance of all runways relative to the annual goals. The PPI measures deviations[4] from the PRAS goals for each Logan runway, the same measure used in the PRAS selection algorithm to determine the best configuration relative to the annual goals on an ongoing basis. Because the PPI measures differences from the runway utilization goals, lower values represent better PRAS achievement. Figure 4.3-5 presents the PPI relative to the number of total annual Logan operations for the period from 1984 through 1998.

The PPI will tend to increase as operations grow since increasing flight levels can limit controller flexibility in selecting runway configurations. While this is generally true, system enhancements have helped improve PRAS achievement, despite growing Logan activity levels, as described below:

- When PRAS was originally installed, there was an immediate improvement in goal conformance during the first few years.
- From 1988 through 1992, the original PRAS became less effective (for reasons explained above), and PRAS goal deviations increased along with airport operations.
- Performance relative to the goals has improved considerably since then with the installation of enhanced PRAS in 1993 and revised PRAS in 1996.

These changes in PRAS performance demonstrate that the FAA is striving to achieve the best possible PRAS goal achievement and has made considerable progress in this area.

4 Calculated as the sum of the squared deviations from the stated PRAS goals.

Figure 4.3-5
PRAS Performance Index

Notes: 1987 PRAS performance information not available; PPI = Sum of squared deviations

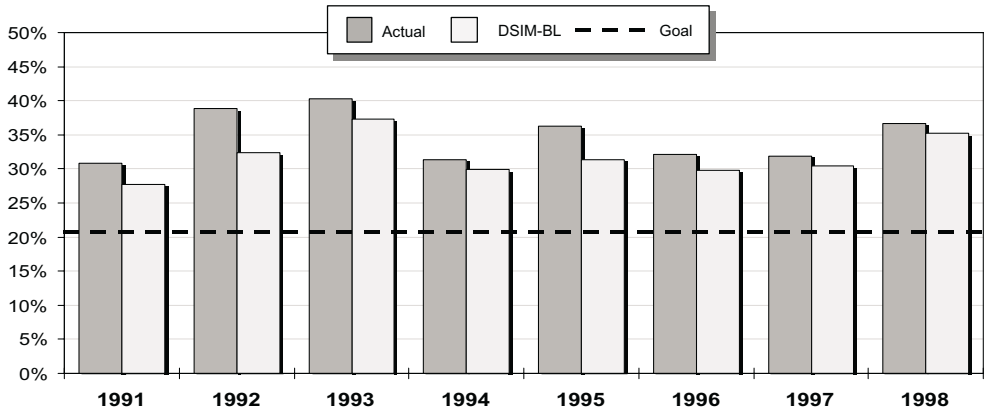
4.3.4.8 Historic PRAS Performance Compared to Model Predictions

The operational and environmental analyses conducted for the Airside Project Draft EIS/EIR and the Supplemental Draft EIS/Final EIR do not assume perfect achievement of PRAS goals. Instead, the DELAYSIM model selects runway configurations based on hour-to-hour demand levels and the capacities of available runway configurations. It is only when more than one runway combination has sufficient capacity to accommodate flight demand that the PRAS long- and short-term goals are considered in the runway selection process.

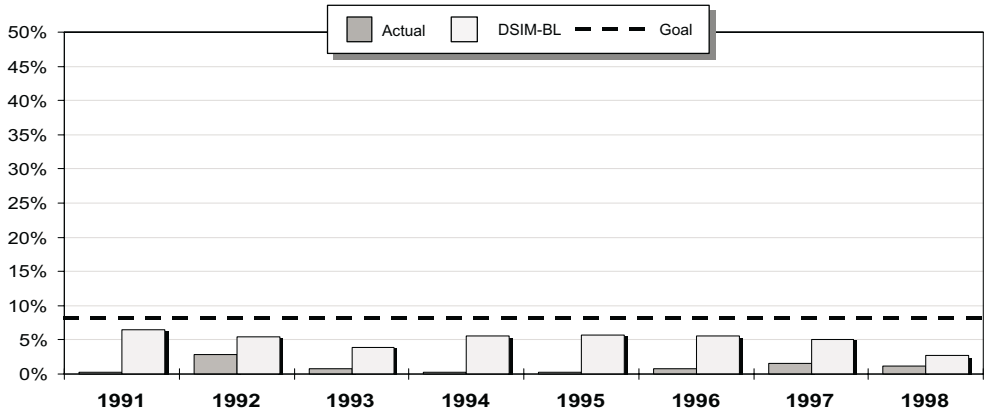
In order to evaluate how closely DELAYSIM would have simulated historic runway utilization patterns, Logan flight activity patterns between 1991 and 1998 were modeled using reported weather patterns for each individual year. Figures 4.3-6 and 4.3-7 show the historic utilization of each Logan runway by year, and compare this to the predicted results based on DELAYSIM modeling. The comparative analysis indicates that for most Logan runways, the differences between actual and simulated utilization are small, and that the margin between actual and simulated runway usage has narrowed over time. This comparison supports the use of PRAS goals within the operational analysis for environmental review purposes.

Figure 4.3-6
Modeled vs. Actual Equivalent Jet Arrivals by Runway and Year

Arrive 4 (Goal = 21.1%)



Arrive 15 (Goal = 8.4%)



Arrive 22 (Goal = 6.5%)

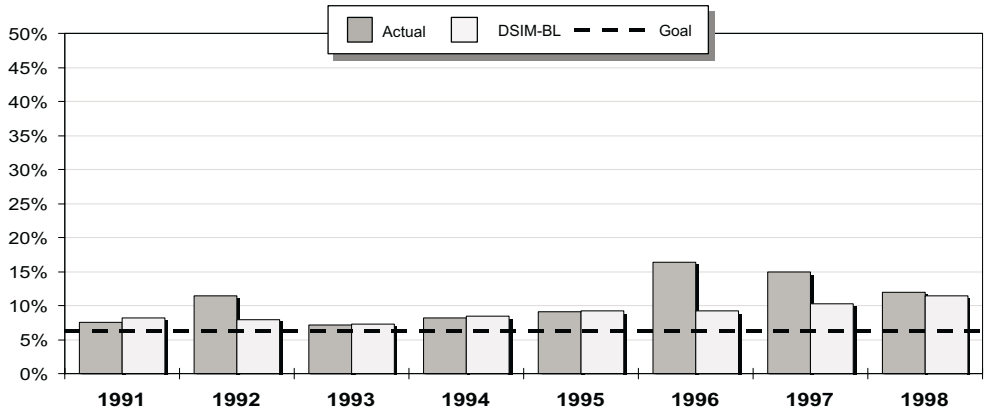
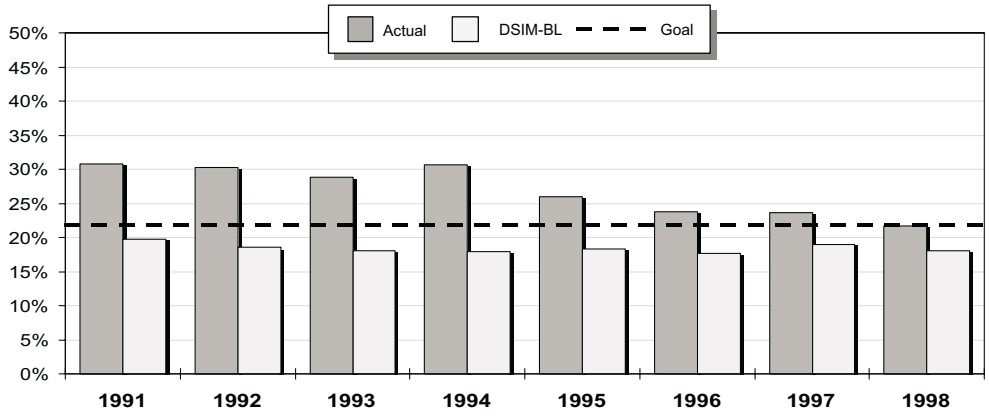


Figure 4.3-6 (Cont'd.)
Modeled vs. Actual Equivalent Jet Arrivals by Runway and Year

Arrive 27 (Goal = 21.7%)



Arrive 33 (Goal = 42.3%)

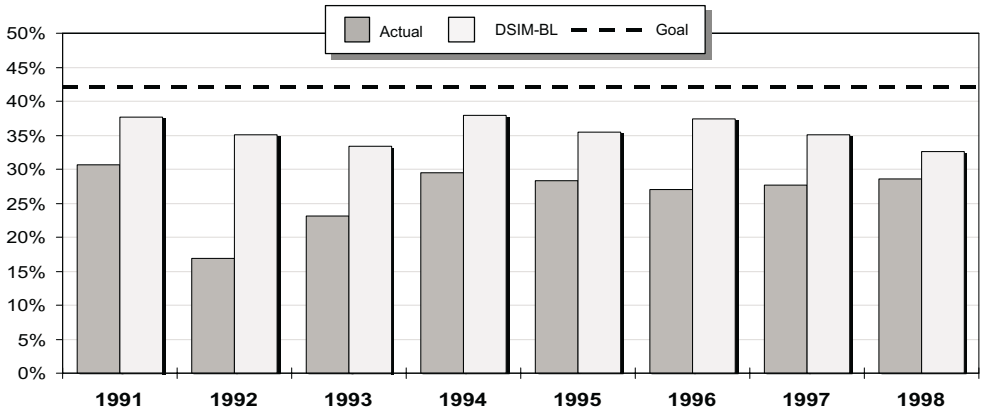
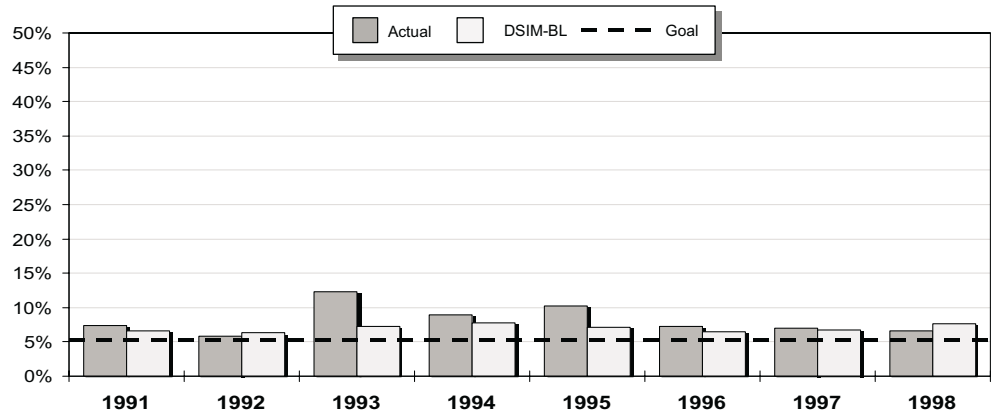
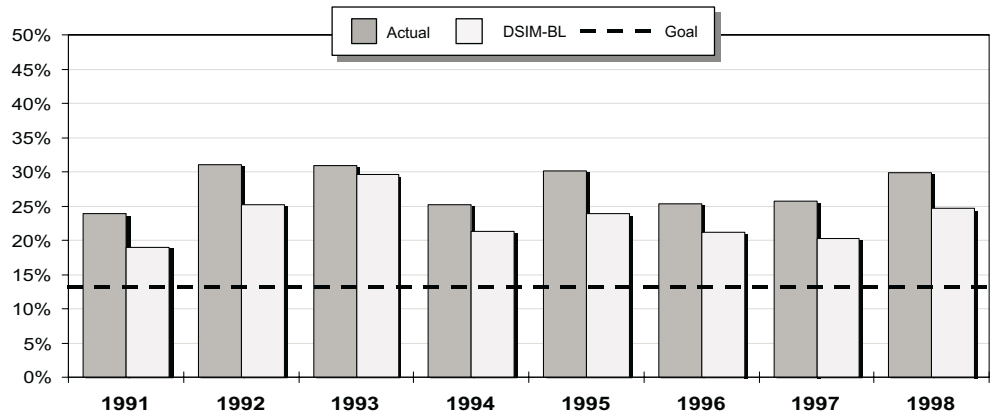


Figure 4.3-7
Modeled vs. Actual Equivalent Jet Departures by Runway and Year

Depart 4 (Goal = 5.6%)



Depart 9 (Goal = 13.3%)



Depart 15 (Goal = 23.3%)

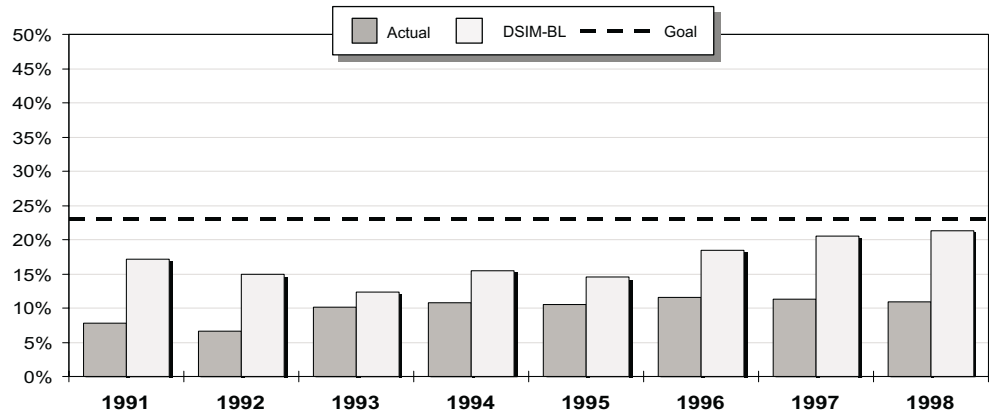
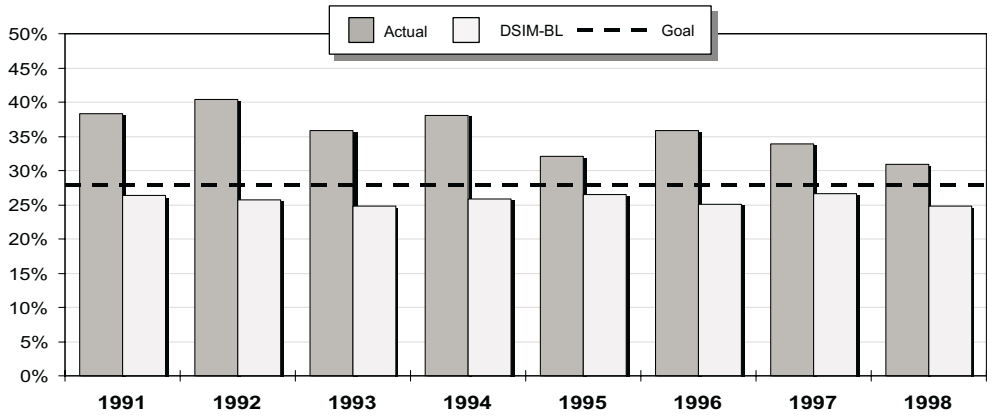
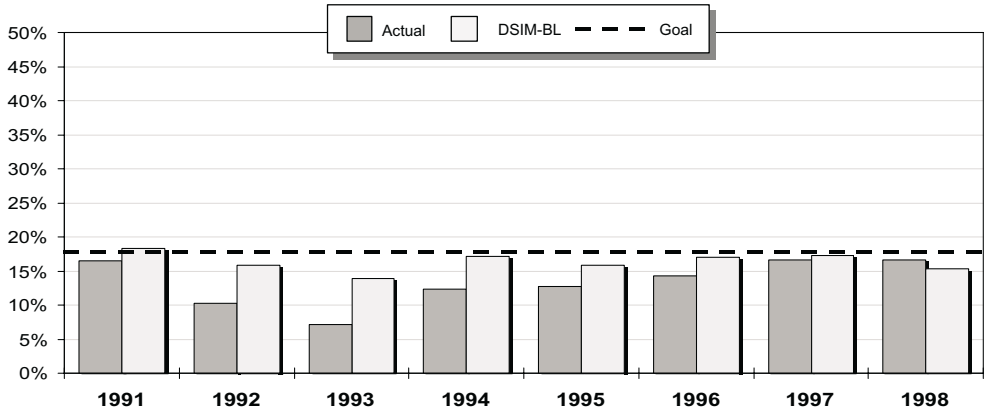


Figure 4.3-7 (Cont'd.)
Modeled vs. Actual Equivalent Jet Departures by Runway and Year

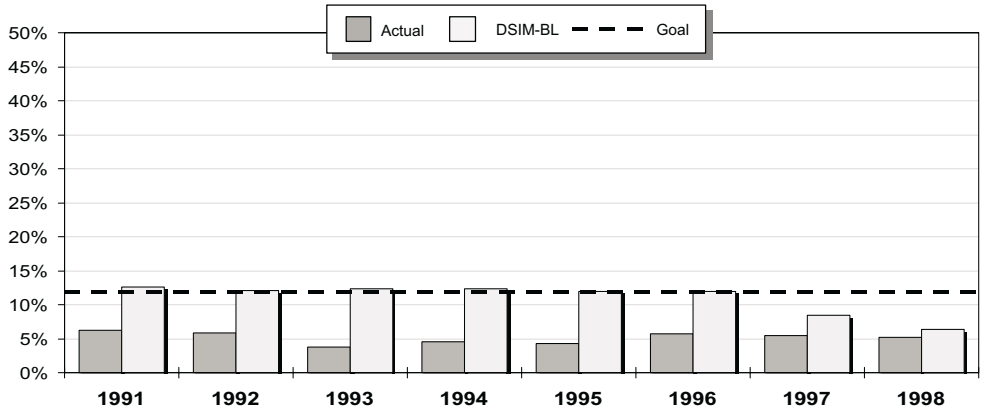
Depart 22 (Goal = 28.0%)



Depart 27 (Goal = 17.9%)



Depart 33 (Goal = 11.9%)



4.3.5 PRAS Reporting and Monitoring

Comments on the Airside Project Draft EIS/EIR and the May 7, 1999 EOEA Certificate requested that quarterly and annual PRAS achievement reports be developed, that the distribution list be broadened, and that results be reported in the GEIR/ESPR. Design of monitoring protocols was also requested. Massport currently monitors PRAS performance at Logan and reports results both internally, to the FAA, and to requesting members of the general public. This section describes the PRAS Monitoring System developed by Massport and describes how PRAS monitoring and reporting will be expanded in response to these requests.

4.3.5.1 Current PRAS Reporting and Monitoring

The PRAS computer system was designed to track a number of statistics and to generate reports comparing Logan runway utilization patterns to the PRAS goals. The PRAS monitoring program produces seven regular reports on PRAS performance, which are described in greater detail below:

- **Monthly Operations**: This report presents the average daily jet arrivals and departures by runway and time of day for any given month. It also shows average day, night, equivalent, and total operations by month relative to the annual PRAS goals.
- **Monthly Utilization**: This report shows the hours and maximum consecutive hours of arrival and departure runway use for each day of a given month. It presents the total monthly and average daily utilization of runways in terms of hours of jet arrivals and departures. It also shows a summary of the hours of runway use by weather condition.
- **Monthly Dwell and Persistence**: The report presents the hours of dwell and persistence by noise area for each day of the month as well as the daily average dwell and persistence and goal exceedence.
- **Monthly Summary**: The summary highlights the three reports described above. It compares jet operations by runway with annual goals, shows the monthly and average day hours of runway use as well as consecutive hours of use. It also summarizes the monthly dwell and persistence conformance.
- **Monthly 33L/15R Utilization**: This report shows the number of hours between midnight and 6:00 AM during which the 33L/15R configuration was both recommended and used. It also presents the use of 33L and 15R individually during nocturnal hours.
- **Annual Utilization**: For the specified calendar year, this report presents the average and maximum consecutive hours of jet use by runway end and month. It also presents total and average annual utilization by runway and weather condition.
- **Annual Dwell and Persistence**: The final report presents the monthly dwell and persistence averages as well as annual averages and the average annual exceedence.

These seven reports are prepared by the Massport Noise Abatement Office on a monthly and annual basis. On a quarterly basis, the Massport Quarterly Noise Reports are distributed to Massport staff, FAA employees, and other requesting parties such as community

members. These reports include measured sound levels, runway use statistics, FAA traffic totals, and the late night runway use report. The quarterly report also includes a PRAS monthly summary report (a version of the summary reported by the PRAS system itself, but generated directly from the ARTS data), which includes day / night hours of jet use by runway, day / night jet operations by runway, monthly conformance relative to the annual PRAS goals, and conformance relative to the annual goals for the previous twelve months. In addition to the printed reports, both the FAA and the Massport Noise Abatement Office have real-time displays showing the rolling 12-month conformance relative to the PRAS goals as well as the current dwell and persistence counts.

In response to the EOEA Certificate and public comments, the Massport Quarterly Noise Reports will be expanded to include all of the PRAS reports generated by the system, and the distribution list will be expanded. The annual reports on runway utilization, dwell and persistence will also be included in upcoming ESPRs and annual Environmental Data Reports (EDRs). In addition, Massport and the FAA have agreed to development of a new report that will track the attainment of the PRAS recommendations.

4.3.6 Extending PRAS Overwater Nighttime Routing Preference

One potential mitigation measure proposed in the comments on the Airside Project Draft EIS / EIR is to begin the nighttime overwater routing preference before 12:00 AM or extend it beyond 6:00 AM. This would reduce late evening and early morning flights over impacted communities.

While the use of the 33L / 15R configuration is environmentally beneficial, its low capacity is a significant operational limitation. Controllers must maintain a minimum of eight miles of separation between opposite direction aircraft, limiting configuration utilization to periods of very low demand. The first step in evaluating the feasibility of extending the nighttime period is analysis of the demand profile. Table 4.3-4 presents the demand profile from 10:00 PM to 7:00 AM in 15-minute increments. Operations are distributed fairly evenly within individual hours from 10:00 PM to 12:00 AM and from 6:00 AM to 7:00 AM. The hourly demand drops from 43 operations at 10:00 PM to 22 at 11:00 PM and 13 operations at 12:00 AM. Conversely, there were only 6 average operations during the 5:00 AM hour increasing to 46 operations in the 6:00 AM to 7:00 AM period.

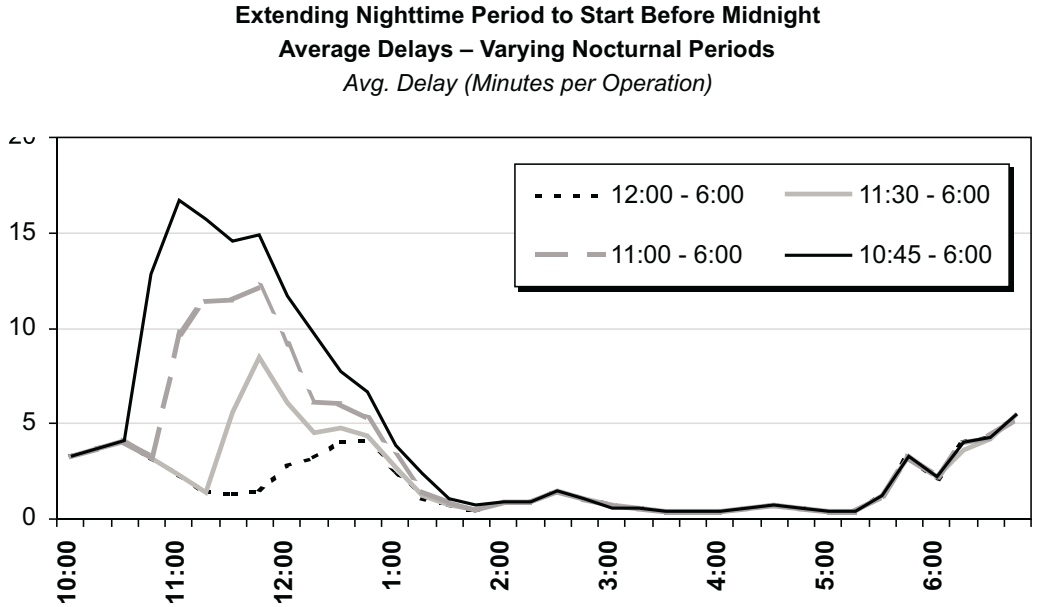
In order to determine the feasibility of extending the nocturnal period, the DELAYS model was used to examine an average August weekday in 1998 broken down into 15-minute increments. This analysis assumed VFR weather and calm winds, conditions under which the preferred nighttime configuration would be available. An hourly saturation capacity of 20 operations while using Runway 33L / 15R simultaneously was estimated. Figure 4.3-8 shows the average delays from various extended nocturnal periods ranging from 10:00 PM to 7:00 AM Beginning the nocturnal period before 11:00 PM or extending it past 6:15 AM would produce excessive delays. It should be noted that delays in the 6:00 AM hour could propagate throughout the day while delays in the 11:00 PM hour are quickly dissipated due to the low demand after midnight.

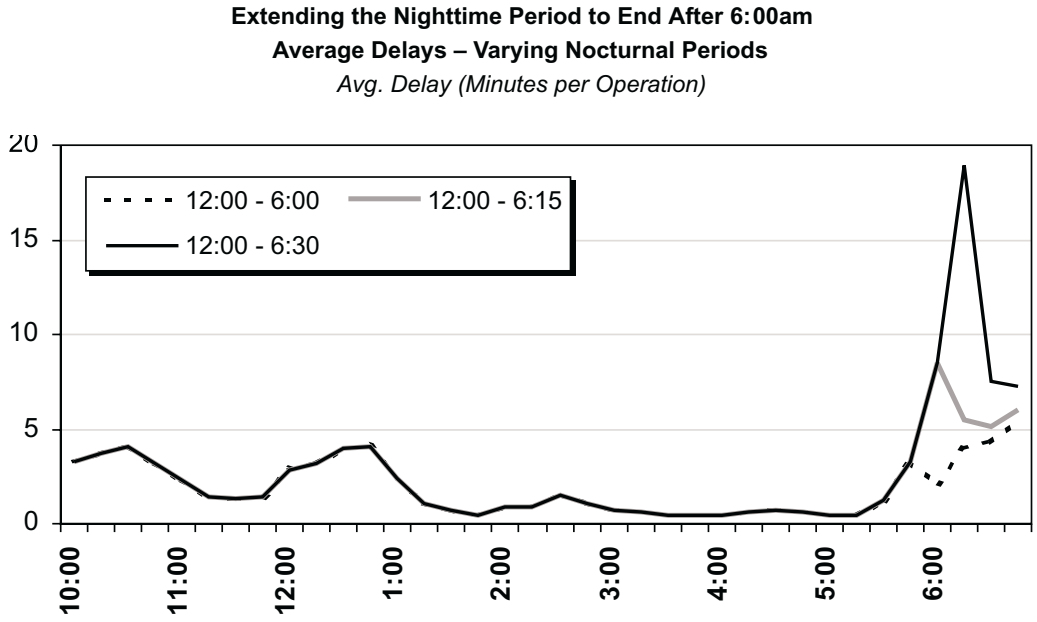
Table 4.3-4
Nighttime Operations (10:00 PM to 7:00 AM)

Time			Average Day Operations	
Start		End	Quarter-Hourly	Hourly
22:00	-	22:14	10.7	
22:15	-	22:29	11	
22:30	-	22:44	11.9	
22:45	-	22:59	9	42.6
23:00	-	23:14	6.4	
23:15	-	23:29	4.9	
23:30	-	23:44	5	
23:45	-	23:59	5.5	21.8
24:00	-	00:14	2.7	
00:15	-	00:29	3.3	
00:30	-	00:44	3.9	
00:45	-	00:59	3.4	13.4
01:00	-	01:14	1.8	
01:15	-	01:29	1.2	
01:30	-	01:44	0.9	
01:45	-	01:59	0.7	4.5
02:00	-	02:14	1.0	
02:15	-	02:29	0.9	
02:30	-	02:44	1.6	
02:45	-	02:59	1.0	4.5
03:00	-	03:14	1.0	
03:15	-	03:29	1.0	
03:30	-	03:44	0.7	
03:45	-	03:59	0.7	3.3
04:00	-	04:14	0.6	
04:15	-	04:29	0.8	
04:30	-	04:44	1.0	
04:45	-	04:59	0.7	3.1
05:00	-	05:14	0.5	
05:15	-	05:29	0.5	
05:30	-	05:44	1.4	
05:45	-	05:59	3.2	5.6
06:00	-	06:14	8.6	
06:15	-	06:29	12.4	
06:30	-	06:44	11.5	
06:45	-	06:59	13.5	46.0

Note: ARTS Data represents July 98 through June 99 and was processed by FTA and Massport.

Figure 4.3-8
Minutes of Average Delay by Nocturnal Period and 15-minute Increment





While the official preferential runway use policy for Logan states that the FAA will observe the nighttime priorities from 12:00 midnight to 6:00 AM, controllers currently try to switch to the Runway 33L / 15R configuration as soon after 11:00 PM as demand permits. Massport will encourage the FAA to continue this practice of initiating overwater routing preferences as soon after 11:00 PM as practicable. It is important to note, however, that controllers can only employ the 33L / 15R nighttime configuration under favorable wind and weather conditions, which limits its use to about 60 percent of the time. In addition, the extended period would only be useable if there were no delays remaining from the daytime period. Finally, it is worth noting that the takeoff and climb performance of modern Stage 3 jets is vastly improved since the nighttime priorities were established, and that departures represent a small percentage of the operations from 11:00 PM to midnight. Hence, most of the noise benefit can be achieved by using 33L for overwater arrivals, whether or not 15R can be used for departures based on the demand level.

4.4 Delay Modeling Approach

As discussed in Chapter 1, existing delay measures such as the FAA OPSNET and CODAS or the DOT ATCR have specific purposes and uses, but none provides an accurate measurement of delays caused by conditions at Logan. Most importantly, they do not provide any information on future delays, either with or without proposed airfield improvements. The only way to estimate airfield delays under alternative future scenarios is to model airfield operations under these conditions.

This section discusses the use of computer models for simulating airfield operations and delays in environmental impact analyses, and discusses the three specific models employed in the Airfield Improvements study.

4.4.1 Computer Modeling for Environmental Impact Studies

With current technology, computer models of airport operations provide the most accurate and useful estimates of airport delays for environmental planning. Computer models that simulate individual aircraft operations over a specified period of time are able to produce very detailed information on airport activity and delay statistics. Because these models calculate all aircraft movements and interactions, they are able to capture details that are not measured by published delay statistics, and they can isolate delays by cause or condition.

Table 4.4-1 summarizes the features and limitations of models available in the industry to estimate flight delays for airport planning. The table describes the three models (FLAPS, the Airport Machine, and DELAYSIM) that have been used in the Logan Airside Improvements Planning Project to estimate airfield capacities and delays, and to produce inputs to the environmental analyses. FLAPS and the Airport Machine were used to simulate runway / airspace and taxiway operations, respectively, for each Logan runway configuration. Other simulation models with similar capabilities are RDSIM, ADSIM, SIMMOD and TAAM. However, FLAPS and the Airport Machine have been specifically configured and validated for Logan operations, and both have been used for planning studies at various international airports around the world.

Table 4.4-1
Comparison on Computer Models for Airport Capacity and Delay

Model	Features	Limitations
FLAPS	Designed at MIT for Logan Detailed runway exit performance Multiple runway interactions Modest input data requirements Used at Boston, St. Louis, LaGuardia, Sydney, Amsterdam, others	Limited graphics. Excludes taxiway system.
Airport Machine	Detailed taxiway system ground movement logic. Detailed graphical presentation Used at numerous domestic and international airports	Excludes airspace system Complex data requirements
SIMMOD	FAA-sponsored development Covers taxiway, runway, airspace Used at numerous domestic & international airports	1-dimensional airspace capability Complex data requirements Inability to handle some common airport procedures
TAAM	Covers taxiway, runway, airspace High resolution 2D and 3D graphics Used at several major international airports	Very complex data requirements Requires special hardware Expensive to acquire and operate
ADSIM	Covers taxiway and runway operations Used by FAA Tech Center Used at several major US airports	Complex data requirements No aircraft landing & braking dynamics
RDSIM	Single or multiple runway operations. Used by FAA Tech Center Used at BOS and other major US airports	No graphical facilities. No aircraft landing & braking dynamics Single runway configuration
DELAYSIM*	Unique airfield utilization simulation Delays based on real weather patterns Detailed delay statistics Controller workload for runway changes Used at Boston, Amsterdam, and Sydney	Individual aircraft movements not simulated Runway selection priority required

* Indicates models used in Logan Airside Project Improvements Project

The DELAYSIM model provides a dimension of airfield modeling that is not available with any other tool. Two primary outputs of the airfield operations / delays analysis are average annual aircraft delays, which are used to measure the benefits of proposed improvements, and average annual runway utilization, which strongly influences the corresponding environmental impacts. Both runway utilization and delays are heavily influenced by the dynamic weather conditions at the airfield, which can vary significantly from year to year. To obtain delay results that account for dynamic variation yet are not biased by a specific year's weather, it is essential to analyze airfield operations under realistic weather patterns for several years and then average the results. DELAYSIM has this capability.

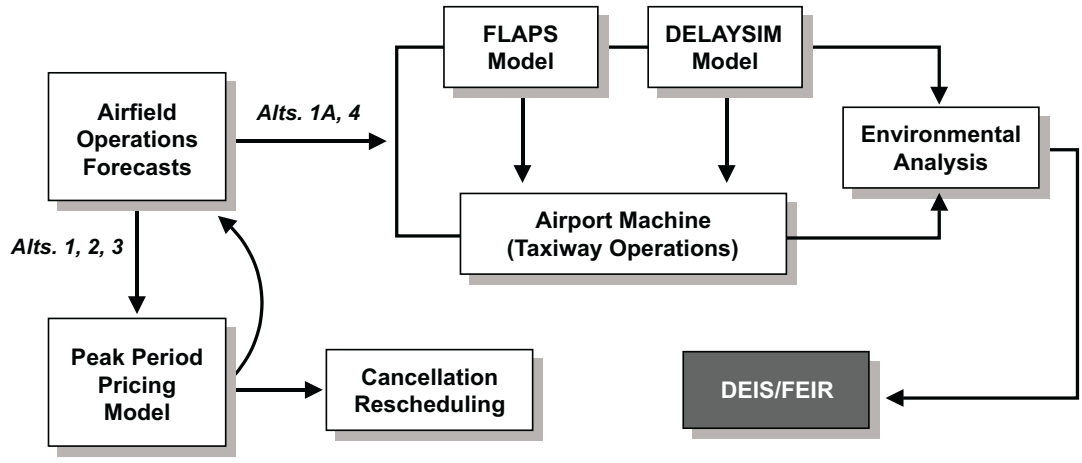
DELAYSIM is a unique model that simulates how the air traffic controllers select runways based on continuously varying demand and weather conditions. It was originally developed specifically for Logan during the enhanced PRAS project, and augmented by incorporating the MIT DELAYS model to estimate the aircraft delays. DELAYS is a dynamic queuing model for estimating expected delay, queue length and other statistics. DELAYSIM simulates the controllers' runway selection process hour-by-hour using historical weather observations. This procedure is repeated for each hour in a multi-year sequence of weather observations, and the results are averaged to produce the expected utilization and delays. The use of multi-year weather observations was particularly beneficial at Boston, where weather conditions can vary widely from year to year.

4.4.2 Airside Modeling Methodology

The airside delay modeling approach was specifically designed to measure historic and future aircraft operating delays by simulating operating conditions at Logan, and to estimate the reduction in delay that each of the proposed alternatives would produce. The models simulate the actual movement of individual aircraft from the approach fix to arrival runway to the gate for arriving aircraft, and from the gate to take-off runway to the departure fix for departing aircraft. Modeling at this high level of detail enables the delay model to generate inputs for the noise and air quality models, ensuring consistency between the estimates of future delays and environmental impacts.

Figure 4.4-1 provides an overview of the modeling approach used to calculate changes in delay and shows how the delay modeling components are linked to the models used to simulate taxiway operations and estimate environmental impacts. This diagram outlines the basic building blocks of the integrated modeling system and indicates the interactions between model components. The operational modeling methodology was described in detail in Chapter 4 of the Airside Project Draft EIS/EIR.

Figure 4.4-1
Delay Modeling Approach



4.5 Peak Period Pricing

Peak Period Pricing is intended to reduce delays caused when demand for airfield access exceeds airfield capacity over a sustained period as a result of airline overscheduling. It is an administrative option that raises the price of using the airfield during these defined peak periods. By raising the price of airfield access during peak periods, some existing aircraft operations would be discontinued or shifted to non-peak hours because the value derived from using Logan during these periods is exceeded by the new cost of doing so.

The methodology used to model and evaluate the impacts of Peak Period Pricing was fully described in the Airside Project Draft EIS/EIR. This section describes supplementary analyses performed for the Supplemental DEIS/FEIR. It includes an assessment of an illustrative exemption program designed to mitigate potential service disruptions at small communities. In addition, the discussion of Peak Period Pricing is expanded to consider potential impacts of the program on regional carrier fleet mix, and the possibility that Peak Period Pricing would result in increased regional airline reliance on alternate regional airports to provide connections from small communities to the national air transportation system.

While Peak Period Pricing is not included for immediate implementation, the delay analysis described later in this chapter indicates that this demand management strategy could represent a viable delay reduction measure under potential future conditions of airline overscheduling. In response to the EOEA Certificate, this section includes a description of a Peak Period Monitoring System that will be established by Massport to determine when and if airline overscheduling is emerging as a significant source of Logan delays. When warranted based on this ongoing schedule monitoring system, Massport will begin collaborative discussions with individual carriers in order to encourage increased scheduling efficiency at Logan. If successful, this initiative will reduce the likelihood that airline overscheduling will develop at Logan such that a Peak Period Pricing program would become necessary. If these discussions do not produce the necessary results, appropriate regulatory action will then be undertaken.

4.5.1 Background

Alternatives 1, 2 and 3 include Peak Period Pricing, which is defined in detail in Section 3.5. Peak Period Pricing differs from the other proposed improvements because it reduces delay by eliminating flights during periods of high demand, rather than by improving the airfield to allow for more efficient accommodation of existing flight demand.

The analysis of Peak Period Pricing was based on the introduction of a $150 surcharge on flights arriving or departing Logan Airport during defined peak periods. The impacts of the program were most pronounced for regional carriers operating small aircraft in the 9- and 19-seat classes, because the fixed surcharge resulted in a significant cost increase on a per passenger basis. The implementation of Peak Period Pricing was forecast to produce flight cancellations in nonstop markets where profitability was substantially reduced.

Because many of New England's small- and medium-sized communities rely heavily on Logan for access to the national air transportation system, reductions in Boston service could have adverse economic consequences. These issues were addressed in Appendices F and G of the Airside Project Draft EIS/EIR which present case studies concerning the impact of Peak Period Pricing on selected Logan regional carriers and small communities. It is in response to concerns regarding market access that the illustrative small community exemption program is addressed in this Supplemental DEIS/EIR.

The delay reduction benefits that result from Peak Period Pricing were described in Chapter 4 of the Airside Project Draft EIS/EIR. The projected delay reduction impacts of Peak Period Pricing are based on forecast changes in flight schedules in response to the modified landing fee structure. The reductions in forecast annual Logan aircraft operations attributed to Peak Period Pricing are summarized below in Table 4.5-1 for the 29M Low Fleet and 37.5M High Fleet scenarios.

On an annual basis, Peak Period Pricing is estimated to reduce aircraft traffic at Logan by 4,000 annual operations under the 29M Low Fleet scenario and by 56,000 operations under the 37.5M High Fleet scenario. The table also illustrates the reduced level of annual aircraft operations for those Alternatives that include Peak Period Pricing as an improvement concept.

The cancellation rate associated with the High Fleet scenario is considerably greater than for the Low Fleet scenario, because the designated peak periods of the High Fleet scenario are longer, thereby producing a greater cost increase. The regional industry is also more competitive and less profitable under forecast High Fleet conditions. Therefore regional carriers would have less flexibility to absorb cost increases before deciding to cancel flights.

Table 4.5-1
Estimated Annual Peak Period Flight Cancellations and Impact on Fleet Assumptions

Forecast Scenario	Forecast Logan Operations (Alternatives 1A and 4)	Estimated Annual Cancellations	Forecast Logan Operations (Alternatives 1, 2 and 3)
29M Low	510,000	4,000	506,000
37.5M High	608,000	56,000	552,000

4.5.2 Potential for Changes in Regional Carrier Fleet Mix in Response to Peak Period Pricing

In responses to the EOEA Certificate, this section describes the potential effect of Peak Period Pricing on changes in aircraft fleet mix.

By applying a fixed surcharge to flights operating in designated peak periods, the tested pricing structure provides a competitive advantage to carriers operating larger aircraft and carrying a greater number of onboard passengers. This is because the fixed peak period fee can be spread over a greater number of passengers, producing a lesser impact per

passenger. The fixed surcharge would therefore accentuate the unit cost advantage already exhibited by larger capacity regional carrier aircraft over smaller equipment.

In the analytic framework used to evaluate the impacts of Peak Period Pricing on market services and Logan delays, carriers were assumed to shift flights scheduled near the beginning and end of the defined peak period to adjacent, off-peak hours in order to avoid the peak period surcharges. On nonstop routes where a regional carrier was projected to incur a significant reduction in profitability due to the cost impacts of the program, cancellation of some peak period flights was projected. The percent of peak period flights cancelled in specific carrier markets was directly related to the degree of profit reduction. Carriers operating smaller regional aircraft in the 9- and 19-seat class were projected to account for the majority of flight cancellations.

In markets where Peak Period Pricing leads to a reduction in flight frequency during peak hours, carriers may be able to consolidate passenger traffic on remaining peak period flights. In some cases, a carrier that had the option within its fleet might substitute a larger capacity aircraft on remaining flights to better accommodate the passenger traffic previously carried on cancelled flights.

Over a near-term horizon, the opportunities for regional carriers to substitute larger aircraft on Logan routes would be limited by their aircraft fleet composition. Many of the regional airlines operating at Boston maintain an aircraft fleet consisting of a single type of aircraft. For example, Cape Air operates only 9-seat Cessna aircraft, while Commutair and Colgan operate 19-seat Beech 1900 aircraft exclusively. Similarly, Allegheny operates only 37-seat Dash 8-100 aircraft.[5] Business Express, recently acquired by American Airlines, has already phased out its 19-seat aircraft, while American Eagle operates only aircraft with greater than 30 seats.

Several Logan regional carriers maintain fleets consisting of multiple aircraft types in varying size categories. It is reasonable to expect that Peak Period Pricing would lead to aircraft substitutions on specific routes served by these carriers in circumstances where the use of larger aircraft would improve market profitability. These types of fleet mix changes were anticipated in the analysis developed in the Airside Project Draft EIS/EIR and are consistent with the results. Fleet mix changes were not explicitly projected because of the uncertainty of these changes and because the delay modeling analysis is more sensitive to changes in flight frequency as compared to changes in aircraft size within the regional non-jet fleet.

The EOEA Certificate and several comments also raised the prospect of regional carriers shifting flights from Logan to alternate airports in the region. Two classes of passengers currently fly on regional carrier flights to and from Logan:

- Local passengers for whom Boston or the surrounding region is the origin or destination of their trip
- Passengers connecting at Boston to or from other domestic or international destinations.

5 Source: 1999 Regional Airline Association Annual Report.

For local passengers, particularly those with ground origins or destinations in the immediate Boston area, the use of other airports in the region may not represent a viable alternative. Because Boston is the largest city in the region, it generates the highest concentration of passenger demand to and from regional carrier markets. The use of alternate airports such as Manchester, Providence or Worcester would be accompanied by a significant reduction in local passenger traffic.

For passengers making connections at Boston to and from the national air transportation system, the regional airports would also represent a less desirable alternative. Even with the recent expansion of services at regional airports such as Providence and Manchester, the frequency and diversity of potential connecting services at these airports fall well below the services available at Boston. Shifting flights now serving Boston to one of the alternate regional airports would again be expected to produce a reduction in connecting passenger demand.

For these reasons, the analysis presented in the Airside Project Draft EIS/EIR does not assume that regional carriers would respond to Peak Period Pricing by shifting Boston flights to alternate airports. While some limited flight shifts to alternate airports could occur, it is not expected that a substantial portion of Logan's existing regional carrier services could be economically supported at alternate regional airports.

4.5.3 Analysis of Peak Period Pricing Exemption Program

The effects of Peak Period Pricing on access to Logan were examined in the regional carrier and small community case studies presented in Airside Project Draft EIS/EIR. This issue was the subject of numerous comments voiced at public hearings and received in formal comment letters addressing the Airside Project Draft EIS/EIR. Comments were received from residents and public officials representing potentially affected communities, and from other interested parties. The EOEA Certificate specifically requested that Massport explore the issue of a tightly crafted exemption program designed to mitigate potential service disruption at small communities.

In response to these concerns, this section expands the Peak Period Pricing analysis presented in the Airside Project Draft EIS/EIR to reflect the inclusion of an exemption program. The purpose of the expanded analysis is to determine whether a limited exemption program could successfully mitigate some of the negative service related impacts of Peak Period Pricing without unduly diluting the effectiveness of Peak Period Pricing as a vehicle to reduce airline overscheduling and its associated delays.

Parameters and methodology used in evaluating the illustrative exemption program are described below:

- Communities were considered as eligible for Peak Period Pricing exemptions if they qualified for the Federal Essential Air Service (EAS) program, and if Boston was designated as a qualifying hub destination. Based on this criterion, 16 New England communities (Figure 4.5-1) were included in the illustrative exemption program. Provincetown, MA was added to the exemption program, despite its lack of EAS

eligibility, because previous analysis indicated that this market relied exclusively on Boston for access to the national airport system, and consequently would potentially bear a unique, disproportionate burden resulting from Peak Period Pricing at Logan. Burlington, VT was not included because it has EAS to New York.

- A total of two daily roundtrips (or four operations) during the peak period were exempted from peak period surcharges at each of the exemption markets. This is consistent with the Federal EAS program that guarantees small communities a minimum of two daily roundtrips to a designated hub airport and will provide subsidy when necessary to maintain this level of essential air service. In markets served by multiple carriers, exemptions were allocated between carriers based on the level of peak period flights each carrier provided to Boston.

- Reflecting the reduction in peak period surcharges, the weight-based landing fee was adjusted to retain an approximately constant level of total airfield revenue, consistent with current federal guidelines.

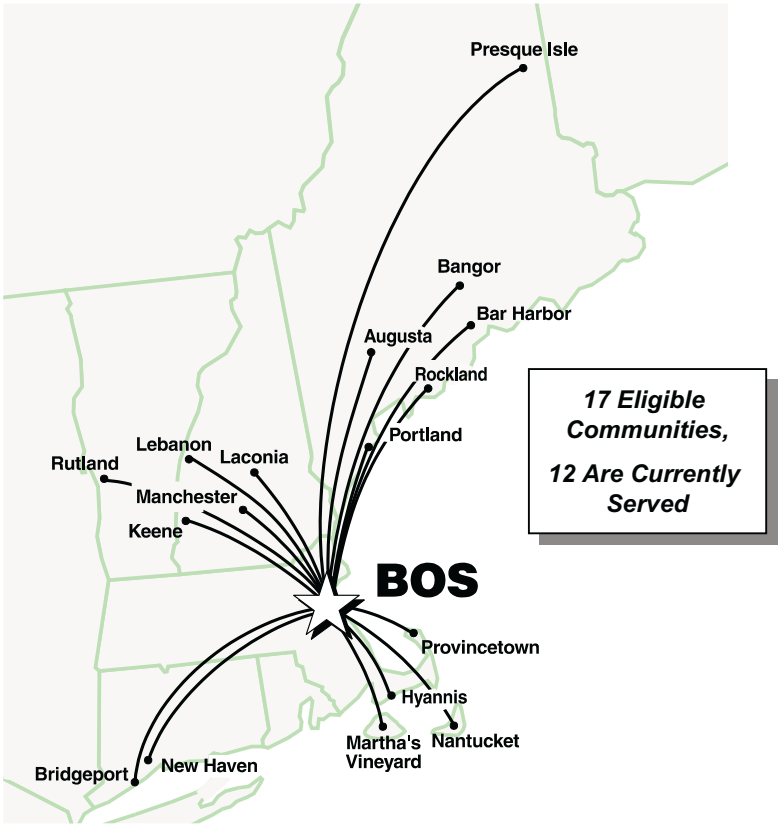
- Cost impacts of the modified Peak Period Pricing program were evaluated by carrier and nonstop market using the schedule patterns and modeling framework previously applied for three future fleet scenarios: the 29M Low Fleet and the 37.5M Low and High Fleets. The 29M Low Fleet approximates current operating conditions at Logan, while the 37.5M Low and High Fleets bound the range of likely future activity levels at the airport.

- Flight shifts and cancellations were projected under each scenario using the methodology and assumptions as described previously in this chapter.

- The daily demand profiles were adjusted to reflect the projected shifts and cancellations of peak period flights. The adjusted profiles were then evaluated using the DELAYSIM model to determine the delay reduction impacts of a Peak Period Pricing program as modified to reflect an illustrative small community exemption program.

In addition to the illustrative exemption program elements described above, consideration will also be given to operational factors, such as the use of the 2,557 foot Runway 15L/33R, that may justify exemptions without jeopardizing the delay reduction benefits of Peak Period Pricing. If appropriate, these operational factors would also be incorporated as part of any Peak Period Pricing exemption program that may be implemented in the future.

Figure 4.5-1
Communities Eligible for Exemptions



4.5.3.1 Results of Exemption Analysis

The exemption from peak period surcharges of two daily roundtrips from eligible communities reduces the initial cost impacts of the program on the regional carriers that serve these markets. This lower cost impact translates to lower required fare increases and, ultimately, tempers the profit margin reduction incurred by carriers serving these routes. As a result, the predicted level of flight cancellations with an exemption program is correspondingly less than the projections previously developed for Peak Period Pricing without exemptions.

Table 4.5-2 shows the comparative percent of flights cancelled, with and without the exemption program, from eligible communities. As illustrated in the table, the cancellation percentages are universally lower with the illustrative exemption program. Under the 29M Low Fleet scenario, only 1.3 percent of summer season flights from exemption eligible communities are projected to be cancelled. This compares to a 4.4 percent cancellation rate projected at these communities prior to exemptions. Under the 37.5M Low Fleet, the cancellation rate falls from an original 5.8 percent down to 1.7 percent with exemptions. Under the 37.5M High Fleet scenario, the projected cancellation rate falls to 15.8 percent with exemptions from 22.6 percent in the original analysis.

Table 4.5-2
Comparison of Projected Service Impacts With and Without Peak Period Exemptions

	Projected Flight Cancellations as Percent of Total Daily Operations					
	Without Exemptions			With Exemptions		
Airport	29M Low	37.5M Low	37.5M High	29M Low	37.5M Low	37.5M High
Martha's Vineyard	14.4%	17.6%	49.9%	5.0%	6.5%	44.6%
Provincetown	21.7%	28.2%	71.7%	0.0%	4.0%	37.6%
Hyannis	2.6%	7.9%	23.4%	0.3%	2.3%	17.3%
Nantucket	6.6%	7.0%	16.0%	3.9%	2.9%	14.5%
Keene	-	-	61.3%	-	-	13.1%
Rockland	0.0%	0.0%	43.4%	0.0%	0.0%	13.1%
Lebanon	0.0%	0.0%	17.4%	0.0%	0.0%	11.9%
Portland	0.0%	0.0%	12.1%	0.0%	0.0%	11.2%
Manchester	0.0%	0.0%	11.3%	0.0%	0.0%	9.9%
Bangor	0.0%	0.0%	11.0%	0.0%	0.0%	8.9%
Bar Harbor	0.0%	3.9%	48.4%	0.0%	0.0%	7.4%
Presque Isle	0.0%	0.0%	15.2%	0.0%	0.0%	4.2%
Augusta	4.9%	4.9%	27.3%	0.0%	0.0%	3.8%
Bridgeport	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**4.4%**	**5.8%**	**22.6%**	**1.3%**	**1.7%**	**15.8%**

Note: "-" indicates the EAS airport had no service to Boston in the corresponding scenario.

The 37.5M High Fleet scenario exhibits the smallest decline in projected service impacts due to the illustrative exemption program. This is because the designated peak period under this scenario extends from 7:00 AM to 8:59 PM (i.e., a span of 14 hours). As a result, the two daily roundtrips that were exempted from peak period surcharges represent a proportionately smaller benefit than realized under the alternative Low Fleet scenarios, with their shorter peak periods (5 to 6 hours). Because a significant proportion of peak period flights under the 37.5M High Fleet scenario would continue to be assessed surcharges, the cost mitigation effects of the exemption program are less pronounced and produce a smaller impact on projected flight cancellations.

4.5.3.2 Delay Reduction Impacts

By reducing the number of projected flight cancellations at eligible communities, the exemption program allows more flights to operate during peak periods and lowers the projected delay reduction benefits of Peak Period Pricing (see Table 4.5-3).

Under the 29M Low Fleet scenario, inclusion of the small community exemption program reduces the projected delay reduction benefits of Peak Period Pricing (and Reduced Minimums) by approximately 2,700 hours, with Alternative 2 producing a 6.2 percent

reduction in annual runway-related delays (vs. Alternative 4) as compared to an 8.1 percent reduction without exemptions.

In the 37.5M Low Fleet, the exemption program reduces the delay reduction impact of Peak Period Pricing by 8,100 annual hours. With exemptions, Alternative 2 (which include Peak Period Pricing and Reduced Minimums) reduce annual runway delays by 7.7 percent compared to an 11.1 percent reduction prior to exemptions.

Table 4.5-3
Exemption Program: Delay Reduction Impacts

	Annual Hours of Runway Delay		
Alternative	**29M Low**	**37.5M Low**	**37.5M High**
Alternative 4 – No Action	136,400	233,900	332,700
Alternative 2 – Administrative Actions Only – No Exemptions	125,300	207,900	194,000
Alternative 2 – Administrative Actions Only – With Exemptions	128,000	216,000	208,900
Delay Reduction			
Alternative 4 vs. Alternative 2 – No Exemptions	**11,100**	**26,000**	**138,700**
Alternative 4 vs. Alternative 2 – With Exemptions	**8,400**	**17,900**	**123,800**

Under the 37.5M High Fleet conditions, the exemption program lowers forecast delay savings by approximately 15,000 annual hours. Under this scenario, Alternatives 2 and 3 would produce an estimated 37.2 percent reduction in delay with the exemption program, as compared to a 41.7 percent reduction in runway delays prior to exemptions.

4.5.3.3 Findings of Exemption Program Analysis

The inclusion of a small community exemption program reflects the trade-off between the potential delay reduction benefits of Peak Period Pricing and recognition of the importance of preserving access to Logan from small and medium-sized New England communities. The illustrative exemption program described above was patterned after the Federal Essential Air Service (EAS) Program. Eligible communities were those markets with EAS determinations that designated Boston as a qualifying hub destination. The number of exemptions was established at two daily roundtrips, also consistent with the EAS standard.

By granting a limited number of exemptions to eligible cities, the projected service disruption caused by Peak Period Pricing would be reduced. In limiting the number of exemptions to two daily roundtrips during peak periods, the effectiveness of Peak Period Pricing in reducing delays is generally maintained, particularly under the 37.5M High Fleet scenario where Peak Period Pricing was recommended as an appropriate delay reduction strategy.

4.5.4 Peak Period Monitoring System

Peak period pricing was evaluated as a demand management program designed to limit airline overscheduling at Logan. Overscheduling was a problem in 1993 when airline flight schedules during peak periods exceeded Logan's available capacity. Since 1993, the hourly flight profile at Logan has flattened and current peak period demand can be accommodated with minimal delay during normal operating conditions. Because airline overscheduling is not a significant source of current delays at Logan, Massport did not recommend Peak Period Pricing for immediate implementation in the Preferred Alternative.

However, the analysis in the Airside Project Draft EIS/EIR indicates that under some future scenarios, overscheduling could re-emerge as a significant source of delays, and Peak Period Pricing could produce substantial delay reduction benefits. Based on this finding, Massport stated in the Airside Project Draft EIS/EIR that it would reserve the option to implement Peak Period Pricing, should this be warranted by future flight activity patterns at Logan.

The EOEA Certificate requires that Massport define the conditions that would lead to the implementation of a Peak Period Pricing program. In response, Massport will establish a monitoring system to provide advance warning of when overscheduling is likely to become a significant contributor to delays at Logan. If so, the system would identify the portion of the day where an overscheduling condition would likely occur. This information would then be used as a basis for initiating a discussion with the carriers on how to achieve timely corrective action. If the necessary corrective action is not agreed to then appropriate regulatory action would be taken to reduce or eliminate overscheduling as a source of airfield delays at Logan.

While the detailed structure of the proposed monitoring system has not been finalized, key components of an illustrative monitoring system are described below:

- Projections of Logan flight activity will be developed on a semi-annual basis. These projections will be prepared 4 to 6 months in advance and will represent estimates of flight levels by hour for the upcoming season. Projections will be based on the most recent activity levels at Logan, historic seasonality patterns, and on advance flight schedules submitted by carriers to the OAG, expanded to reflect non-scheduled activity including charter and general aviation. Advance carrier flight schedules have been a reliable indicator of future activity at Logan, as illustrated in Table 4.5-4.

- Logan's average capacity under VFR weather conditions will be evaluated as required to account for fleet mix changes and advances in air traffic control technology as required. VFR conditions are available approximately 80 percent of the year.

- Delays due to overscheduling will be quantified through an analysis that simulates the projected flight schedule against Logan's average VFR capacity. Delays will be estimated by hour to permit designation of a specific peak period when overscheduling conditions are causing significant delays.

- A phased Peak Period Pricing curative process would be initiated when projected delays due to airline overscheduling reach or exceed an average level of 15 minutes per flight over a period of three or more consecutive hours. The 15-minute criterion is based on the FAA threshold for identifying significant delay.

Table 4.5-4
Comparison of Advanced and Actual Flight Schedules for Logan

Year	Daily Nonstop Logan Departures for August		Percent Difference
	Advanced	Actual	
1998	707	724	2.4%
1999	691	689	-0.2%

Note: Advanced schedules based on April OAG Schedule Tape.
Source: Official Airline Guide, Schedule Tapes.

Phase 1: Voluntary Schedule Adjustments

When the 15-minute delay threshold is projected to be exceeded, Massport will first meet individually with airlines that exhibit significant levels of flight activity during the identified peak period. These carriers would be informed that Peak Period Pricing will be invoked unless flight schedules are reduced below threshold levels. If voluntary schedule adjustments occur, the Peak Period Pricing regulatory requirements would be deferred.

Phase 2: Regulatory Action

If voluntary schedule adjustments do not eliminate the overscheduling situation, Massport will take the necessary steps to implement Peak Period Pricing at Logan. Massport will continue to monitor flight schedules and make adjustments to the peak period as warranted by future schedule changes. Massport will also make other adjustments to the monitoring system and the Peak Period Pricing program if necessary to effectively address any overscheduling situation that may arise.

4.6 Aircraft Delay and Runway Use Results

The Logan airfield modeling methodology, described in Chapter 4 of the Airside Project Draft EIS/EIR, was used to estimate aircraft delays and runway utilization for the 1993 historic analysis and for each of the future passenger demand and aircraft activity levels. To provide perspective on current conditions at Logan, additional analysis of 1998 conditions was also performed for this Supplemental DEIS/FEIR. At the request of the SDEIS Panel, a new 37.5 million passenger High Regional Jet Fleet (37.5M High RJ Fleet) scenario was also examined; the results of the High RJ Fleet analyses are presented in Section 4.7.

4.6.1 Analysis of Historic (1993) and Current (1998) Delays

The year 1993 represents a peak year for small aircraft operations at Logan Airport. Flight operations in 1993 also exhibited a relatively high degree of hourly peaking compared to the current, flatter operations profile at Logan. The year 1993 was originally chosen as an analysis year since it represented the most recent complete year of available data at the beginning of the Logan Airside Improvements Feasibility Study. Though considerable time has passed since 1993, the analysis year illustrates operating and environmental conditions at Logan during a period of airline overscheduling and high delays.

To supplement the 1993 historic analysis, 1998 conditions have been studied in the Supplemental Draft EIS/Final EIR to provide a more recent point of reference. Since 1998 has less hourly peaking, delays are lower than those in 1993, even though total demand was nearly the same. While these years provide context for historic and current conditions at Logan, the appropriate data for assessing the benefits of the proposed Airside Project improvement concept in future years is a comparison of the action Alternatives (Alternatives 1, 1A, 2 and 3) to Alternative 4, the No Action Alternative. The 1993 and 1998 analyses are useful for model calibration and for providing a frame of reference.

The 1993 historic analysis estimated 159,000 annual hours of aircraft delay at Logan, with 135,000 hours of delay related to runway congestion and 24,000 hours resulting from taxiway congestion. The delay analysis for 1998 indicates that Logan incurred 120,000 hours of runway-related delays in that year, comparable but slightly below the 1993 level of 135,000 hours. While detailed simulation of taxiway movements were not conducted for 1998, an estimated 22,000 annual hours of taxiway delays occurred in 1998 based on interpolation from other modeled scenarios. Incorporating both runway and taxiway delays for 1998, Logan experienced total aircraft delays of approximately 142,000 hours during the year.

Analysis of 1998 Delays with the Preferred Alternative

In addition to modeling actual Logan operating conditions and delays, the analysis also re-modeled 1998 activity assuming that the airfield improvements contained in the Preferred Alternative were in place. This analysis quantifies the delay reduction benefits that would have been realized at Logan in 1998 if the Preferred Alternative had been implemented.

Logan operations during 1998 were analyzed using 1998 runway utilization from the *1998 Annual Update* and actual 1998 weather observations. The version of DELAYSIM used for the 1998 delay analysis included an added feature for tabulating delays by wind direction. In order to demonstrate the benefits of Runway 14/32 under northwest wind conditions, the analysis of actual 1998 conditions was compared to projected 1998 results assuming that the Preferred Alternative improvements were in place.

Similar to the results for future year operating conditions, if Runway 14/32 had been available in 1998, Logan would have experienced a 32 percent reduction in runway delays, or 82,000 hours versus 120,000 hours without the Preferred Alternative improvements (Table 4.6-3). While this improvement is significant, the analysis of VFR delays is even more compelling and demonstrates the impact of unidirectional Runway 14/32 on VFR delays, particularly under northwest wind conditions. Figure 4.6-1 shows that the Preferred Alternative would have reduced 1998 VFR delays by 69 percent, from 51,000 annual delay hours to only 16,000 hours.

Figure 4.6-1 also categorizes 1998 VFR delays by wind direction. As shown in the figure, delays from northwest winds made up 70 percent of VFR delays in 1998. Since winds from the northwest accounted for only 37 percent of the 1998 VFR weather conditions, northwest winds generated a disproportionate percentage of the VFR delays. The disproportionate share of VFR delays that occur during northwest winds demonstrates the inefficiency caused by Logan's lack of a third runway in the northwest-southeast orientation. A comparison of the 1998 No Action and Preferred Alternative results indicates that Runway 14/32 would have had a dramatic effect on VFR northwest wind delays in 1998, reducing them by nearly 90 percent. This case study of VFR delays under northwest wind conditions demonstrates the effectiveness of Runway 14/32 under current operating conditions at Logan.

4.6.2 Total Delays

Massport selected Alternative 1A as its Preferred Alternative (all actions except Peak Period Pricing) because airline overscheduling is not currently a problem at Logan. Further, the delay reduction benefits associated with Peak Period Pricing come at a cost to passengers, communities and the regional carriers. If airline overscheduling emerges as a significant contributor to Logan delays, the monitoring program provides for a clear plan of action to alleviate that condition (see Section 4.5.4).

The following discussion analyzes the delay reduction savings associated with the Preferred Alternative under two fleets that reflect a broad range of likely operating conditions at Logan over the near and long term—the 29M Low Fleet and the 37.5M High Fleet.

Figure 4.6-1
Annual VFR Delay Hours by Wind Direction

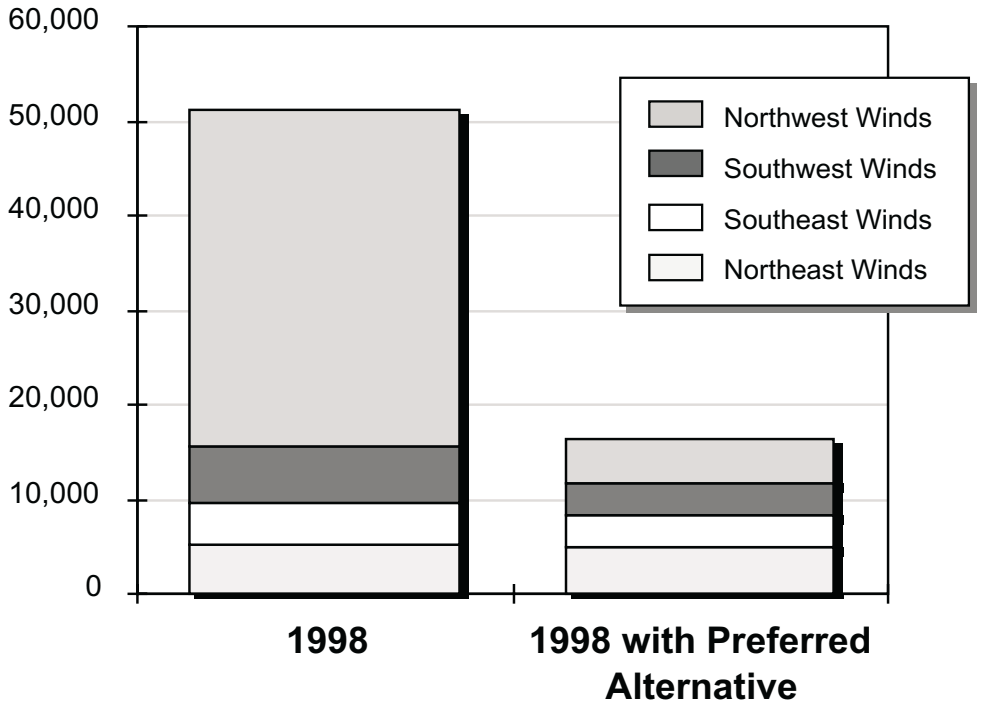


Table 4.6-1 compares the results of the operating delay analysis of the Preferred Alternative versus the No Action Alternative under the 29M Low Fleet and the 37.5M High Fleet scenarios. The airfield operations analysis indicates that Logan will incur extremely high levels of delay if no actions are taken to improve airport operating efficiency. For the No Action Alternative (Alternative 4) under the 29M Low Fleet, which reflects the lowest growth in aircraft operations, Logan passengers and airlines are forecast to experience 157,500 annual hours of delay. Even under this most conservative growth scenario, the extent of Logan's delay problem is highlighted by the FAA's threshold of 20,000 annual hours of delay which is used to identify severely congested (i.e., delay prone) airports. If aircraft operations at Logan reach the level projected under the 37.5M High Fleet, delays could exceed 360,000 hours per year, more than double the 159,000 hours of modeled delay in the 1993 historic analysis.

Under Low Fleet conditions that are most similar to current conditions at Logan (29M Low), the Preferred Alternative produces a delay reduction contribution of over 43,000 hours. This represents a savings in delay of approximately 27 percent under likely near term conditions as shown in Table 4.6-2.

Table 4.6-1
Total Hours of Runway and Taxiway Delay by Alternative and Fleet Scenario

Alternative	Runway and Taxiway Total Annual Delay Hours	
	29M Low	37.5M High
Total Delay		
Preferred Alternative - All except Peak Period Pricing	114,450	249,600
Alternative 4 - No Action	157,500	363,400
Delay Reduction		
Alternative 1 vs. Alternative 4	46,100	194,800
Preferred Alternative vs. Alternative 4	43,050	113,800

Table 4.6-2
Percent Reduction in Total Annual Hours of Delay by Fleet Scenario for the Preferred Alternative (Including Runway and Taxiway Delay)

Improvement Concept	Percent Delay Reduction vs. No Action	
	29M Low	37.5M High
Preferred Alternative - All except Peak Period Pricing	-27.3%	-31.3%
	Annual Hours of Delay	
Alternative 4 – No Action	157,500	363,400
Preferred Alternative	100,000	200,000

The contribution of the Preferred Alternative grows rapidly in future conditions. The 37.5 M High Fleet represents an appropriate upper bound for future conditions at Logan. Under this future High Fleet scenario, the Preferred Alternative produces 114,000 hours of delay reduction—a savings that is comparable to the current level of runway related delay at Logan. The Preferred Alternative would provide delay savings of 31.3 percent compared to the No Action Alternative.

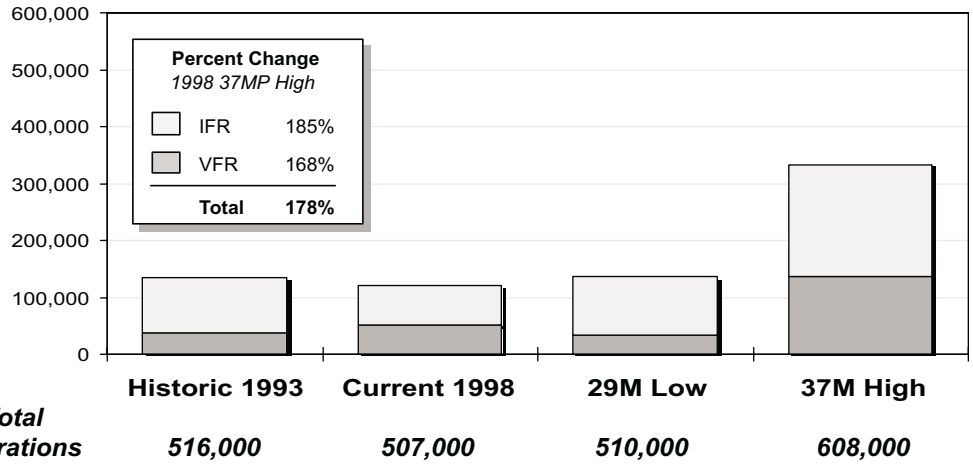
In the 37.5M High Fleet scenario, flights at Logan would experience an average delay of 36 minutes per flight (runway plus taxiway delay). Based on the estimated $2,500 per hour cost of aircraft delay, including both aircraft operating expenses and the value of time for airline passengers, the potential level of delays in the 37.5M High scenario could cost airlines and passengers $925 million if no improvements are made.

4.6.3 Runway Related Delays

Total Logan operating delays can be segmented into two principal components—runway delays and taxiway delays. Separate analysis of these segments provides a clearer understanding of the benefits associated with the Preferred Alternative. Runway-related delays account for the majority of aircraft delays at Logan. The Preferred Alternative will significantly reduce runway-related delays, but because of limited runway capacity under severe weather conditions, Logan will continue to experience some runway-related delay under all forecast scenarios.

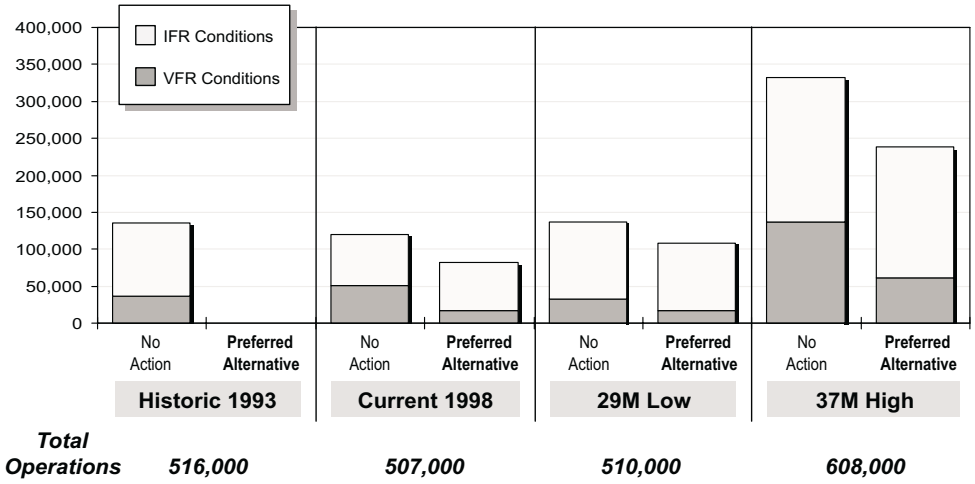
Figure 4.6-2 shows the forecast distribution of runway delays between VFR (Visual Flight Rules) and IFR (Instrument Flight Rules) weather conditions at Logan. IFR conditions reflect poor weather that ranges from low cloud cover to heavy fog and blizzards. While IFR conditions prevail less than 15 percent of the time at Logan (using the ten-year weather data), a disproportionately high share of historic airport delays have occurred during these conditions. In 1993, for example, over 70 percent of modeled delays occurred in IFR conditions. In 1998, (with actual 1998 weather), IFR conditions occurred 13 percent of the time and made up 57 percent of the delays.

Figure 4.6-2
Forecast Annual Hours of Delay by Weather Condition – No Action Alternative



As shown in Figure 4.6-3, future growth in aircraft operations will produce large increases in VFR delays under the No Action Alternative. Under the 37.5M High Fleet scenario, VFR delays will increase by 168 percent over 1998 levels if no actions are taken to address the delay problem at Logan. Conversely, implementation of the Preferred Alternative (Alternative 1A) will substantially reduce the growth in delays occurring in VFR conditions. Under the 37.5M High Fleet scenario, if the Preferred Alternative is implemented VFR delays would be reduced by over 50 percent compared to the No Action Alternative.

Figure 4.6-3
Forecast Annual Hours of Delay by Weather Condition – Preferred Alternative vs. No Action Alternative



As Table 4.6-3 shows, if no action is taken, runway delay could grow from 120,000 hours in 1998, to 333,000 hours under 37.5M High Fleet conditions. This represents an increase of 175 percent. The Preferred Alternative would reduce runway-related delays by 38,000 hours under current conditions and 94,000 hours in the 37.5M High Fleet scenario.

Table 4.6-3
Hours of Delay by Alternative and Fleet Scenario

	Runway Related Delay		
Alternative	**1998**	**29M Low**	**37.5M High**
Preferred Alternative - All except Peak Period Pricing	82,000	108,000	239,000
Alternative 4 - No Action	120,000	136,000	333,000
	Delay Reduction		
Preferred Alternative vs. Alternative 4	**38,000**	**28,000**	**94,000**

4.6.4 Taxiway Related Delays

The second component of airfield delay at Logan is taxiway delay. While the level of taxiway delays at Logan is not as high as delays associated with runway constraints, the airfield operations analysis indicates that taxiway improvements will provide substantial delay reduction. Table 4.6-4 shows the level of taxiway-related delays associated with the Preferred Alternative in comparison to the No Action Alternative.

The taxiway delay reduction associated with the Preferred Alternative ranges from 15,000 annual hours under the 29M Low scenario to 19,800 hours under the 37.5M High Fleet scenario. At approximately $2,500 per hour of delay, the potential reduction in taxiway-related delays represents annual cost savings of between $37 and $49 million.

Table 4.6-4
Hours of Taxiway Delay by Alternative and Fleet Scenario

	Taxiway Related Delay	
Alternative	**29M Low**	**37.5M High**
Preferred Alternative – All except Peak Period Pricing	6,450	10,600
Alternative 4 – No Action	21,500	30,400
	Delay Reduction	
Preferred Alternative vs. Alternative 4	**15,050**	**19,800**

Taxiway construction improvements make the largest contribution to reduction in taxiway delays, but the addition of unidirectional Runway 14/32 also contributes to taxiway delay savings. The availability of Runway 14/32 permits a shift in runway usage patterns that allow the use of more efficient taxiway configurations. Under the 37.5M High scenario, Alternative 2 which includes taxiway construction (but does not include Runway 14/32) reduced delay by 4,900 hours per year compared to Alternative 3 which does not include taxiway improvements. The construction of Runway 14/32, included in the Preferred Alternative, reduces taxiway-related delay by a further 4,700 hours per year in addition to reducing runway-related delays. Appendix K of the Airside Project Draft EIS/EIR includes the "Taxiway Delays Case Study" which examined taxiway delays during periods of peak terminal utilization.

4.6.5 Runway Use

The delay reduction benefits associated with Alternative 1A were critical to its selection as the Preferred Alternative. A second important factor was the effect that Runway 14/32 would have on runway use patterns which in turn directly impacts both the level and distribution of aircraft related noise. The addition of Runway 14/32 and the resultant flexibility that controllers would have to shift runway use patterns provides the communities to the north and south of Logan substantial relief from noise, while at the same time moving a substantial portion of Logan's operations over water. By reducing the reliance on north/south runways, Runway 14/32 allows greater performance relative to the PRAS annual runway use goals—in fact, the predicted PRAS conformance nearly doubles with Runway 14/32. Without unidirectional Runway14/32, the communities to the north and south of Logan will bear an increasingly disproportionate high impact from flight activity at Logan.

This section describes the differences in runway use patterns for the Preferred Alternative and the No Action Alternative. The analysis will describe effective jet utilization[6], which weights nighttime operations ten times more heavily than daytime operations. This weighting reflects how noise is perceived by the public and thus is a key input for estimating in-flight noise impacts.

4.6.5.1 Annual PRAS Goals

Without airfield improvements, air traffic controllers will have fewer runway options as activity at Logan increases, limiting their ability to follow preferred runway use procedures. As illustrated in Table 4.6-5, without Runway 14/32 the percentage of effective jet operations impacting populated areas to the northeast and west of Logan is projected to increase from 69 percent in 1998 up to 82 percent in the 37.5M High Fleet scenario. By providing an additional three-runway configuration with a northwest orientation, unidirectional Runway 14/32 would permit a more balanced distribution of operations by direction. In the 37.5M High Fleet scenario, the effective jet utilization of runways affecting communities to the north and south would decline from 82 percent to 57 percent with the

▼

6 Effective jet utilization excludes non-jet operations and weights nighttime jet operations, operated from 10:00 PM to 7:00 AM, by a factor of 10.

availability of unidirectional Runway 14/32. In addition, effective jet activity to the southeast or over the water would increase from 13 to 26 percent with unidirectional Runway 14/32.

Table 4.6-5
Distribution of Effective Jet Aircraft Operations by Operating Direction

		37.5M High Fleet	
Direction	1998	Alternative 4 No Action	Alternative 1A Preferred Alternative
North and South	69%	82%	57%
East (Overwater)	21%	13%	26%
West	10%	5%	17%
Total	100%	100%	100%

A summary of effective jet aircraft runway use for the 1993, 29M Low and 37.5M High Fleets is presented in Table 4.6-6 for arrivals and Table 4.6-7 for departures. The information for the future scenarios is also presented graphically in Figures 4.6-4 and 4.6-5 (Appendix H of the Airside Project Draft EIS/EIR included effective jet runway use for the 29M High, 37.5M Low, and 45M High Fleets. Also see Appendix B of this Supplemental DEIS/FEIR for the 1998 Fleet).

In all future forecast scenarios, the Preferred Alternative increases operations over water and achieves a more balanced distribution of operations over land because it includes Runway 14/32. For example, in the 29M Low scenario, the Preferred Alternative increases equivalent jet arrivals for Runways 15R, 32 and 33L compared to Alternative 4 (No Action). In the same scenario, equivalent jet arrivals on Runway 4R, which occur over land and impact the South Boston and South Shore communities, are reduced significantly. In terms of departures, the Preferred Alternative causes an increase in equivalent jet utilization for Runways 14 and 15R (overwater) and a significant reduction for Runway 9, which impacts the Point Shirley community.

Table 4.6-6
Effective Arrivals by Fleet and Runway End

Runway End and Improvement Concept	Percent Effective Arrivals by Fleet		
	1993 Historic	29M Low	37.5M High
Runway 4L/R			
PRAS Goal	**21.1**	**21.1**	**21.1**
Alternative 1 - All Actions	--	24.6	30.0
Preferred Alternative - All Except Peak Period Pricing	--	24.6	29.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	34.1	45.4
Alternative 4 - No Action	35.8	34.8	47.3
Runway 15L/R			
PRAS GOAL	**8.4**	**8.4**	**8.4**
Alternative 1 - All Actions	--	7.7	6.0
Preferred Alternative - All Except Peak Period Pricing	--	7.7	4.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	4.1	2.1
Alternative 4 - No Action	3.7	4.9	1.2
Runway 22L/R			
PRAS Goal	**6.5**	**6.5**	**6.5**
Alternative 1 - All Actions	--	12.2	12.0
Preferred Alternative - All Except Peak Period Pricing	--	12.3	16.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	12.1	13.9
Alternative 4 - No Action	11.7	12.4	21.6
Runway 27			
PRAS Goal	**21.7**	**21.7**	**21.7**
Alternative 1 - All Actions	--	18.6	16.0
Preferred Alternative - All Except Peak Period Pricing	--	18.6	13.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	14.6	23.7
Alternative 4 - No Action	16.9	14.6	15.7
Runways 33L and 32			
PRAS Goal	**42.3**	**42.3**	**42.3**
Alternative 1 – All Actions	--	36.8	35.9
Preferred Alternative - All Except Peak Period Pricing	--	36.8	37.0
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	35.0	14.9
Alternative 4 – No Action	31.8	33.2	14.2

Table 4.6-7
Effective Departures By Fleet and Runway End

Runway End and Improvement Concept	Percent Effective Departures by Fleet		
	1993 Historic	29M Low	37.5M High
Runway 4L/R			
PRAS Goal	**5.6**	**5.6**	**5.6**
Alternative 1 - All Actions	--	7.6	11.1
Preferred Alternative - All Except Peak Period Pricing	--	7.8	6.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	7.0	13.9
Alternative 4 - No Action	10.3	7.7	7.7
Runway 15L/R and 14			
PRAS Goal	**23.3**	**23.3**	**23.3**
Alternative 1 - All Actions	--	18.1	11.6
Preferred Alternative - All Except Peak Period Pricing	--	18.0	14.6
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	13.0	9.5
Alternative 4 - No Action	12.9	12.5	12.2
Runway 22L/R			
PRAS Goal	**28.0**	**28.0**	**28.0**
Alternative 1 - All Actions	--	26.9	24.8
Preferred Alternative - All Except Peak Period Pricing	--	27.0	25.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	26.1	37.3
Alternative 4 - No Action	27.5	26.3	33.4
Runway 27			
PRAS Goal	**17.9**	**17.9**	**17.9**
Alternative 1 - All Actions	--	17.0	17.1
Preferred Alternative - All Except Peak Period Pricing	--	16.9	20.5
Alternative 2/3 - All Except Runway 14/32 and No Build	--	15.2	5.4
Alternative 4 - No Action	12.3	14.1	5.5
Runway 33L			
PRAS Goal	**11.9**	**11.9**	**11.9**
Alternative 1 - All Actions	--	12.0	9.8
Preferred Alternative - All Except Peak Period Pricing	--	12.0	9.9
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	11.5	1.7
Alternative 4 - No Action	11.7	11.1	3.0
Runway 9			
PRAS Goal	**13.3**	**13.3**	**13.3**
Alternative 1 - All Actions	--	18.5	25.7
Preferred Alternative - All Except Peak Period Pricing	--	18.4	23.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	27.3	32.3
Alternative 4 - No Action	25.2	28.3	38.2

Figure 4.6-4
Runway Utilization and PRAS Goals – 29M Low Fleet Scenario (510,000 Operations)
Percent of Equivalent Operations on Runway

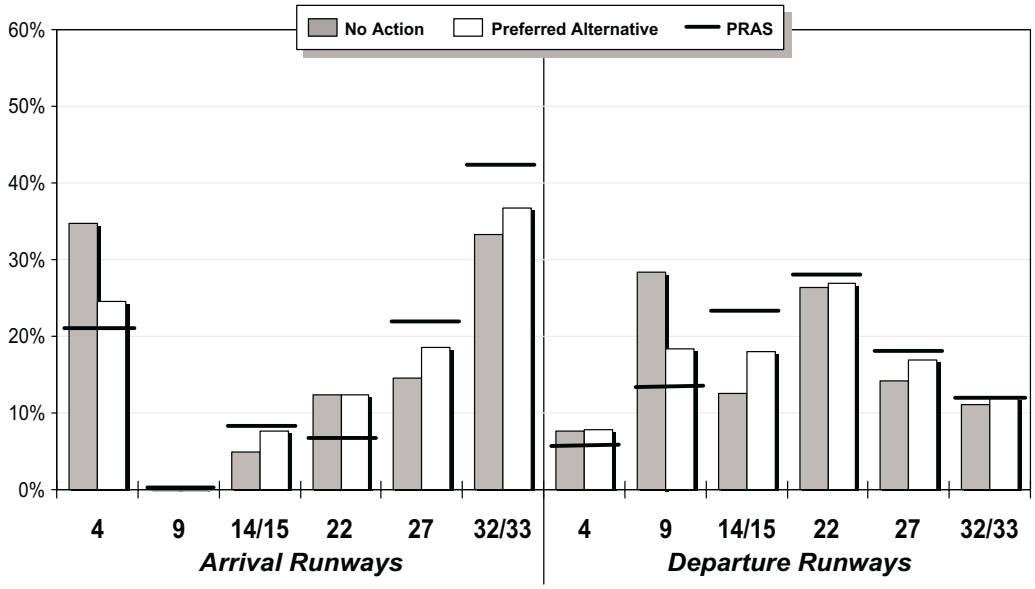
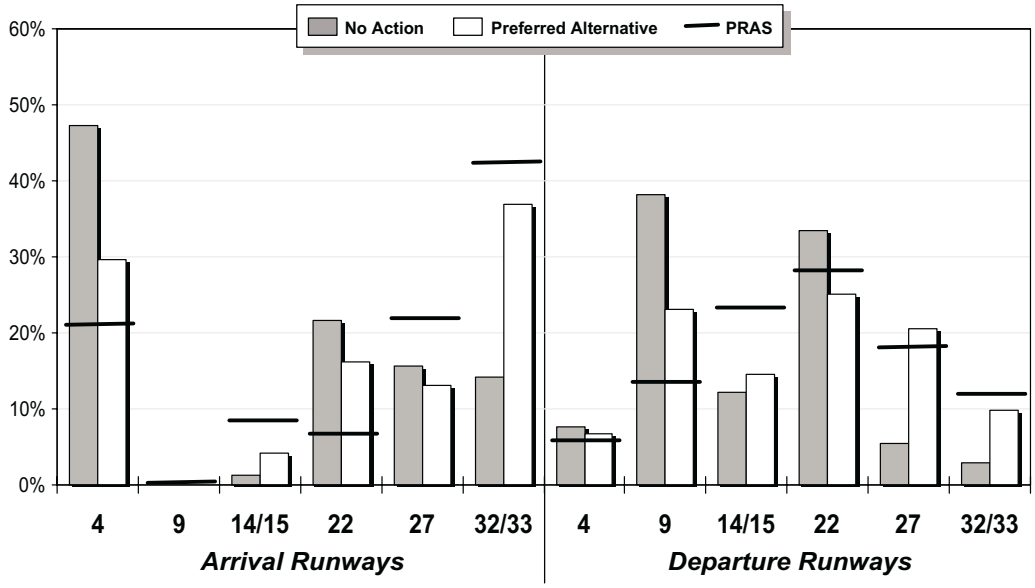


Figure 4.6-5
Runway Utilization and PRAS Goals – 37.5M High Fleet Scenario (608,000 Operations)
Percent of Equivalent Operations on Runway



The Preferred Alternative offers a dramatic improvement in overall annual PRAS goal achievement, and by providing reduced approach minimums, also offers greater flexibility and improves PRAS goal achievement under poor weather conditions. The overall degree to which airfield operations approach annual PRAS goals for runway use at Logan can be measured in terms of the PRAS Performance Index (PPI) described previously in this chapter. A value of zero would represent perfect compliance with the PRAS goals, compared to the *1998 Annual Update* value of 997. An improvement in terms of the PRAS goals is expressed as a decline in the PPI, which means that lower values indicate better conformance (see Table 4.6-8).

For most runway ends, the Preferred Alternative provides closer achievement of the annual PRAS runway use goals. For some runway ends, such as 15R, greater compliance with the PRAS goals leads to an increase in effective jet utilization.

Table 4.6-8
Achievement of Annual PRAS Runway Use Goals

	PRAS Performance Index		
Improvement Concept	**1998 Historic**	**29M Low**	**37.5M High**
Perfect PRAS Compliance	0	0	0
Preferred Alternative - All Except Peak Period Pricing	59	147	480
Alternative 4 – No Action	997	731	2,803

4.6.5.2 Dwell and Persistence

The short-term PRAS goals include dwell (one-day) and persistence (three-day) goals. (See Section 4.3.2.2) The DELAYSIM model measures compliance with dwell and persistence goals in terms of annual hours in excess of the defined targets. It is important to note that increases in dwell or persistence for overwater areas actually represent benefits since this results in a corresponding decrease in the total hours of flying over more populated areas.

The addition of Runway 14/32 and the reduced approach minimums on Runways 15R, 22L, 27 and 33L result in substantial benefits, with significantly fewer hours of dwell over populated areas. Figures 4.6-6 and 4.6-7 illustrate annual hours of dwell exceedence by runway end for the 29M Low and 37.5M High Fleets.

Figure 4.6-6
Annual Hours of Dwell Exceedence by Noise Area – 29M Low Fleet Scenario (510,000 Operations)

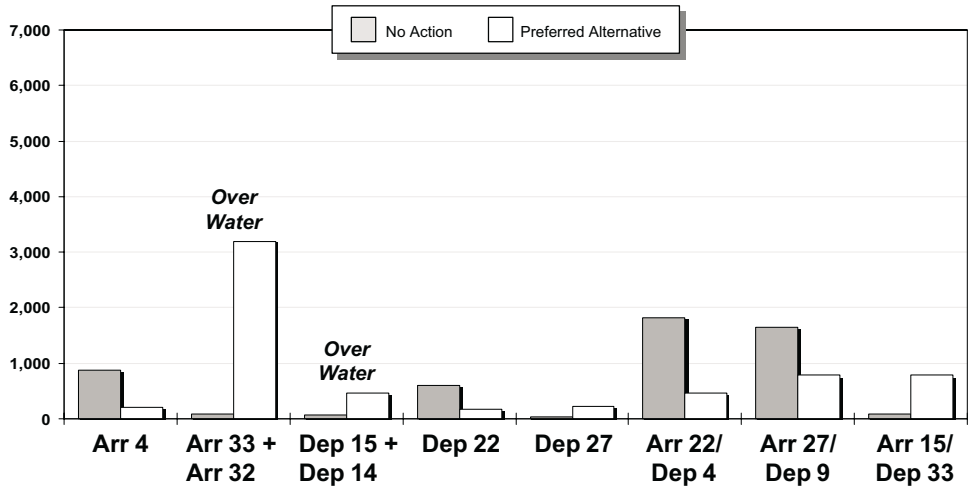
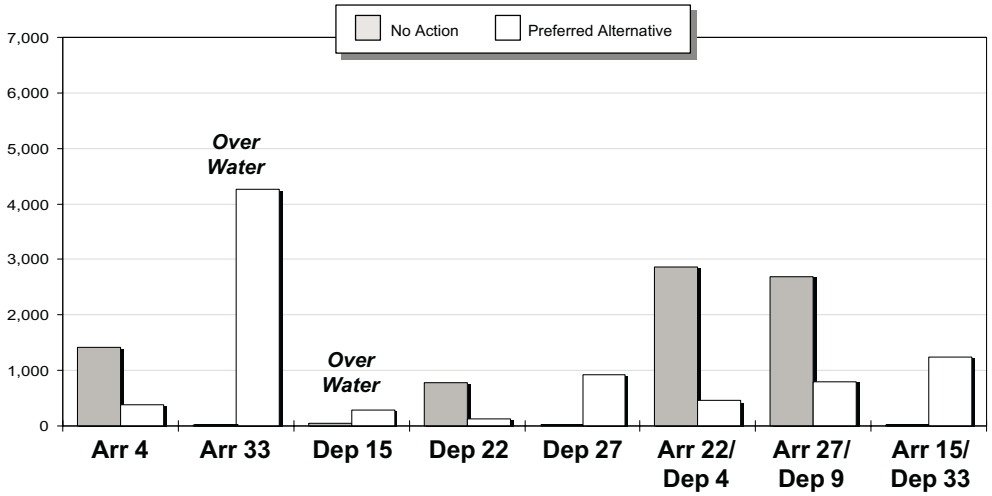


Figure 4.6-7
Annual Hours of Dwell Exceedence by Noise Area – 37.5M High Fleet Scenario (608,000 Operations)



The hours of persistence exceedence presented in Figure 4.6-8 and Figure 4.6-9 are consistent with those for dwell. As with dwell, the addition of Runway 14/32 results in significant improvements, particularly in the long-term scenario. A significant environmental benefit of Runway 14/32 is that hours of persistence exceedence for overwater areas increase dramatically (e.g., from 74 to 3,186 hours in the 29M Low Fleet for arrivals to Runway 33), while in most cases, persistence over populated areas and therefore perceived noise impacts is greatly reduced. Figures 4.5-8 and 4.6-9 illustrate annual hours of persistence exceedence by runway end for the 29M Low and 37.5M High Fleets.

Figure 4.6-8
Annual Hours of Persistence Exceedence by Noise Area – 29M Low Fleet Scenario (510,000 Operations)

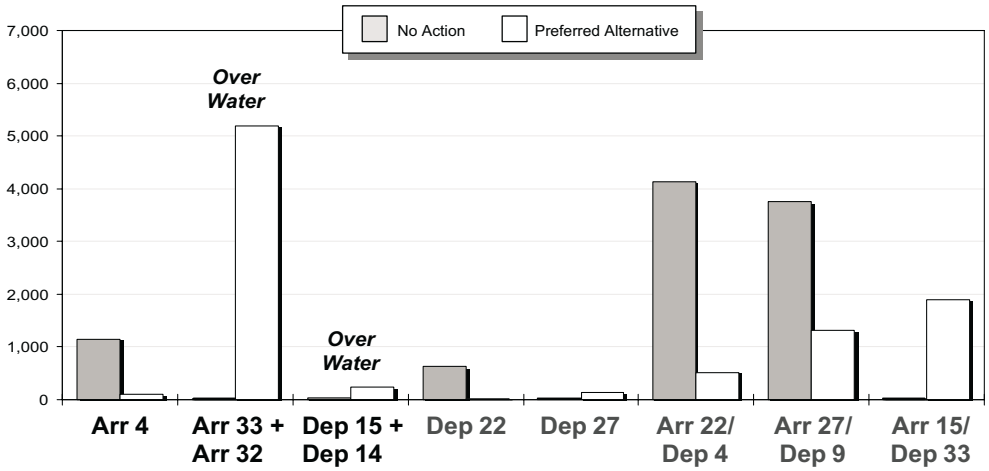
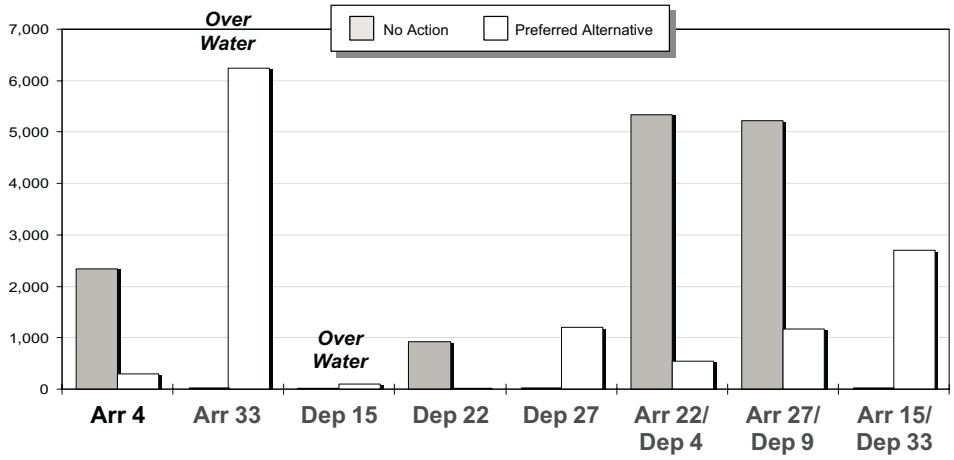


Figure 4.6-9
Annual Hours of Persistence Exceedence by Noise Area – 37.5M Low Fleet Scenario (608,000 Operations)



4.7 Aircraft Delay and Runway Use Results for High Regional Jet Scenario

The Logan airfield modeling methodology, described previously in this chapter and in Chapter 4 of the Airside Project Draft EIS/EIR, was also used to estimate runway delays and runway utilization for the new 37.5M High RJ Fleet described in Section 4.2. This analysis was identical to that discussed previously with the following three exceptions.

The High RJ scenario examined only the runway related delays. The Airside Project Draft EIS/EIR developed taxiway delays for a full range of future fleet scenarios. The taxiway delays comprise a relatively small fraction of the runway delays in every case, and there is no reason to expect that the taxiway delay savings for the High RJ fleet would differ in any significant manner from those of the other fleets (e.g., 15,000 to 20,000 annual hours).

Due to the nature of the High RJ fleet, the delay models were modified to allow the regional jets to be analyzed as separate classes. Thus, for example, the runway assignments and runway utilization statistics can extract the regional jets from the other conventional jets.

The largest change in the High RJ analysis was the use of newer weather data for estimating delays and runway utilization for this scenario. Several comments received on the Airside Project Draft EIS/EIR suggested that the 1981 through 1990 weather database used in the prior studies should be updated with later information. Analysis has shown that there have been no climatic changes since 1981-90 that could substantially alter the conclusions of the earlier studies, the FAA has recently augmented its weather database with the inclusion of wind gust observations that were not previously available. Since controllers and pilots normally consider wind gusts when selecting active runways at the airport, this newer data was adopted for the analysis of the 37.5M High RJ Fleet scenario. Because the enhanced weather data has only been available since 1997, the delay and runway use results for the High RJ Fleet scenario are based on a three-year weather period rather than the ten-year period employed previously. The general impact of the wind gust data is to reduce somewhat the availability of each runway configuration. This is because the wind speed with gusts is the same as or greater than without the gusts, so the cross-wind or tail-wind restriction will occasionally exclude a runway configuration that would otherwise be available. As a consequence of the wind gust data, the analysis of runway use and corresponding delays for the 37.5M High RJ fleet represents an improved estimate of actual operating practice at the airfield.

Since operational experience with regional jets is still relatively limited, there is no unanimity among pilots, controllers, airlines, airport operators and manufacturers as to their practical limitations. To assess the benefits of Runway 14/32 under different assumptions, a sensitivity analysis is presented in Section 4.7.3. The assumption adopted for the nominal analysis follows the suggestions in the *FAA Consultant Report of Regional Jet Utilization of Runway 14/32* in Appendix C: all Dornier model RJs will be able to land on Runway 32; all Embraer model RJs will be able to land on Runway 32 in dry conditions (but not when the runways are wet); and Canadair models will not use Runway 32.

The final refinement in the 37.5MHigh RJ Fleet analysis was an assessment of the potential impacts of an effective Peak Period Pricing program. Because regional jets are generally far more profitable than non-jets, the flat-fee peak period pricing program used with the other fleets was ineffective. The following section describes that analysis and the projected impacts of an effective program.

4.7.1 Peak Period Pricing Program with the 37.5M High Regional Jet Fleet

The initial Peak Period Pricing analysis for the 37.5M High RJ Fleet scenario followed the general approach used to evaluate this demand management mechanism under the other tested fleet scenarios. This approach is described in Section 4.5 of this chapter.

The fleet mix changes reflected in the 37.5M High RJ Fleet scenario have significant implications for a successful Peak Period Pricing program at Logan. First, the 37.5M High RJ Fleet includes a substantial number of regional jet operations and a greatly reduced, but still significant volume of non-jet regional carrier aircraft. It is the combination of these two aircraft types that poses the greatest problem for a flat-fee based Peak Period Pricing Program. The larger and faster regional jets are operating in markets of longer distance, higher revenue and greater profit than their non-jet predecessors, and will be less susceptible to the economic disincentive represented by the flat $150 surcharge. A flat fee large enough to impact peak period regional jets would threaten the economic viability of non-jet services, and could result in the elimination of non-jet operations at Logan, despite the exemption program.

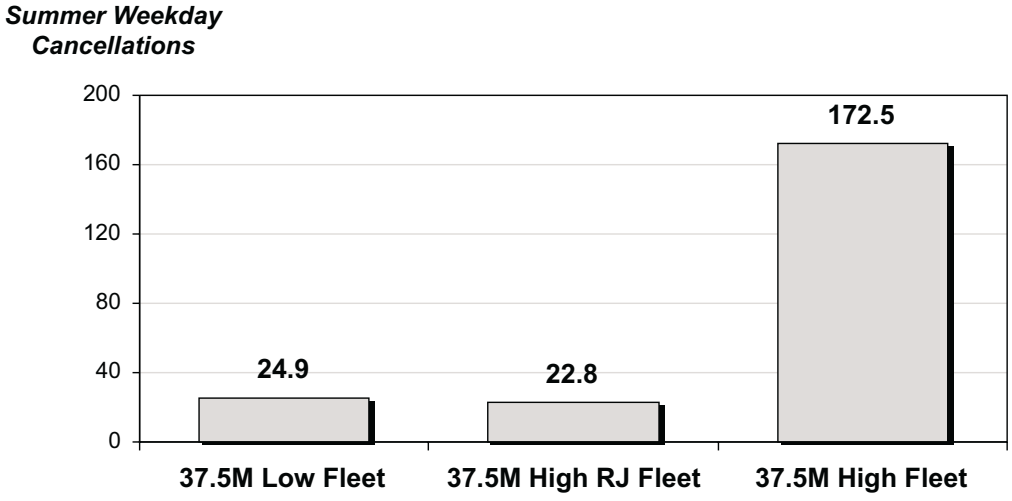
Table 4.7-1 compares estimated revenues and profit levels for several illustrative Logan markets served by either regional jets or conventional non-jet aircraft. It shows that the profit level achieved on a typical regional jet route can be significantly greater than the profit associated with a non-jet service. Whereas a $150 fee could easily eliminate the profitability of a non-jet flight, particularly those operated with the smallest 9- and 19-seat aircraft, a surcharge of this magnitude is unlikely to represent a meaningful deterrent to an operator of regional jet aircraft.

It is therefore not surprising that the analysis of a $150 peak surcharge on the 37.5M High RJ Fleet shows only a limited impact on carrier flight schedules and the resulting Logan demand profile. Figure 4.7-1 compares the number of daily flight cancellations (summer weekday) predicted for the 37.5 million passenger fleets. The 23 daily flight cancellations estimated for a summer weekday in the 37.5M High RJ scenario are far below the predicted impact on the 37.5M High Fleet, and even below the levels estimated for the 37.5M Low Fleet. Based on previous analysis of the delay impacts associated with Peak Period Pricing under the Low Fleet scenario, it was apparent that the predicted schedule changes caused by a $150 peak fee on the 37.5M High RJ Fleet would not produce a meaningful reduction in delays.

Table 4.7-1
Impact of a $150 Peak Period Surcharge on Turboprop and RJ Markets

Aircraft Class and Market	Carrier	Aircraft Seat Size	Estimated Revenue Per Passenger	Revenue per Flight	Peak Fee	Peak Fee as a Percent of Revenue
Turboprop						
Nantucket	Cape Air	9	$85	$383	$150	39.2%
Portland	US Airways Express	19	$64	$608	$150	24.7%
Burlington	American Eagle	33	$93	$1,527	$150	9.8%
Regional Jet						
Norfolk	American Eagle	37	$193	$3,939	$150	3.8%
Philadelphia	Delta Connection	50	$142	$3,910	$150	3.8%
Indianapolis	US Airways Express	50	$177	$4,858	$150	3.1%
Richmond	US Airways Express	50	$186	$5,106	$150	2.9%

Figure 4.7-1
Comparison of Impacts of a $150 Surcharge on 2015 37.5M Fleet Scenarios – 37.5M Low vs. 37.5M High RJ vs. 37.5M High

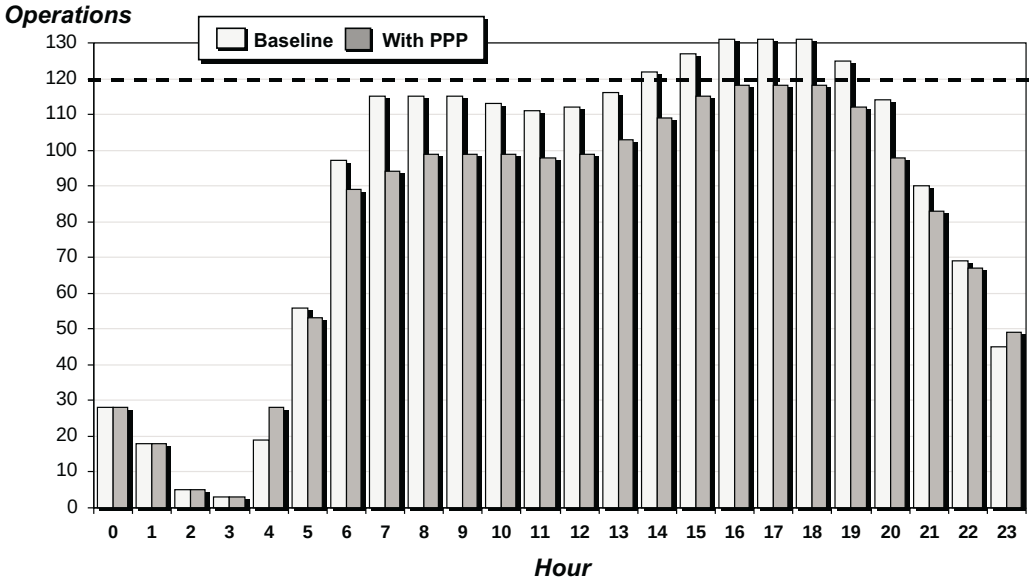


To structure a Peak Period Pricing regimen that would succeed in eliminating airline overscheduling in an environment such as the 37.5M High RJ Fleet scenario, it would be necessary to charge a substantially higher peak period surcharge. In addition to the risk of eliminating non-jets at Logan, a sufficiently high peak surcharge could produce a large surplus in airfield revenues, thereby violating the principle of revenue neutrality.

The FAA is currently evaluating alternative demand management mechanisms to replace the interim slot lottery at New York LaGuardia (see Chapter 3). Clearly, any strategy to eliminate excess airline demand at LaGuardia will have to deal with the high level of regional jet demand that emerged following passage of Air-21 in March 2000. In addressing the LaGuardia situation, the FAA may provide guidance on issues such as revenue neutrality and a mechanism to permit a continuation of turbo-prop services from small and medium-size communities. With the pending decision at LaGuardia, it is premature at this time to define the specific parameters for an effective program at Logan. Rather, these parameters will be more effectively defined at the time of implementation, following an FAA rulemaking at LaGuardia and when the specific fleet characteristics of Logan's overscheduling situation are known.

It is possibile, however, to postulate what the results of an effective Peak Period Pricing program would be in terms of the program impacts on Logan's hourly demand profile. For example, in the 37.5M High Fleet scenario, Peak Period Pricing provided significant delay reduction benefits by reducing hourly flight volumes to a level below Logan's normal operating capacity of approximately 120 flights per hour. The impacts of the illustrative program on the summer demand profile for the 37.5M High Fleet scenario are shown in Figure 4.7-2.

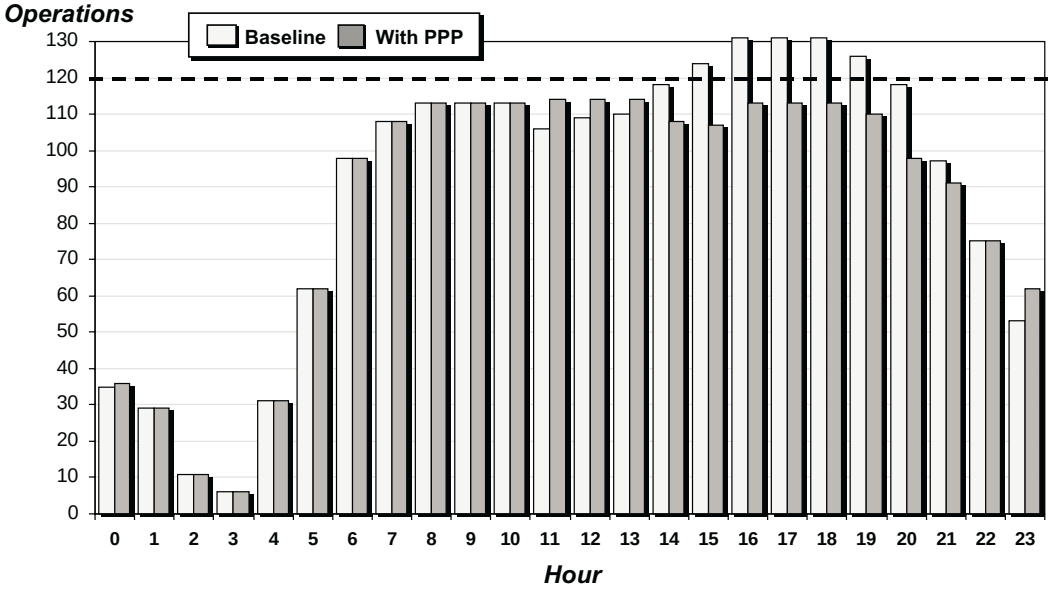
Figure 4.7-2
Comparison of August Weekday Peaking Patterns – 37.5M High Fleet (Maximum 3-Hour Average)



The operational and environmental analysis for Peak Period Pricing on the 37.5M High RJ Fleet was structured based on projected impacts to Logan's demand profile that were comparable to those produced under the 37.5M High Fleet scenario. Figure 4.7-3 illustrates the demand profiles for a representative summer weekday that were developed to reflect the projected impacts of an effective Peak Period Pricing program on the 37.5M High RJ Fleet. It shows that the peak activity level for the busiest three-hour period is reduced from 131 flights per hour down to 114 hourly flights, and that operation levels are consistently below Logan's full operating capacity of 120 flights per hour. The changes in the profile are equivalent to approximately 18,000 annual cancellations (or 10.5 percent of the total peak period flights).

The demand profile described above, and the fleet mix associated with that demand profile, were inputs to the capacity and delay modeling for the 37.5M High RJ alternatives that included Peak Period Pricing (Alternatives 1, 2, and 3). The results of this Peak Period Pricing delays analysis are described along with the delay reduction benefits of the Preferred Alternative in the following sections.

Figure 4.7-3
Comparison of August Weekday Peaking Patterns – 37.5M High RJ Fleet (Maximum 3-Hour Average)



4.7.2 Runway Delays

The results of the 37.5M High RJ Fleet runway delay analysis are similar to those for the other future year operating conditions. Table 4.7-2 compares the results of the runway delay analysis for the four alternatives under the 37.5M High Regional Jet scenario. The table indicates that Logan will incur extremely high levels of delay if no actions are take to improve airport operating efficiency. For the No Action Alternative (Alternative 4), Logan passengers and airlines are forecast to experience over 370,000 annual hours of delay. With the Preferred Alternative, these runway delays are reduced by 29% to 263,000 hours, demonstrating the effectiveness of Runway 14/32. Analysis with the proposed Peak Period Pricing monitoring program indicates that the 37.5M High RJ Fleet would trigger implementation of a peak period pricing program, and under Alternative 1 (All Improvements), runway delays would be further reduced to 219,000 annual hours. This additional benefit demonstrates the effectiveness of a peak period pricing program under overscheduling conditions.

Table 4.7-2
Total Hours of Runway Delay by Alternative

Alternative	37.5M High RJ Fleet
Total Delay	
Alternative 1 – All improvements	219,200
Preferred Alternative - All except Peak Period Pricing	263,500
Alternative 2 – All except Runway 14/32	304,300
Alternative 4 - No Action	372,200
Delay Reduction	
Alternative 1 vs. Alternative 4	**153,000**
Preferred Alternative vs. Alternative 4	**108,700**
Alternative 3 vs. Alternative 4	**67,900**

Figure 4.7-4 shows the forecast distribution of runway delays between VFR (Visual Flight Rules) and IFR (Instrument Flight Rules) weather conditions. With the High RJ Fleet, approximately fifty percent of the modeled No Action delays occur in IFR conditions. While the proposed improvements have relatively little impact on IFR delays, VFR delays decline significantly with the airside improvements.

Figure 4.7-4
Annual Delay Hours by Weather Condition

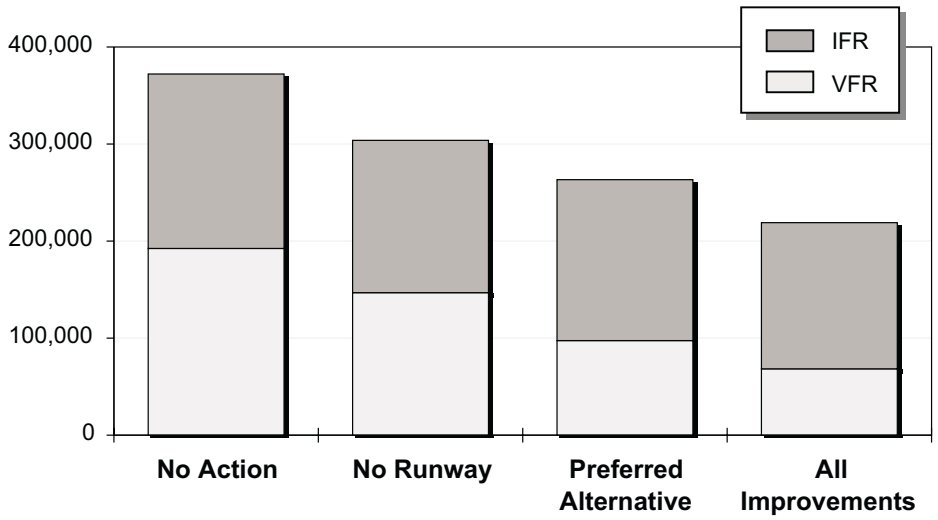


Figure 4.7-5 depicts VFR delays categorized by wind direction. A comparison of the No Action and Preferred Alternative indicates that Runway 14/32 would reduce VFR northwest wind delays by 65 percent.

4.7.3 Runway Use

The effects of the Airside Improvements on runway use for the High RJ Fleet are also similar to those presented previously for the other future scenarios.

Table 4.7-3 shows the total jet operations by operating direction for 1998 and the projections for the 37.5M High RJ Fleet. Without unidirectional Runway 14/32, the north/south communities' share of overflights would grow to 90 percent from the 76 percent that occurred in 1998. With the Preferred Alternative, jet overflights of the north/south communities decline to 58 percent. At the same time, the Preferred Alternative would increase the overwater flights by a factor of four versus the No Action scenario and would produce a much more balanced and equitable distribution of overflights. Peak period pricing would not help the disproportionate impact on the north/south communities.

Figure 4.7-5
VFR Delay Hours by Wind Direction

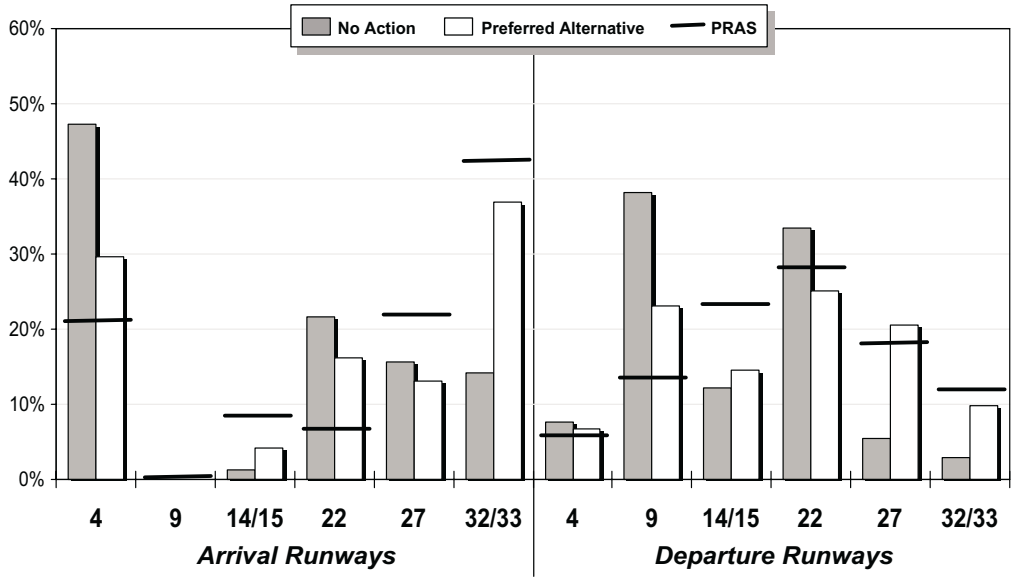


Table 4.7-3
Distribution of Jet Operations by Operating Direction

		37.5M High RJ Fleet			
Direction	1998	Alternative 4 No Action	Alternative 1A Preferred Alternative	Alternative 1 All Actions	Alternative 2/3 No Runway
North and South	76%	90%	58%	57%	91%
East (Overwater)	13%	6%	22%	22%	5%
West	11%	4%	21%	21%	4%
Total	100%	100%	100%	100%	100%

4.7.4 PRAS Goals

This section describes how the differences in runway use patterns provided by the Airside Improvements would produce an overall improvement in future compliance with the annual and short-term PRAS goals under the 37.5M High RJ scenario.

4.7.4.1 Annual Runway End Use Goals

As discussed previously, the annual PRAS goals use effective jet utilization[7] which weights nighttime operations ten times more heavily than daytime operations. Table 4.7-4 compares the effective jet utilization for 1998 and the four modeled alternatives of the 37.5M High RJ Fleet.

Table 4.7-4
Distribution of Effective Jet Operations by Operating Direction

		37.5M High RJ Fleet			
Direction	1998	Alternative 4 No Action	Alternative 1A Preferred Alternative	Alternative 1 All Actions	Alternative 2/3 No Runway
North and South	69%	84%	60%	59%	83%
East (Overwater)	21%	11%	23%	24%	12%
West	10%	5%	17%	17%	5%
Total	100%	100%	100%	100%	100%

Without unidirectional Runway 14/32 the percentage of effective jet operations impacting populated areas to the north and south of Logan is projected to increase from 69 percent in 1998 up to 84 percent in the 37.5M High RJ Fleet scenario. The Preferred Alternative increases overwater flights and achieves a more balanced distribution of operations over land. For example, the, Preferred Alternative more than doubles equivalent jet operations over Boston Harbor, while reducing them over the northern and southern communities by 29 percent. The effective jet utilization of runways affecting communities to the north and south together would decline to 60 percent (less than 1999's 68 percent) with the availability of Runway 14/32. Moreover, by reducing delays at the airfield which shift some flights into the nighttime hours, the Preferred Alternative would also yield an 8 percent reduction in total effective jet operations. Peak Period Pricing (Alternative 1) would provide a slight additional reduction in total effective jet operations by canceling a few regional jet flights, but by itself (Alternatives 2/3) would not permit any relief to the northern and southern communities.

Tables 4.7-5 and 4.7-6 compare the effective jet utilization of the four Airside Improvement alternatives with 1998 actual use and with the PRAS annual goals, while Figure 4.7-6 presents the 37.5M High RJ runway end use graphically. The Preferred Alternative offers a dramatic improvement in overall annual PRAS goal achievement. The PRAS Performance Index (PPI) described previously in this chapter shows that the Preferred Alternative improves PRAS conformance by a factor of 2.7 (see Table 4.7-7).

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7 Effective jet utilization excludes non-jet operations and weights nighttime jet operations, operated from 10:00 PM to 7:00 AM, by a factor of 10.

Table 4.7-5
Effective Arrivals and PRAS Goals by Runway End

Runway End and Improvement Concept	Percent Effective Arrivals 1998 Historic	Percent Effective Arrivals 2015 High RJ
Runway 4L/R		
PRAS Goal	**21.1**	**21.1**
Alternative 1 - All Actions	--	33.5
Preferred Alternative - All Except Peak Period Pricing	--	34.4
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	44.6
Alternative 4 - No Action	36.7	44.7
Runway 15L/R		
PRAS GOAL	**8.4**	**8.4**
Alternative 1 - All Actions	--	2.2
Preferred Alternative - All Except Peak Period Pricing	--	1.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	0.6
Alternative 4 - No Action	1.2	0.6
Runway 22L/R		
PRAS Goal	**6.5**	**6.5**
Alternative 1 - All Actions	--	17.3
Preferred Alternative - All Except Peak Period Pricing	--	19.6
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	26.0
Alternative 4 - No Action	11.9	26.7
Runway 27		
PRAS Goal	**21.7**	**21.7**
Alternative 1 - All Actions	--	8.9
Preferred Alternative - All Except Peak Period Pricing	--	7.2
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	13.0
Alternative 4 - No Action	21.7	12.3
Runways 33L and 32		
PRAS Goal	**42.3**	**42.3**
Alternative 1 – All Actions	--	38.1
Preferred Alternative - All Except Peak Period Pricing	--	37.0
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	15.7
Alternative 4 – No Action	28.6	15.5

Table 4.7-6
Effective Departures and PRAS Goals by Runway End

Runway End and Improvement Concept	Percent Effective Departures 1998 Historic	Percent Effective Departures 2015 High RJ
Runway 4:/R		
PRAS Goal	**5.6**	**5.6**
Alternative 1 - All Actions	--	6.8
Preferred Alternative - All Except Peak Period Pricing	--	5.5
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	7.9
Alternative 4 - No Action	6.6	5.6
Runway 15L/R and 14		
PRAS Goal	**23.3**	**23.3**
Alternative 1 - All Actions	--	9.7
Preferred Alternative - All Except Peak Period Pricing	--	8.6
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	7.4
Alternative 4 - No Action	10.9	6.6
Runway 22L/R		
PRAS Goal	**28.0**	**28.0**
Alternative 1 - All Actions	--	22.7
Preferred Alternative - All Except Peak Period Pricing	--	23.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	38.7
Alternative 4 - No Action	30.9	38.9
Runway 27		
PRAS Goal	**17.9**	**17.9**
Alternative 1 - All Actions	--	20.5
Preferred Alternative - All Except Peak Period Pricing	--	20.7
Alternative 2/3 - All Except Runway 14/32 and No Build	--	6.6
Alternative 4 - No Action	16.6	7.1
Runway 33L		
PRAS Goal	**11.9**	**11.9**
Alternative 1 - All Actions	--	12.1
Preferred Alternative - All Except Peak Period Pricing	--	11.2
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	3.0
Alternative 4 - No Action	5.2	3.0
Runway 9		
PRAS Goal	**13.3**	**13.3**
Alternative 1 - All Actions	--	28.4
Preferred Alternative - All Except Peak Period Pricing	--	30.2
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	36.6
Alternative 4 - No Action	29.9	38.8

Figure 4.7-6
Runway Utilization and PRAS Goals -- 2010 37.5M High RJ (585,000 Operations)
Percent of Equivalent Operations by Runway

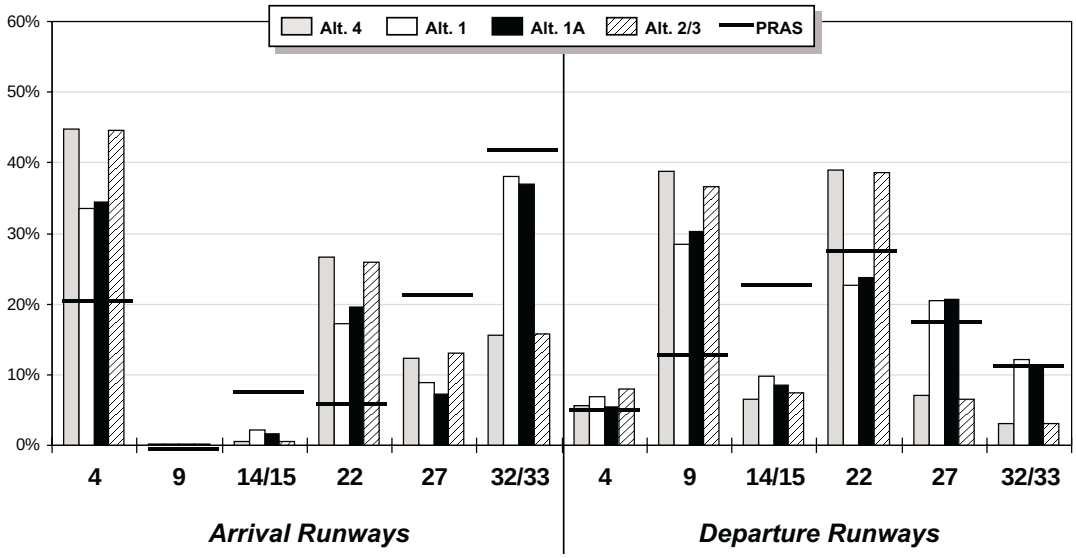


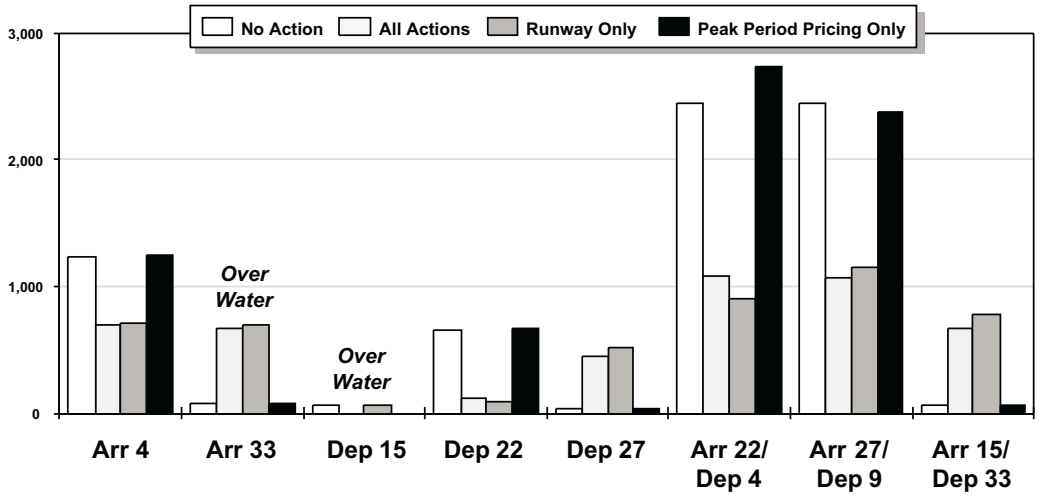
Table 4.7-7
Achievement of Annual PRAS Runway Use Goals

	PRAS Performance Index	
	1998	2015
Improvement Concept	Historic	High RJ
Perfect PRAS Compliance	0	0
Alternative 1 -- All Improvements		943
Preferred Alternative - All Except Peak Period Pricing		1,160
Alternative 2/3 – All Except Runway 14/32		2,893
Alternative 4 – No Action	997	3,078

4.7.4.2 Dwell and Persistence

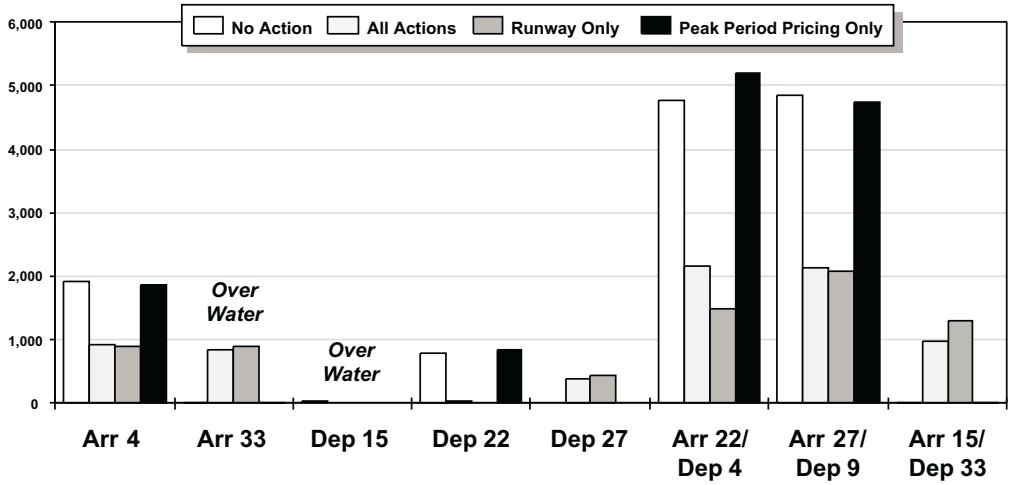
Figure 4.7-7 presents the annual hours of dwell exceedence for the High RJ scenario by runway end for each improvement alternative. The addition of Runway 14/32 and the reduced minimums of the Preferred Alternative result in substantial short-term noise benefits, with 30 percent fewer total hours of dwell over populated areas. Peak period pricing, either alone or with the runway, does not produce any significant changes in dwell. With the runway, communities to the north (A22/D4 and A27/D9) and south (A4 and D22) experience substantial short-term noise relief, while the overwater zones (A33/32 and D15/14) receive more dwell. Dwell also increases for populated areas to the west (D27), but those communities still receive less impact than the north and south populations, and total exposure is reduced.

Figure 4.7-7
Dwell Exceedence by Noise Area – 2010 37.5M High RJ Fleet
Annual Hours of Dwell Exceedence



The annual hours of persistence exceedence are presented in Figure 4.7-8 by runway end and alternative. The results are generally consistent with those for dwell, but the magnitude of the benefits are even greater. The Preferred Alternative reduces total persistence exceedence by 42 percent, or 49 percent if overwater areas are excluded. Peak period pricing actually increases the persistence exceedence slightly. Although communities to the west receive a moderate increase in persistence exceedence with the Preferred Alternative, the level is far less than that suffered by the north or south communities.

Figure 4.7-8
Persistence Exceedence by Noise Area – 2010 37.5M High RJ Fleet
Annual Hours of Persistence Exceedence



4.7.5 Sensitivity to Regional Jet Runway Use

The 37.5M High RJ Fleet scenario was developed to assess the potential impact of regional jet aircraft on the future utility of the proposed Runway 14/32. The regional jets in this scenario comprise nearly one-third of the total flight operations. Of these, 55 percent are by Embraer models (ERJ), 24 percent by Dornier/Fairchild models (DRJ), and 21 percent by Canadair models (CRJ). A key factor in the operational evaluation was the ability of these new regional jets to land on a 5,000 foot runway. The airframe manufacturers specifications and the FAA type certifications indicate that the regional jets produced by all three makers are capable of landing in less than 5,000 feet over a 50-foot obstacle when the aircraft is at maximum gross weight, the runway is dry, there is no wind, and the temperature is below 60 degrees Fahrenheit. However, the conditions of each flight operation are different, and a fully loaded CRJ, for example, would not be able to land on 5,000 feet on a warm rainy summer day. On the other hand, few regional flights operate at maximum gross weight, and normally when Runway 32 is in use northwest winds will provide a headwind that can substantially reduce landing distances. Moreover, there is no obstacle on the approach end of Runway 32, and the length of the runway plus the safety areas on both ends add up to 7,000 feet of paved surface. When long delays exist on Runway 33L under strong northwest wind conditions, it is unlikely that many would reject the option of a perfectly safe and legal landing on Runway 32, particularly as they gain familiarity with the new runway.

The assumptions for regional jet use of Runway 32 were based on the analysis conducted by FAA's consultant that DRJs would use it under wet or dry conditions, ERJs would accept it under dry conditions, and CRJs would refuse it. (See Appendix C). This policy resulted in a 29 percent reduction in runway delays for the Preferred Alternative compared to the No-Action Alternative. To assess the sensitivity of delays to the possible regional jet utilization of Runway 32, two other cases were modeled. One extreme was to assume all

regional jets could and would use Runway 32 under all conditions. The other was to assume that only the DRJs would use the new runway. The results of the sensitivity analysis are presented in Table 4.7-8. Under the most optimistic assumption—that all regional jets use the runway—the incremental delay savings are 9,500 hours or just 2.6 percent more than the nominal 29 percent. The very pessimistic assumption that only the DRJs use Runway 32 still saves 76,400 hours of delay per year, or 21 percent less than would occur under the No Action scenario. The conclusion of the sensitivity analysis is that, depending on the regional jet use, Runway 14/32 will save between 76,000 and 118,000 hours of delay per year, with the best estimate being about 108,000 hours.

Table 4.7-8
Sensitivity of Delays to Regional Jet Use of Runway 32

	Runway 32 Assignment						Annual	Percent
	Dormier		Embraer		Canadair		Delay Hours	Delay
Alternative	Dry	Wet	Dry	Wet	Dry	Wet	Saved	Savings
No Action Alternative (Alt. 4)							N/A	
Preferred Alternative (Alt. 1A)								
Nominal (Base Case)	X	X	X				108,100	29.0%
High	X	X	X	X	X	X	117,600	31.6%
Low	X	X					76,400	20.5%

4.7.6 Northwest Wind Restriction on Use of Runway 32

One of the issues raised in the SDEIS Panel Process was the possibility of restricting the availability and use of Runway 32 to northwest wind conditions only. This concept was conceived as a potential limit on the increase in the number and proportion of jet departures on Runway 27 that was predicted to occur with construction of Runway 14/32. Runway 27 is the principal departure runway used in combination with arrivals on Runways 33 and 32 in the new three-runway configuration that would become available with construction of unidirectional Runway 14/32. With the proposed runway, Logan would have three-runway configurations available in three distinct operating directions: to the northeast using Runways 4L/4R and 9, to the southwest using Runways 22L/22R and 27, and to the northwest using Runways 33/32 and 27.[8]

Currently, when wind conditions require air traffic control to route aircraft on a northwesterly heading, available airfield capacity declines sharply from Logan's normal three-runway capacity down to the capacity of two, and sometimes just one runway. As described throughout this report, the construction of Runway 14/32 would prevent this

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8 Construction of the proposed new runway would also create a fourth three-runway configuration—Runways 15/14/ and 9—in a southeast alignment. However, this configuration would have limited arrival capacity.

substantial decline in airfield capacity, and the resulting aircraft delay that now occurs under these conditions.

The increased usage of Runway 27 projected in the airfield simulation modeling reflects the availability of this new three-runway configuration in the northwest direction. This configuration would not only allow controllers to nearly eliminate northwest wind delays at Logan, but would also enable air traffic control to more evenly distribute aircraft overflights across three different operating directions during periods of high demand. As discussed previously in this chapter, this flexibility leads to a significant improvement in the ability of air traffic control to achieve the Preferential Runway Assignment System (PRAS) goals and provides relief to residents of communities impacted by use of the existing north and south runway configurations.

The full analysis of the proposed northwest wind restriction on Runway 32 is presented in Appendix D of this Supplemental DEIS/FEIR. Major findings are summarized below.

4.7.6.1 Summary of Results for a Northwest Wind Restriction on Runway 32

A northwest wind restriction would sacrifice a portion of the delay reduction benefits that could be realized through unrestricted usage of unidirectional Runway 14/32. Even at the least severe 5-knot wind restriction, Logan would experience 17,000 more hours of annual aircraft delay under the 37.5M High RJ Fleet scenario than it would with an unrestricted runway. As the wind speed criterion is increased, further limiting the circumstances in which Runway 14/32 could be used, the delay benefits of the proposed runway are progressively eroded.

The proposed restriction does limit the increase in jet departures off Runway 27 that results from its use in combination with Runways 33L and 32. With a 5-knot northwest wind restriction, usage of Runway 27 declines from 29 percent to 18 percent of total Logan jet departures.

However, the decreased usage of Runway 27 corresponds with other, less desirable changes in runway utilization at Logan. Restrictions on the use of Runway 32 would limit the number of aircraft using over-the-water routings to Runways 32 and 33L. The proposed restriction also sacrifices potential relief to residents of communities impacted by the prevailing north/south runway configurations at Logan.

Restricting the use of Runway 32 would reduce the ability of air traffic controllers to achieve the PRAS goals, including the annual runway use goals and the short-term goals designed to limit dwell and persistence of overflights impacting individual communities.

A wind restriction on the use of Runway 32 would increase the number of people exposed to the highest noise levels above 70 DNL (compared to an unrestricted runway). However, the restriction would at the same time lower the population exposed to noise levels greater than 65 DNL. These impacts occur due to changes in runway utilization patterns that result from restricting the use of Runway 32.

4.8 Conclusion

Logan is currently the sixth most delayed airport in the United States, and experienced approximately 142,000 hours of total aircraft delay in 1998. If no improvements are made at Logan, continuing growth in demand for air transportation services will be accompanied by a significant increase in delays. Conversely, the Preferred Alternative represents an effective means to minimize the growth in delays, enhance safety, allow for better achievement of PRAS goals, and increase the number of flights over water.

The delay reduction benefits attributable to the various Airside Project Alternatives were assessed against a range of potential future fleet scenarios. This analytic approach provides an understanding of the circumstances under which individual improvement concepts are most effective, and how their contribution may vary according to future operating conditions at Logan. The analysis demonstrated that Alternatives that include Runway 14/32 provide a significant reduction in delay in both the near- and longer-term operating environment at Logan. Delay reduction benefits associated with the Preferred Alternative range from 21 percent (or 28,000 annual hours) under the 29M Low Fleet, to 29 percent (or 109,000 hours) under the 37.5 M High Fleet scenario. The greatest benefits occur during VFR weather conditions when the availability of Runway 14/32 would reduce future delays by approximately 50 percent or more.

Unidirectional Runway 14/32 reduces delays by enabling Logan to maintain its normal three-runway capacity when wind conditions require operations in the northwest direction. Since operations in turboprops have declined and regional jets have entered the fleet, commenters questioned the utility of the proposed runway. Even though the unidirectional Runway 14/32 is only 5,000 feet long, the FAA consultant evaluated the probable utilization by regional jets and found that the runway length would be acceptable for most future RJ's at Logan.

Runway 14/32 would be permitted and operated as a unidirectional runway, with all arrivals and departures occurring over Boston Harbor. As a result, 52,000 jet flights, or 17 percent of total jet operations for the 29M Low Fleet, would shift from flight paths over communities to flight paths over the water. By establishing an additional three-runway configuration at Logan, Runway 14/32 would provide greater flexibility in runway selection. This increased flexibility will permit a substantial improvement in the achievement of the annual PRAS runway use goals, designed to produce an equitable distribution of impacts across surrounding communities.

Incorporating a northwest wind restriction on Runway 32 would limit the increase in jet departures on Runway 27 that results from the availability of an additional three-runway configuration at Logan. However, this restriction would sacrifice a portion of the delay reduction benefits provided by the runway, and would also limit the relief provided to communities affected by the north/south runways which are already the most heavily utilized at Logan.

The Centerfield Taxiway and other proposed taxiway improvements provide consistent delay reduction benefits across future fleet scenarios by increasing the efficiency of Logan's taxiway system and reducing aircraft taxi delays by 47 percent with the 29M Low Fleet and 26 percent with the 37 M High Fleet (Alternative 2 vs. Alternative 3). The runway and taxiway improvements also enhance operational safety at Logan by reducing congestion on the ground and lowering the potential for runway incursions or wingtip conflicts.

Reduced minimums provide some delay reduction benefits and enhance safety by increasing runway availability options in Instrument Flight Rules (IFR). Reducing minimums do not change the flight path of arriving flights, but move the decision point for missed approaches closer to the airport, or over the airport. Reducing minimums will permit pilots to operate on optimal runways during crosswind conditions. While reduced minimums result in a modest annual delay reduction benefit, they are particularly effective during IFR weather conditions.

Peak Period Pricing is designed to reduce delays resulting from airline overscheduling which occurs when flight demand exceeds Logan's normal VFR capacity. Current and expected near-term demand patterns at Logan do not exhibit an overscheduling condition. In this environment, Peak Period Pricing would produce marginal delay reduction benefits while imposing heavy economic costs on regional carriers and small communities.

The illustrative Peak Period Pricing program with a $150 surcharge was ineffective at reducing delays under the 37.5M High RJ Fleet scenario. A higher peak fee would be required to provide meaningful delay reduction under this fleet scenario, principally due to the higher revenue and profitability of regional jet services as compared with non-jets. An effective Peak Period Pricing program that eliminates overscheduling in the High RJ Fleet was projected to reduce runway delays by approximately 68,000 annual hours or 18 percent (Alternative 2/3). While not recommending Peak Period Pricing for current implementation at Logan, Massport is establishing a schedule monitoring system to determine if and when to initiate curative action, which would lead to the implementation of Peak Period Pricing if necessary. As a first step in its curative action plan, Massport will initiate collaborative discussions with individual Logan carriers aimed at improving scheduling efficiency at Logan and postponing or eliminating the potential future emergence of airline overscheduling conditions. Massport is also anticipating guidance from the FAA as to key elements of a Peak Period Pricing program as the FAA addresses this issue at LaGuardia over the next several months.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston Logan International Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

Volume 2

5 Affected Environment

Key Points

In the Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report (Airside Project Draft EIS/EIR), Chapter 5 presented an overview of the baseline environmental conditions within the airport and surrounding communities. In this chapter of the Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report (Supplemental DEIS/ FEIR), the analysis of baseline conditions was expanded to include analyses of the current environmental conditions that were presented in the *1998 Annual Update*.[1] This chapter also includes a description of historic properties and parklands within the Project impact area (this material was previously contained in Chapter 8 of the Airside Project Draft EIS/EIR) to support the analysis of potential impacts under Section 4(f) of the Department of Transportation Act, and under Section 106 of the National Historic Preservation Act of 1966, as amended.

This Supplemental DEIS/FEIR adds to the analysis included in the Airside Project Draft EIS/EIR by including 1998 Existing Conditions in comparison to 1993 Historic Modeled Conditions. The 1998 Existing Conditions are based on the findings of the *Logan Airport 1998 Annual Update*[2] to the *Logan Airport 1994/1995 Generic Environmental Impact Report* (GEIR)[3].

Noise

- Winthrop and East Boston are most affected by noise exposure from Logan operations, with significant numbers of residents experiencing noise greater than 70 decibel (dB) Day-Night Sound Level (DNL), and some experiencing it at levels above 75 dB DNL. South Boston and Revere are generally next most affected. Exposures at these highest noise levels support the continuing need to improve compliance with PRAS goals that attempt to reduce exposure in the most highly exposed areas without significantly increasing the exposure above 65 dB DNL in other areas.

- Nighttime noise levels determined from Time-Above calculations for both the 1993 modeled historic and the 1998 actual operations indicate that the most affected areas are Loring Road near Court, Somerset and Johnson, and Bay View

1 *Boston Logan International Airport, 1998 Annual Update,* October ,1999.
2 *Ibid*.
3 The Logan Airport Generic Environmental Impact Report is now known as the Environmental Status and Planning Report (ESPR). The 1999 ESPR was filed with the Executive Office of Environmental Affairs, MEPA Office on December 15, 2000.

and Grand View, all in Winthrop, and Bayswater and Nancia Roads and the East Boston Yacht Club in East Boston. These same sites also experience some of the highest DNL values of any locations around Logan.

- When comparing the noise-exposed population within the 65 dB DNL noise contours for the 1993 and 1998 scenarios, overall the 1993 historic modeled scenario includes approximately 34,400 people, while the 1998 actual condition includes 23,300 people. Almost all of this difference occurs northwest of Logan in East Boston and Chelsea. It is attributable to a variety of factors including 1993s use of 10 years of weather data and modeled, rather than actual, air traffic conditions, and a higher percentage of Stage 3 compliant aircraft.

- Noise exposure from aircraft taxi operations is significantly less than that for in-flight operations, especially during conditions of average sound propagation. However, for maximum propagation the ground taxi DNL is close enough to that for in-flight noise that it can add 1 to 2 dB to the closest receptors. The highest ground taxi noise appears to be at the three receptors around the northeast corner of the airport which are exposed to the noise from aircraft taxiing to take off on Runways 22L and 22R and to return to the terminals after landing on 4L and 4R. The areas are: Loring Road near Court, Winthrop, and Bayswater and Shawsheen Roads and the East Boston Yacht Club, both in East Boston.

Air Quality/Odors

- Measured air quality at Logan is within national and state ambient air quality standards. The Boston metropolitan area has experienced past violations that caused this area to be designated nonattainment for ozone.

- As documented in the *1998 Annual Update* ground service equipment (GSE) constitute the largest source of carbon monoxide (CO) emissions, representing over 43 percent of the Logan total. However, Massport and several major air carriers at Logan are undertaking programs to convert GSE to alternative fuels where feasible. Aircraft closely follow at approximately 42 percent. Airport-related motor vehicles are the third largest source, and other sources have a nearly negligible contribution.

- As in the 1993 historic modeled inventory, in 1998 aircraft emitted the largest portion (80 percent) of oxides of nitrogen (NOx). GSE are responsible for about 10 percent, while motor vehicles and other sources each emit almost 5 percent of the total.

- In 1998, volatile organic compounds (VOCs) emitted by aircraft constitute around 58 percent of the total, followed by GSE at roughly 18 percent. The remainder is divided between motor vehicles (11 percent) and other sources (13 percent).

Drainage and Water Quality

- The Preferred Alternative would be constructed in an area served by an existing stormwater collection and treatment system. Existing airfield stormwater runoff was found to be generally uncontaminated.

Soils

- The Airside Project Draft EIS/EIR identified a potential need to remove up to approximately 240,000 cubic yards of soil material stockpiled on Governors Island for construction of proposed Runway 14/32 (Alternatives 1 and 1A). Since circulation of the Airside Project Draft EIS/EIR, portions of the Governors Island soil stockpile were moved to the Town of Middleton's landfill, in response to a request from the court-appointed receiver for the landfill closure. As a result, there no longer will be a need to remove any of the Governors Island soil stockpile for construction of Runway 14/32.

- Other soil materials which may need to be excavated for taxiway and runway construction can be handled with conventional soil management procedures.

Habitat

- The Preferred Alternative is located in upland areas of the airfield which are generally vegetated by common grassland species. No portion of the Project is proposed within wetland resource areas.

Endangered and Threatened Species

- The upland sandpiper, a State-listed endangered species, has been observed on portions of the airfield to be used for the Preferred Alternative.

Coastal Zone Management Consistency

- In accordance with state and federal regulations, construction projects within the Coastal Zone must be consistent with the policies and principles established for these areas by the Massachusetts Office of Coastal Zone Management (MCZM). Discussion of the consistency criteria is included in Chapter 6, Environmental Consequences.

Parklands and Historic Resources

- Cultural resources including historic resources and parklands which are regulated under Section 4(f) of the Department of Transportation Act, the National Historic Preservation Act ("Section 106"), and by state regulations concerning historic properties are not impacted by the Preferred Alternative. As specified in the May 7, 1999 EOEA Certificate, parklands addressed include the Boston Harbor Islands, Arnold Arboretum, Franklin Park, and the Emerald Necklace.

Other

- The Preferred Alternative is located on an existing airfield and does not alter existing land use patterns. Likewise, the Preferred Alternative will not affect light emissions, floodplain, wild and scenic rivers, economic issues, farmland, energy supply, design and architecture or energy supply.

5.1 Introduction

The Federal Aviation Administration (FAA) directive[4] which implements the National Environmental Policy Act (NEPA) identifies categories of impact that are typically analyzed in an Environmental Impact Statement (EIS). The directive also indicates that analyses should be focused on areas in which impacts are likely, rather than areas where no impact or nominal impact is anticipated. Similarly, the Massachusetts Environmental Policy Act (MEPA) scope for the Logan Airside Improvements Planning Project (Airside Project) also focuses the environmental analysis on specific areas of potential impact. Chapter 5 describes environmental resources that may be affected by the Airside Project alternatives under consideration. Chapter 6, Environmental Consequences, presents an assessment of impacts of the Airside Project alternatives for both the construction and operations phases, while potential cumulative impacts are evaluated in Chapter 7.

5.1.1 Supplemental DEIS/FEIR Studies and Analyses

Additional studies and analyses conducted for this chapter of the Supplemental DEIS/FEIR are summarized below:

- This chapter describes noise conditions in the vicinity of Logan. It differs from the Airside Project Draft EIS/EIR in that it reports on the noise from a new operational scenario, the actual activity occurring in 1998 (as reported in the *Logan Airport 1998 Annual Update).*

- The noise analysis contains additional data in response to the Secretary of Environmental Affairs (EOEA) May 7, 1999 Certificate which requested Massport to extend the outer limits of its DNL and population analyses to the 60 dB DNL contour.

- A broader description is provided of cultural resources including historic resources and parklands which are regulated under Section 4(f) of the Department of Transportation Act, the National Historic Preservation Act ("Section 106"), and by state regulations concerning historic properties. As specified in the EOEA Certificate, parklands addressed include the Boston Harbor Islands, Arnold Arboretum, Franklin Park, and the Emerald Necklace.

[4] *FAA Environmental Handbook*, Order 5050.4A, October 8, 1985.

5.1.2 Affected Resources

As outlined in the EOEA Certificate[5] on the Airside Improvements Planning Project (Airside Project) Draft EIS/EIR, this Supplemental DEIS/FEIR is required to address the following categories of operational impacts: noise, air quality, and odor. This Supplemental DEIS/FEIR addresses those categories of operational impacts and also addresses impacts of more limited duration associated with construction of the alternatives, such as construction traffic. On-airport issues to be addressed by this Supplemental DEIS/FEIR consist of wetlands and vegetation, wildlife, water quality, soils management and relocation impacts to the South Cargo area of the airport. During the construction period, airport operations may also be affected. Background information provided in this chapter is used for detailed analysis of potential impacts presented in Chapter 6, Environmental Consequences, and summarized in Chapter 8, Preferred Alternative and Mitigation.

Due to the nature and location of the proposed Airside Project alternatives, there are several categories of resources that will not receive impacts, or would receive insignificant impacts. These are farmland, floodplains, wild and scenic rivers, light emissions and energy supply. There are no parklands, cultural resources, farmlands, or wild and scenic rivers on the airfield site; and no construction would occur in regulated floodplain areas. The lighting for proposed Runway 14/32 will be low to the ground and will be placed in accordance with FAA regulations for spacing and intensity. Therefore light emissions were not considered to have potential to create annoyance. Energy demands of the various alternatives would be within the capacity of available energy supply.

Categories in which impacts may potentially result have been identified for the Airside Project, and are discussed in the following sections.

5.1.3 Study Area

Logan Airport occupies approximately 2,400 acres, 700 acres of which are water, within the boundaries of the East Boston district of the City of Boston, Massachusetts and the Town of Winthrop, Massachusetts. The airport is surrounded by Boston Harbor on the east and south and on much of the north side as well. The East Boston neighborhoods of Jeffries Point, Eagle Hill, Harborview, and Orient Heights are west and northwest of the airport. The Town of Winthrop is east and northeast of the airport, separated by the waters of Boston Harbor. The Downtown Boston Central Business District is located to the west, and South Boston is located to the southwest across the Inner Harbor. (See Figure 5.1-1.)

[5] Secretary of the Executive Office of Environmental Affairs' on the Airside Improvements Planning Project Draft EIS/EIR, May 7, 1999. (See Responses to Comments, Volume 4).

The proposed Airside Project improvements are located on the existing airfield and do not alter existing land use patterns within the adjacent communities. Under FAA NEPA guidelines, the compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of noise impacts related to that airport. Land use ramifications are also evaluated concurrently with respect to other impact categories, such as wetlands, critical habitat of endangered and threatened species, or the disruption or relocation of communities.

In order to address both the broad concerns of surrounding communities and on-site issues, two study areas have been delineated: one which includes communities impacted by airport noise, as directed by FAA guidelines, and a second which consists of the Logan airfield.

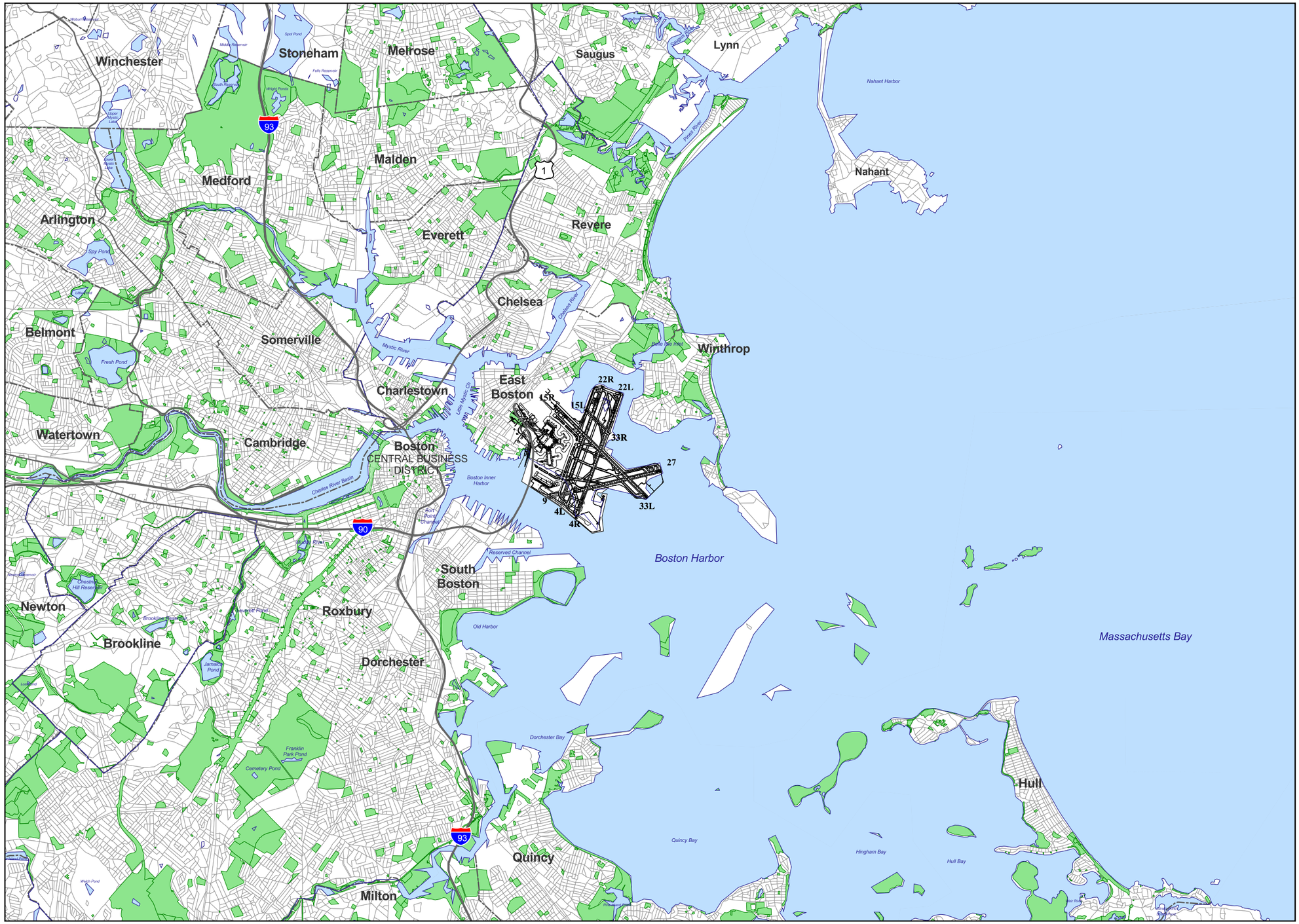
5.1.1.1 Community Study Area

The community study area includes those areas within the 60 dB DNL noise exposure contour for airport-generated noise. While both the Department of Housing and Urban Development (HUD) and the FAA define an annual average DNL of 65 dB as the threshold of noise compatibility with residential land uses, this study contains additional data in response to the May 7, 1999 EOEA Certificate which requested Massport to extend the outer limits of its DNL and population analyses to the 60 dB DNL contour. Additionally, since there are adverse impacts foreseen within the 65 dB DNL noise contour area, FAA procedures call for a general characterization of land uses within the 60 dB DNL contour area.

Logan Airport's noise contours are produced using an FAA-approved computer program known as the Integrated Noise Model, or INM. The INM requires detailed operational information including factors such as:

- The physical runway configuration, the numbers and types of aircraft using the airport,
- Whether the flights occur during the day or night, and
- How often they use each runway, and which flight paths they follow.

Each of these affects the noise exposure in surrounding neighborhoods. (See Section 5.2 for a more detailed discussion of the noise analysis.) The geographic area of the 60 dB DNL or greater contours changes depending on the year's activity and the operational scenarios being evaluated, but it generally includes the communities of Boston (including downtown Boston, East Boston, South Boston, Dorchester, Roxbury, and the South End), Winthrop, Chelsea, Revere, and Everett.



Legend

- Open Space
- Census Block Boundaries

N

0 0.5 1 1.5 Miles

massport

Figure 5.1-1

Boston-Logan International Airport and Surrounding Communities

Source: Harris Miller Miller & Hanson

5.1.1.2 Logan Airfield Study Area

The boundaries of the Airfield study area are shown in Figure 5.1-2. The study area encompasses all airport taxiways and runways as well as the South Cargo Area. Also shown for locational context are nearby airport facilities such as passenger terminals, cargo handling areas, and other facilities. Additional descriptions of the airfield site characteristics are provided in Section 5.5 – Biotic Communities and 5.7 - Soils/Sediment Characterization.

5.1.1.3 Base Year Analysis

This Supplemental DEIS/FEIR includes updated operational and environmental analyses of 1998 conditions consistent with those contained in the *Logan Airport 1998 Annual Update.*[6] While the *Logan Airport 1999 Environmental Status and Planning Report*[7] published in December 2000 includes updated analyses for 1999, the differences between the two study years are small. Between 1998 and 1999, operations declined by 2.5 percent, primarily due to a decline in regional carrier operations.[8] The fleet mix and runway use varied little, the shape of the noise contours and the population impacts, and the air quality and other environmental analyses also yielded similar results.[9] Since the relevant comparison for evaluating the proposed Airside Project improvements is the comparison between the No Action and Preferred Alternatives, and since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS/FEIR uses the 1998 modeling analysis as a representation of recent conditions at Logan.

5.2 Noise

Chapter 5 of the Airside Project Draft EIS/EIR presented a detailed assessment of the noise-affected environment around Logan using 1993 as the study year. Both flight and ground operations were modeled in detail and exposures were described using a variety of noise metrics. Chapter 5 of this Supplemental DEIS/FEIR introduces 1998 to describe the affected environment. This new scenario serves to update the Airside Project Draft EIS/EIR by presenting actual noise exposure data for 1998. The information is taken primarily from the *Logan Airport 1998 Annual Update,* a document published annually by Massport in compliance with requirements of the Massachusetts Environmental Policy Act.

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6 *Logan Airport 1998 Annual Update*, October 15, 1999
7 *Logan Airport 1999 Environmental Status and Planning Report*, December 15, 2000.
8 A more detailed comparison of the change between 1998 and 1999 passengers and operations is included in Chapter 2 of the ESPR.
9 The ESPR compares all of the 1998 and 1999 analyses and discusses the differences in detail.

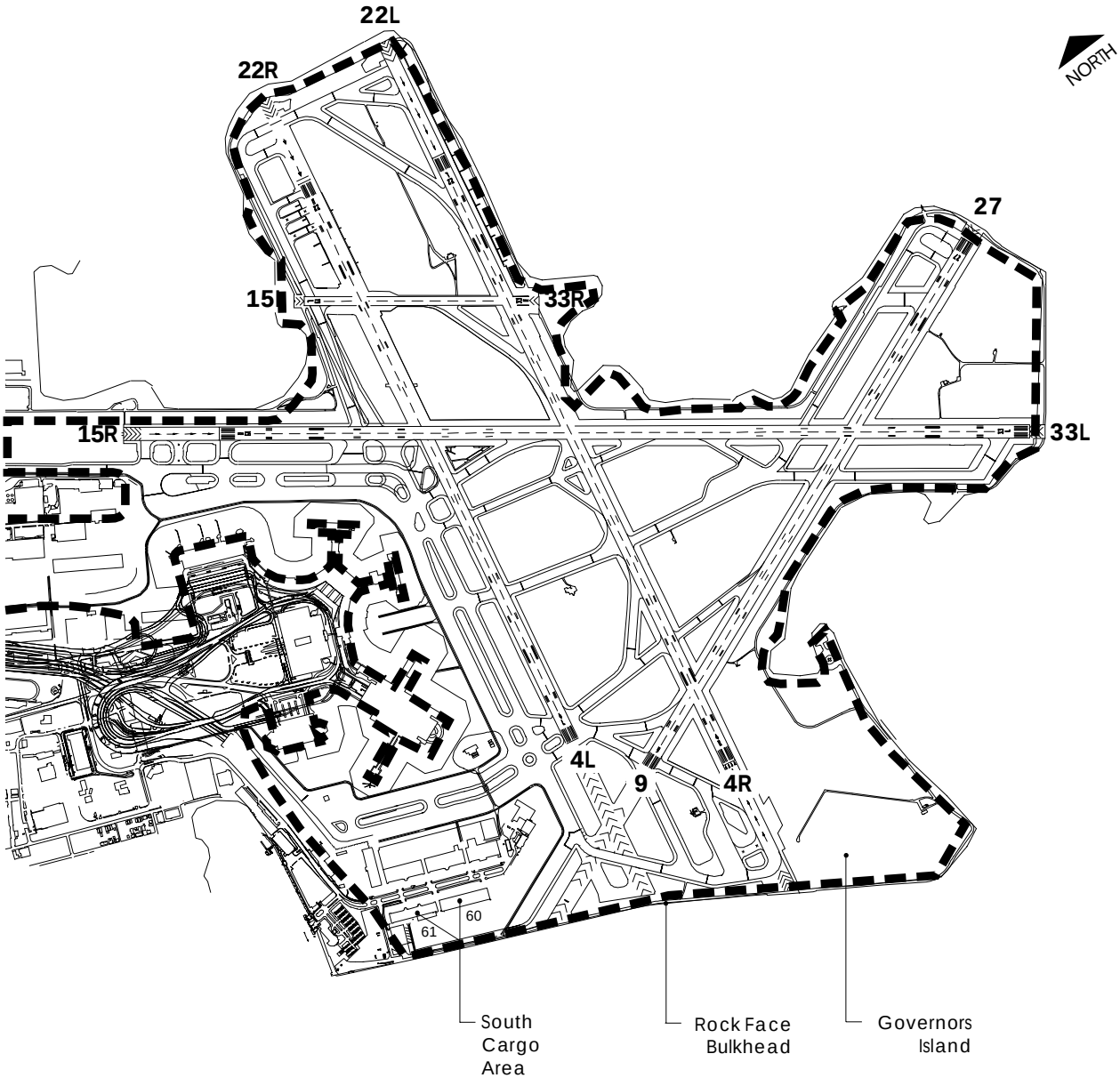

Figure 5.1-2
Airfield Study Area

7466-FIG-5.1-2.p65

This Supplemental DEIS/FEIR includes updated operational and environmental analyses of 1998 conditions similar to that contained in the Logan Airport *1998 Annual Update* prepared in October 1999. While the *1999 Environmental Status and Planning Report* published in December 2000 includes updated analyses for 1999, the differences between the two study years are small. Between 1998 and 1999, operations declined by 2.5 percent, primarily due to a decline in regional carrier operations.[10] Since the fleet mix and runway use varied little, the shape of the noise contours and the population impacts were also similar, with slightly less impact in Winthrop and Boston and slightly more impact in Chelsea and Revere in 1999 compared to 1998.[11] The air quality and other environmental analyses also yielded similar results.[12] Since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS/FEIR includes the 1998 modeling analysis as a representation of recent conditions at Logan.

Later in this Supplemental DEIS/FEIR, Chapter 6 presents an assessment of the noise impacts of the Preferred Alternative under two future fleet assumptions and compares those results to the No Action Alternative, as well as to 1998.

5.2.1 Noise Metrics

Both the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR depend heavily on the reader's comprehension of common metrics used to evaluate aircraft noise. The two most pertinent to this document are (a) the DNL, and (b) times above designated "threshold" sound levels, commonly referred to as "Time-Above", or TA. Appendix E of this Supplemental DEIS/FEIR provides a summary of noise metrics. The reader is urged to become familiar with the terminology and related background material in order to maximize understanding of the more condensed material presented here.

5.2.2 Modeling Noise of Flight Operations

The following section outlines the FAA's noise modeling tools and their application at Logan.

5.2.2.1 FAA's Integrated Noise Model

The basic tool used to model aircraft flight operations is the Integrated Noise Model, or INM. Developed by the FAA and prescribed on Federally-sponsored projects such as the Airside Project, the INM utilizes airport geometry, descriptions of aircraft operations, and an internal database of noise and performance characteristics to compute the noise of individual flights, adds them together depending on the noise

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10 A more detailed comparison of the change between 1998 and 1999 passengers and operations is included in Chapter 2 of the *1999 ESPR*.

11 A more detailed comparison of the change between 1998 and 1999 noise impacts is included in Chapter 6 of the *1999 ESPR*.

12 The *1999 ESPR* compares all of the 1998 and 1999 analyses and discusses the differences in detail.

metrics of interest, and presents the accumulation as a set of contours and/or noise calculations at specific points.

Detailed operational inputs to the INM fall generally into three categories of information including:

- Daily numbers of daytime and nighttime takeoffs and landings by specific aircraft types,
- Typical flight path and runway geometry, and
- Average statistics on usage of each runway and flight path by various aircraft groups.

Historical data from sources such as Massport's noise monitoring system, which records and saves FAA radar data from Logan's Air Traffic Control Tower, are used to develop descriptions of past noise environments. Predicted aspects of an airport's operations are used to evaluate alternative assumptions regarding growth, future aircraft fleets, shifting of flight paths, new runway and taxiway configurations, delay, noise mitigation measures, and other critical planning efforts.

INM users do not normally alter the model's internal noise and performance databases as a part of the modeling process. However, when there is an identifiable need, the FAA requires that any changes to these databases be approved by them prior to use on any FAA-related project. Database adjustments have been made for the Airside Project. In 1996, Massport applied for and received permission to make adjustments to the INM to better account for Logan's unique location surrounded on nearly all sides by water. The water's surface affects propagation of sound into shorefront neighborhoods and is not normally accounted for in the standard INM algorithms. The FAA-approved adjustments are described briefly in the section that follows. (See Appendix E of this document for the FAA's written authorization to modify the INM model.)

5.2.2.2 INM Version 5.0 Upgrade and Adjustment

In 1995, a comparison of INM Version 5.0 modeled noise results with the measured noise levels obtained from Massport's extensive noise monitoring system indicated that the model accurately predicted the noise from aircraft in flight during takeoff but under-predicted the noise from takeoff ground roll and the approach noise just before landing. Therefore, adjustments to the model were developed for arrival noise below 1,000 feet altitude and for the noise radiated from the aircraft during the ground-roll portion of the takeoff.

Authorization for use of the adjustments at Logan was issued in May 1996 by FAA's Office of Environment and Energy. Subsequent noise analyses have been conducted with the adjustments (See Appendix E). In particular, the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR, as well as the *Logan Airport 1994/95 Generic Environmental Impact Report* (GEIR) and the *1996, 1997,* and *1998 Annual*

Updates, used INM Version 5.0 with the authorized adjustments for their respective noise analyses.

5.2.3 Model Inputs for INM Noise Analyses

Many of the operational inputs used to model noise exposure for 1993 are summarized in Sections 5.2.6, 6.2.1, and Appendix H of the Airside Project Draft EIS/EIR. This section of the Supplemental DEIS/FEIR updates the Airside Project Draft EIS/EIR by summarizing the operations used to model the 1998 exposure levels and draws brief comparisons between the two periods.

5.2.3.1 Fleet Mix and Operations

For purposes of computing 24-hour DNL's, annual aircraft operations at Logan are subdivided into average daily operations by specific aircraft types, and in some cases by engine model as well. Massport's Noise Office compiles these records of commercial jet and turboprop activity from a variety of sources including published schedules in the Official Airline Guide, comprehensive reports provided by carriers and cargo operators as part of their compliance with Massport's Noise Rules, and reports from the two main flight service companies operating at Logan. The data are consolidated into average daily takeoffs and landings for daytime hours (7:00 AM to 10:00 PM) and nighttime hours (10:00 PM to 7:00 AM) – the periods used in DNL calculations – and are sorted into different trip lengths used by the INM to approximate takeoff weights. Radar data are used to determine actual, rather than scheduled arrival and departure times. General aviation operations, were formerly excluded from modeling because of the difficulty identifying aircraft types and because they made only a minor contribution to total traffic at Logan. The operations have been approximated in the Airside Project analyses and are included in the 1998 analyses which use FAA radar data to determine the numbers and times of operations by these specific aircraft types.

Table 5.2-1 summarizes the average daily operations at Logan for 1998. Commercial jet operations are classified by their noise certification level. Noisier "Stage 2" aircraft (such as the older Boeing 727s and 737s, and McDonnell-Douglas DC-9s) meet initial Federal Aviation Regulation (FAR) Part 36 noise limits issued in 1969, but not the more stringent "Stage 3" limits applicable to newer aircraft (such as the Boeing 737-300 and 737-400, the Boeing 757 and 767, McDonnell-Douglas MD-80s, and Airbus A-300s and A-320s). The Stage 3 operations summary includes Stage 2 aircraft that have been retrofitted with hushkits or new engines to meet the Stage 3 criteria. The number of Stage 3 aircraft has increased steadily based on the ongoing replacement of Stage 2 operations by Stage 3 aircraft in the Logan fleet mix. In 1993, 69 percent of the commercial jet operations at Logan were in Stage 3 aircraft; in 1998, that percentage increased to 87 percent. The 87 percent also compares favorably to the 1998 national average of 82 percent, due in large measure to the benefits of Massport's Noise Rules that have resulted in conversion to Stage 3 aircraft faster than federal regulations.

As of January 1, 2000, operators of large jet aircraft (weighing over 75,000 pounds) are required by *The Airport Noise and Capacity Act of 1990* to have 100 percent of their fleets compliant with Part 36 Stage 3 noise limits. The *Logan Airport 1998 Annual Update* estimated the benefit of an all Stage 3 fleet to be on the order of 3 dB.

Table 5.2-1
1998 Modeled Daily Operations

1998 Operations	Stage 2 Jets	Stage 3 Jets	Turboprops	Totals		
	Day/Night	Day/Night	Day/Night	Day	Night	Daily
Commercial	85/6	541/96	553/22	1,179	124	1,303
General Aviation	5/0	31/4	37/16	73	20	93
Total	90/6	572/100	590/38	1,252	144	1,396

Note: "Day" defined as 7:00 AM to 10:00 PM and "Night" defined as 10:00 PM to 7:00 AM, consistent with the definitions used in DNL calculations.
Source: *Boston-Logan International Airport 1998 Annual Update.*

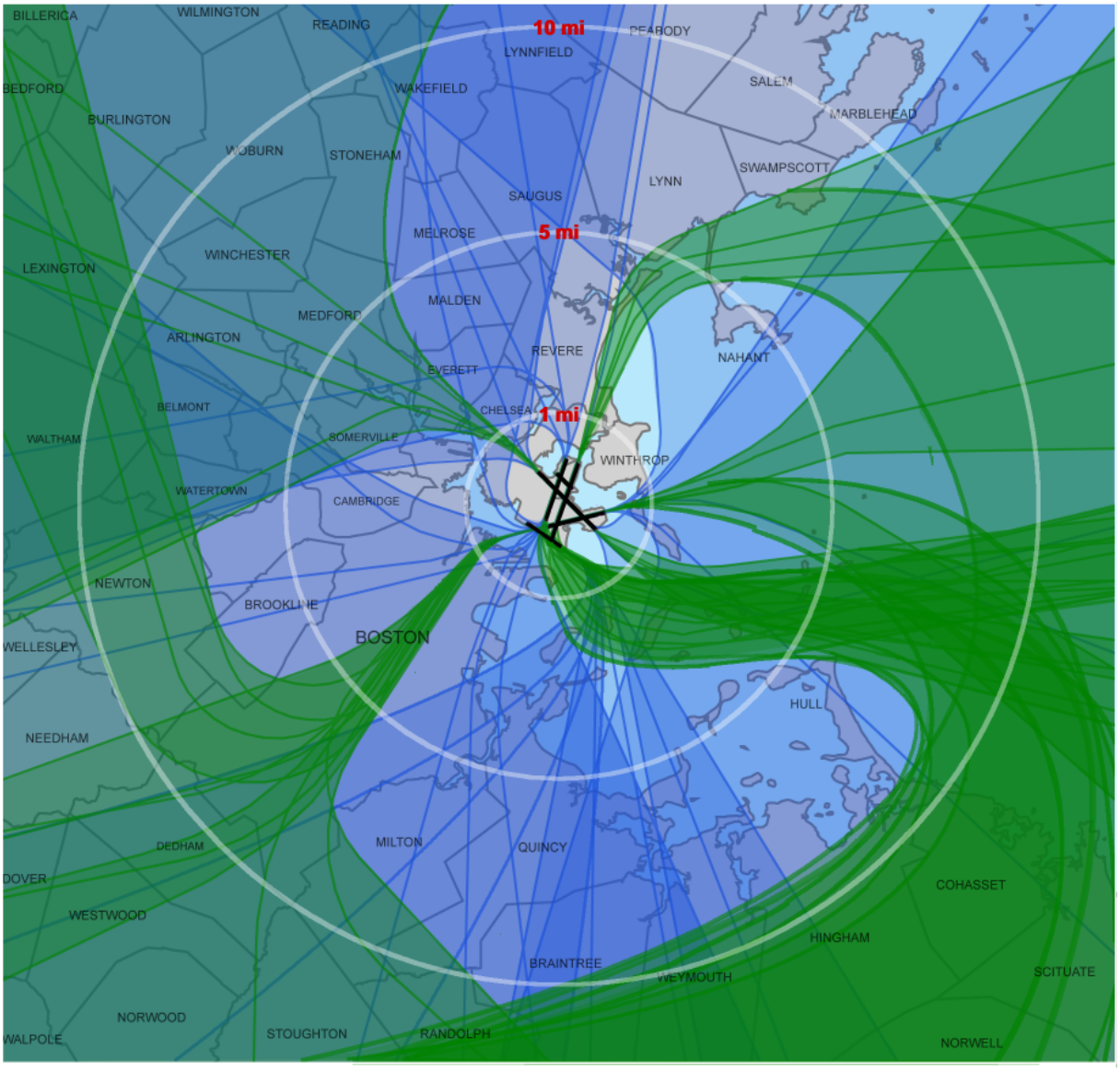
5.2.3.2 Flight Tracks

The flight tracks used in the INM are derived from radar tracks obtained by the Noise Abatement Office at Massport from the FAA's Automatic Radar Terminal System-3 (ARTS) radar at Logan. This radar system obtains the location of each aircraft in the terminal airspace area at intervals of 4 seconds. Massport software is designed to determine the actual tracks and profiles of individual aircraft and to develop tracks for modeling purposes. For example, jet departure operations are typically modeled by a set of five to as many as 15 tracks per runway, while a separate set of three to five tracks per runway is used to model turboprop activity.

The resulting sets of model tracks represent an approximation of the flight corridors that are actually overflown during a year by operations from and to each of the runways. Figure 5.2-1 shows the existing jet and turboprop departure flight tracks. Figure 5.2-2 shows the existing jet and turboprop arrival flight tracks for all runways.

With one exception, the 1998 case uses the same tracks as have been used in each of the scenarios that do not include the new Runway 14/32. The one difference pertains to the departure corridor off Runway 27. For both the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR, modeled tracks were developed based on objectives set forth in the FAA's Record of Decision (ROD)[13] on the Environmental Impact Statement for the new Runway 27 departure procedure. The procedure, itself, had not been implemented at the time these Airside Project analyses were initiated so the track locations had to be estimated. Since that time, the tracks and their usage were based on actual radar data for 1998.

[13] Runway 27 Final Environmental Impact Statement, 1997.



Jet Departures in Green **Turboprop Departures in Blue**

Aircraft Altitude Along the Flight Path (from runway departure)

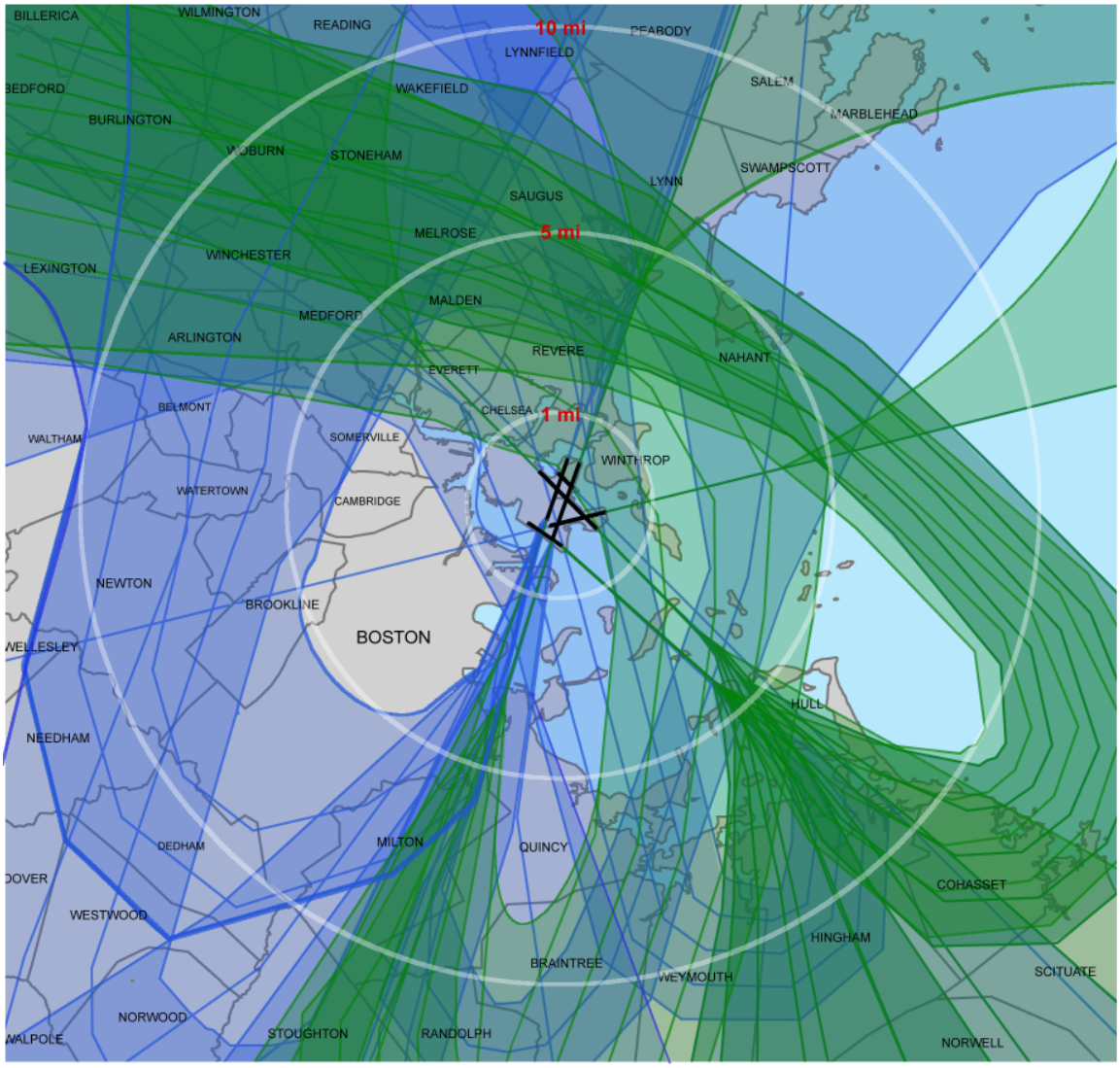
1 Mile from Takeoff= 1,000 ft. or Less 5 Miles from Takeoff = 2,000 ft. or More 10 Miles from Takeoff = 4,000 ft. or More

Notes: Mileage rings are for reference only and do not indicate actual distance along the flight path
Jet departures cross the shoreline of the Southshore at or above 6,000 ft.

Figure 5.2-1

Modeled Departure Flight Tracks for Existing Runway Configurations

7466-FIG-5.2-1.p65



Jet Arrivals in Green **Turboprop Arrivals in Blue**

Aircraft Altitude Along the Flight Path (from runway touchdown)

1 Mile from Touchdown = 500 ft. or Less 5 Miles from Touchdown = 2,000 ft. or Less 10 Miles from Touchdown = 3,000 ft. or Less

Notes: Mileage rings are for reference only and do not indicate actual distance along the flight path
All jet arrivals descend from 11,000 ft. to 6,000 ft. entering final approaching airspace

Figure 5.2-2
Modeled Arrival Flight Tracks for Existing Runway Configurations

7466-FIG-5.2-2.p65

The first full year that the new departure procedure for Runway 27 was in effect was 1997. Analyses performed by Massport and reported on in the *1997 Annual Update* indicated that the flight corridor was not being maintained by the percentage of aircraft required by the FAA's ROD. This resulted in an increase in population impacts within the 65 dB DNL contour for 1997. Data collected and analyzed by Massport for the *1998 Annual Update* indicate that the aircraft pilots have been making progress towards attainment of the required flight corridor objectives, but the requirements are still are not being fully met. Thus, differences continue to exist between the 1998 flight tracks and those in the Airside Project EIS/EIR analyses which assumes full achievement of the ROD directives. Full achievement of the ROD tracks was estimated in the *1998 Annual Update* to reduce the number of residents of South Boston exposed to noise above 65 dB DNL by about 2,700 people. The FAA will continue to encourage and monitor compliance with the ROD departure tracks with the intention of further realizing these benefits.

5.2.3.3 Runway Use

Runway use refers to the frequency with which aircraft utilize each runway during the course of a year, as dictated or permitted by wind, weather, aircraft weight, air traffic control conditions, and noise considerations. The more often a runway is used throughout the year, the more noise is created in communities located off the ends of that runway.

Runway use statistics for 1998 are based on traffic counts from radar data processed by Massport's noise and operations monitoring system. Takeoffs and landings are counted separately and sorted into daytime and nighttime operations, then further separated by groups of aircraft having different performance characteristics (for example turboprops separately from 747's) reflecting existing runway use restrictions and takeoff length requirements for certain aircraft. A summary of the computed usages by all jet aircraft was previously published in the *Logan Airport 1998 Annual Update* ; it is reproduced here as Table 5.2-2. Also included are 1998's effective runway utilizations statistics (where usage at night is weighted by a factor of ten). These, too, were reported in the *1998 Annual Update* and are computed each year to compare with Preferential Runway Advisory System[14] (PRAS) goals. The goals, themselves, are discussed in detail in Chapter 4 and their implications on noise exposure are discussed in Chapter 6.

[14] The PRAS program is based on an FAA initiative, with the objective of reducing noise exposure for the most highly impacted communities. At Logan, PRAS is a computer program that recommends to the FAA air traffic controllers, runway configuration options that will meet weather and demand requirements, while providing an equitable distribution of the airport's noise impacts on the surrounding communities. The primary objectives of PRAS are to distribute the noise in accordance with annual runway utilization goals, and to provide short-term relief from continuous operations over the same neighborhoods at the ends of the runways. PRAS goals for Logan were established by a PRAS Advisory Committee (including representatives from Massport, the FAA and neighboring communities). PRAS was first implemented in 1983, and the program has undergone two major enhancements since then.

5.2.4 1998 Noise Exposure Levels

Section 5.2.7 of the Airside Project Draft EIS/EIR presented noise exposure levels from flight activity as well as from ground taxi activity using the operations data developed for the 1993 modeled scenario. This current section of the Supplemental DEIS/FEIR updates the analysis of noise from flight operations by presenting the 1998 case.

Table 5.2-2
1998 Actual and Effective Runway Utilizations for Jet Aircraft

	1998 Actual Usage		1998 Effective Usage	
Runway	Arrivals	Departures	Arrivals	Departures
4L	2%	0%	36.7%*	0.0%
4R	41%	8%		6.6%
9	0%	35%	0.0%	29.9%
15R	2%	6%	1.2%	10.9%
22L	7%	5%	11.9%	30.9%*
22R	0%	28%	0.0%	
27	28%	14%	21.7%	16.6%
33L	19%	5%	28.6%	5.2%
Total	100%	100%	100.1%	100.1%

Note: Small addition errors may exist within the table due to rounding.
* For closely-spaced parallel runways, Massport computes effective usage for the combined pair except when use restrictions permit activity to only one of the parallels.
Source: *1998 Annual Update*

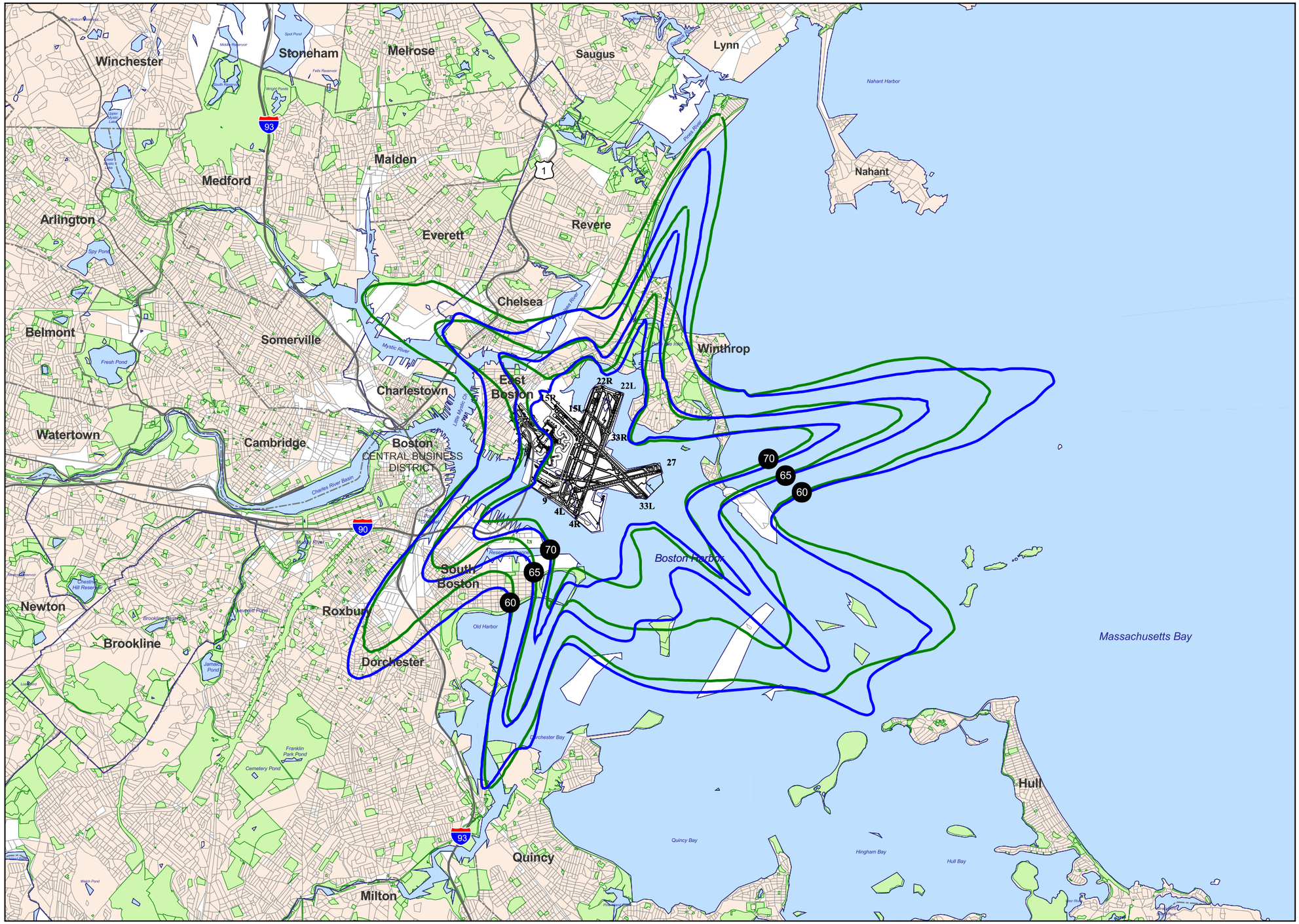
5.2.4.1 Noise from Flight Operations

24-Hour Day-Night Sound Levels (DNL)

For 1998 actual operations, 60, 65 and 70 dB DNL contours generated by the INM are presented in Figure 5.2-3. DNL noise exposure contours are a graphical representation of how the cumulative noise from Logan's aircraft operations is distributed over the surrounding area on an average day of a given year. Comparing DNL contours from different years or different forecast scenarios provides valuable information for noise abatement programs or proposed airport development projects.

Both the Department of Housing and Urban Development (HUD) and the FAA define 65 dB DNL as the threshold of noise incompatibility with residential land uses. Thus, the 65 dB DNL contour is important for population impact assessments. In addition, this study contains data in response to the May 7, 1999 EOEA Certificate which requested Massport to include the 60 dB DNL contour.

The INM produces population estimates simultaneously with the development of DNL contours. Estimates of the numbers of people residing within each noise exposure contour are summarized in Table 5.2-3.



Legend

- 1998 Actual Conditions
- 1993 Historic Modeled Conditions
- Open Space

Census Blocks

- Populated
- Non-Populated

N

0 0.5 1 1.5 Miles

Figure 5.2-3

Day/Night Sound Level Contours
1993 Historic Modeled and
1998 Actual Conditions DNL Contours

Source: Harris Miller Miller & Hanson

Table 5.2-3
Noise-Exposed Populations Within Various Values of DNL for 1998 Actual Operations

Community	DNL 60 dB and Above	DNL 65 dB and Above	DNL 70 dB and Above	DNL 75 dB and Above
Boston[1]	10,809	0	0	0
Chelsea	9,222	0	0	0
East Boston (other than Jeffries Point)	28,108	7,962	590	58
East Boston (Jeffries Pt.)	2,288	0	0	0
Everett	0	0	0	0
Quincy	0	0	0	0
Revere	5,300	3,168	0	0
South Boston	22,511	3,553	48	0
Winthrop	15,120	8,613	2,041	519
Totals	**93,358**	**23,296**	**2,679**	**577**

1 Portions of Dorchester, Roxbury, and the South End are included in the Boston totals.
Source: *1998 Annual Update*.

The 1998 population counts shown above and presented first in the *Logan Airport 1998 Annual Update* are based on the same 1990 federal census as used for the Airside Project. Thus, both the contours in Figure 5.2-3 and the population counts within the contours indicate significant differences in the degree of impact occurring within individual communities. Winthrop and East Boston are most affected, with significant numbers of residents experiencing noise greater than 70 dB DNL, and some experiencing it at levels above 75 dB DNL. South Boston and Revere are generally next most affected. Exposures at the highest noise levels support the continuing need to improve compliance with PRAS goals.

Noise Levels at Specific Monitoring Locations

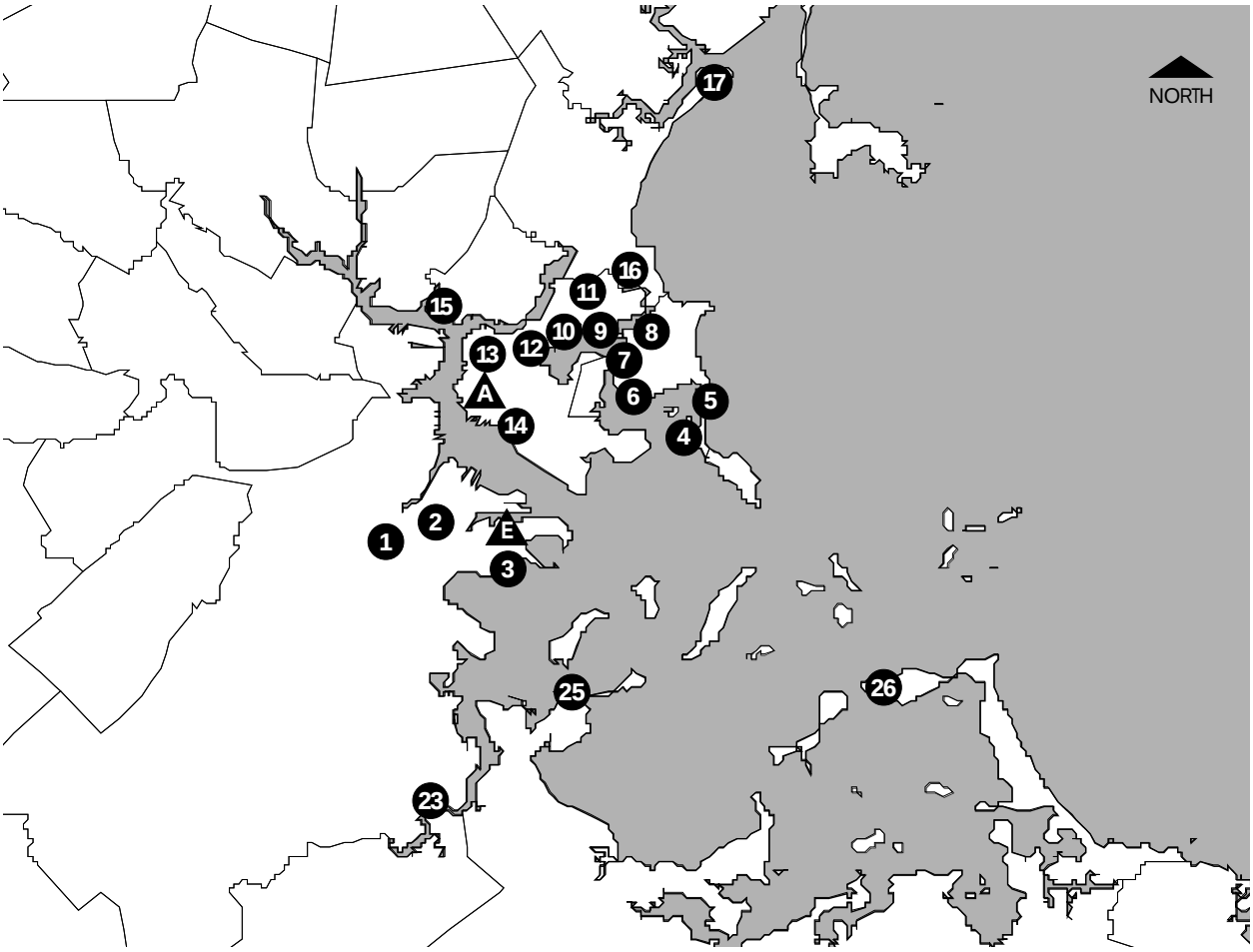
Massport maintains a state-of-the-art noise monitoring system that continuously records noise levels at each of its permanent noise monitor locations. At present, there are 29 installed and operational noise monitors in residential neighborhoods recording noise from flight operations at Logan.

For the Airside Project noise analyses, 21 of these sites, plus 2 additional locations (A and E) were selected for detailed location-specific analysis (see Figure 5.2-4). These selected monitoring locations included all of the highest noise level measurement sites close to the airport, as well as those further from the airport that are consistently overflown. Five sites were not included since they did not meet one of these criteria. Their measurements were expected to contain enough noise of local origin such that their correlation with modeled aircraft noise would be low. The remaining three sites had not yet been installed at the time the Airside Study was initiated. Locations A and E were added for analysis of noise from ground operations and were discussed in detail in the Airside Project Draft EIS/EIR.
At each of these 23 specific locations, a number of noise computations were completed and reported in the Airside Project Draft EIS/EIR. These included:

- Day-Night Sound Level (DNL)
- Maximum Sound Level (Lmax)
- Night (10:00 PM to 7:00 AM) Equivalent Sound Level (LeqN)
- Times Above Sound Levels of 55, 65, 75, 85, and 95 dB at night (TAN)
- Times Above Sound Levels of 55, 65, 75, 85, and 95 dB for 24-hour days (TA24)

In this Chapter of the Supplemental DEIS/FEIR, similar data for 1998 are reported where available. Table 5.2-4 summarizes the DNL calculations from the INM at the 21 noise monitoring locations used in the Airside analysis. It also includes the times above 65, 75, and 85 dB thresholds for nighttime hours (TAN) and for average 24-hour periods (TA24) at the same 21 locations. These data were reported initially in Table 5-9 of the *1998 Annual Update*. The threshold levels of 65, 75, and 85 dB were identified in the 1998 *Annual Update* as covering different degrees of speech interference depending on factors such as whether people are outdoors, or indoors with windows open or closed.

Observations regarding TA calculations for 1998 are similar to those for DNL. The highest exposure levels occur at Sites 4 and 7 at Bayview and Grandview in Winthrop and along Loring Road in Winthrop, where DNL values are 79 and 76 dB, respectively. These same locations experience sound levels exceeding 85 dB for about 21 to 23 minutes per day and experience daily levels above 75 dB for almost an hour at Site 4 to nearly an hour and a half at Site 7. Sites 9 and 12 at Bayswater near Annavoy in East Boston and at the East Boston Yacht Club also experience high exposures. Their DNL levels are 72 and 74 dB, respectively, and they are exposed to sound levels above 85 dB for 8 and 16 minutes per day. In fact, the five most highly exposed sites, both at night and over 24 hours, are located in Winthrop and East Boston – the same communities identified earlier as having high numbers of people residing in areas where the DNL exceeds 70 dB. Again, these analyses indicate a need for improved conformance with PRAS goals if these highest exposures are to be reduced. Chapter 6 addresses the changes that occur in these communities under the Preferred Alternative as air traffic controllers are better able to achieve the goals.



1 Andrews Street, South End
2 B and Bolton, South Boston
3 South Boston Yacht Club, South Boston
4 Bayview and Grandview, Winthrop
5 Harborview and Faun, Winthrop
6 Somerset and Johnson, Winthrop
7 Loring Road near Court, Winthrop
8 Morton and Amelia, Winthrop
9 Bayswater and Annavoy, East Boston
10 Bayswater/Shawnsheen, East Boston
11 Orient Heights, East Boston
12 East Boston Yacht Club,
13 East Boston High School
14 Jeffries Point Yacht Club, East Boston
15 Admiral's Hill, Chelsea
16 Bradstreet and Sales, Revere
17 Carey Circle, Revere
23 Myrtlebank/Hilltop, Dorchester
24 Cunningham Park, Milton
25 Squaw Rock Park, Quincy
26 Hull High School, Hull
A Sumner near Lamson, East Boston
E Farragut at 2nd, South Boston

LEGEND

● Permanent Noise Monitors
▲ Additional Airside Project Noise Monitors

Location not shown on map:
24 Cunningham Park, Milton

NOTE:
Monitors 18 to 22, and 27 and 29 not used for Airside analysis and not shown on map.

Figure 5.2-4

Noise Monitor Locations Used For Airside Analysis

7466-FIG-5.2-4.p65

Table 5.2-4
INM-Computed DNL Values and Times Above Threshold Values at Specific Points – 1998 Actual Operations

Site	Location[1]	Day-Night Sound Levels	Minutes Above Threshold in 24-Hour Period (TA 24)			Minutes Above Threshold During Nighttime (TAN)		
		DNL	85 dBA	75 dBA	65 dBA	85 dBA	75 dBA	65 dBA
1	Andrews Street, South End	59.6	0.1	3.6	14.6	0.0	0.5	2.7
2	B and Bolton, South Boston	67.4	2.3	8.2	28.2	0.3	1.4	4.6
3	Day Blvd. near Farragut, South Boston	64.3	0.3	11.7	106.0	0.0	1.0	9.1
4	Bayview and Grandview, Winthrop	79.8	20.5	53.0	137.3	1.8	5.4	15.1
5	Harborview and Faun, Winthrop	71.8	8.2	35.4	113.8	0.6	3.4	12.0
6	Somerset and Johnson, Winthrop	68.9	0.7	41.9	174.3	0.0	4.9	25.2
7	Loring Road near Court, Winthrop	76.5	21.8	87.2	270.1	1.9	9.7	34.4
8	Morton and Amelia, Winthrop	67.9	1.6	21.4	112.4	0.1	2.3	15.0
9	Bayswater and Annavoy, East Boston	72.7	7.9	33.8	118.0	1.0	4.7	15.5
10	Bayswater/Shawsheen, East Boston	66.8	2.2	15.1	81.4	0.2	1.8	10.5
11	Orient Heights, East Boston	62.8	0.2	8.8	55.5	0.0	1.0	6.8
12	East Boston Yacht Club	74.7	15.4	80.9	259.2	1.9	12.2	41.1
13	East Boston High School	64.9	0.8	4.2	43.4	0.1	0.7	5.4
A	Sumner near Lamson, East Boston	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Jeffries Point Yacht Club, East Boston	65.7	0.0	19.5	116.5	0.0	2.4	15.5
15	Admiral's Hill, Chelsea	61.7	0.5	3.2	19.9	0.1	0.4	2.4
16	Bradstreet and Sales, Revere	68.6	2.9	13.1	42.1	0.5	1.7	5.6
17	Carey Circle, Revere	57.9	0.0	2.9	18.4	0.0	0.4	2.2
23	Myrtlebank/Hilltop, Dorchester	51.7	0.0	0.0	7.4	0.0	0.0	0.5
24	Cunningham Park, Milton	51.5	0.0	0.1	10.5	0.0	0.0	0.8
25	Squaw Rock Park, Quincy	51.3	0.0	0.0	2.3	0.0	0.0	0.3
26	Hull High School, Hull	57.7	0.0	0.9	24.1	0.0	0.2	3.5
E	Farragut @ 2nd, South Boston	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 Sites modeled for the Airside Project noise analysis. Refer to Table 5.2-5 for a full list of Massport noise monitor locations.
N/A Not available.

5.2.4.2 Ground Taxi Noise Levels

The Airside Project Draft EIS/EIR provided a detailed analysis of noise from aircraft on taxiways using modeled 1993 operations. Calculations were made for the same five metrics as were assessed for 1993 flight operations:

- Day-Night Sound Level (DNL)
- Maximum Sound Level (Lmax)
- Night (10:00 PM to 7:00 AM) Equivalent Sound Level (LeqN)
- Times above sound levels of 55, 65, 75, 85, and 95 dB at night (TAN)
- Times above sound levels of 55, 65, 75, 85, and 95 dB over 24 hours (TA24)

Chapter 6 of this Supplemental DEIS/FEIR summarizes the analysis of ground noise that was conducted for the Airside Project Draft EIS/EIR, comparing the No Action and Preferred Alternative. Readers interested in further analyses of ground noise are referred back to the Airside Project Draft EIS/EIR.

5.2.5 Comparing Measured and Modeled Noise Levels

Massport's permanent noise monitoring system continuously measures the noise levels at each of 29 microphone locations around the airport. Twenty-one of those sites were operational and used in the analysis of the Airside Improvements Planning Project, as shown earlier in Figure 5.2-1. During normal operation, noise monitors at the microphone locations measure hourly noise exposure levels as well as a variety of metrics associated with individual noise events that exceed preset threshold sound levels. These data are transmitted back to Massport's Noise Abatement Office where daily DNL values as well as other noise metrics are computed from the measured data and summarized.

In past years, *Logan Airport GEIRs* and *Annual Updates* have compared the annual average day values of DNL as measured by Logan Airport's monitoring system to INM-computed annual average values of DNL. Though many of the results are consistent, several have indicated significant differences of 10 or more decibels. One of the major factors contributing to these differences has been that the measured levels include community-based noise sources in the vicinity of the monitor, while the INM-computed levels include the noise only from aircraft. This, in addition to aircraft, has tended to make measured levels higher than predicted values at certain locations.

As a result, commencing at the end of 1997, Massport enhanced its monitoring system to separate aircraft noise events from other sources and produce "aircraft-only" DNL values in addition to the total DNL values it has previously reported. Table 5.2-5 presents these measurement results for 1999 and compares them to INM-generated levels for 1999.

Among the more significant observations regarding these data are the following:

- The average difference in 1998 between the *aircraft-only* DNLs and the INM-generated values at all 29 monitoring locations is approximately 0.9 dB (measured values averaging higher than computed). In 1998, this difference in aircraft-only DNLs was 1.5 dB (measured values also averaging higher than computed).

- At monitoring sites in higher noise environments where measurements are greater than 60 dB (and where it would be expected that the measured levels are more easily identified as aircraft), the average difference between *aircraft-only* DNLs and INM-generated levels in 1998 is 0.2 dB (measured values averaging higher than computed). In 1998, this difference was 0.4 dB.

For a second year, these measured results show high correlation with INM calculations and indicate major improvement in the monitoring system's capabilities. The close agreement that these new aircraft-only levels have with INM-generated values of exposure significantly enhances the monitoring system's value as an analytical tool and also fully corroborates the INM's noise prediction capability.

Table 5.2-5
Comparison of Measured DNL Values to INM-computed DNL Values for 1998

Site	Location	1998 Total Measured DNL	1998 Aircraft – Only DNL	1998 INM Result[1, 2]	1998 Measured vs. Modeled
1	Andrews Street, South End	66.3	61.8	58.7	3.1
2	B and Bolton, South Boston	69.2	66.1	66.7	-.6
3	Day Blvd. near Farragut, South Boston	67.4	65.1	64.5	.6
4	Bayview and Grandview, Winthrop	80.2	79.8	79.4	.4
5	Harborview and Faun Bar, Winthrop	71.4	70.6	71.4	-.08
6	Somerset near Johnson, Winthrop	71.0	69.9	68.2	1.7
7	Loring Road near Court, Winthrop	73.9	73.3	76.1	-2.8
8	Morton and Amelia, Winthrop	68.3	67.0	67.5	-0.5
9	Bayswater near Annavoy, East Boston	75.9	75.3	72.4	2.9
10	Bayswater near Shawsheen, East Boston	71.2	69.4	66.3	3.1
11	Selma and Orient , East Boston	66.5	64.8	62.2	2.6
12	East Boston Yacht Club	72.3	71.1	74.0	-2.9
13	East Boston High School	66.9	65.6	64.2	1.3
14	Jeffries Point Yacht Club, East Boston	66.9	64.6	64.9	-0.3
15	Admiral's Hill, Chelsea	67.0	63.3	61.1	2.2
16	Bradstreet and Sales, Revere	71.2	70.8	69.0	1.8
17	Carey Circle, Revere	66.6	62.3	58.3	4.0
18	U.S.C.G. Recreational Facility, Nahant	65.5	55.2	49.8	5.4
19	Smith Lane, Swampscott	56.8	49.2	45.7	3.5
20	Pond and Towns Court, Lynn	58.5	53.6	49.5	4.1
21	Tremont near Prescott, Everett	61.2	54.8	53.8	1.0
22	Magoun near Thatcher, Medford	60.4	52.6	49.4	3.2
23	Myrtlebank near Hilltop, Dorchester	63.1	57.7	52.0	5.5
24	Cunningham Park near Fullers, Milton	60.9	55.5	51.9	3.6
25	Squaw Rock Park, Quincy	57.7	51.0	51.2	-0.2
26	Hull High School near Channel St., Hull	63.2	59.2	58.1	1.1
27	Boston Latin Academy, Roxbury	65.3	60.4	58.8	1.6
29	Lewenburg School, Mattapan	59.0	55.1	54.0	1.1
30	Piers Park, East Boston	63.2	59.9	62.2	-2.3

1 INM Version 5.0 with adjusted database as described in the *Logan Airport 1994/1995 Generic Environmental Impact Report.*

2 Includes FAA-approved terrain adjustment.

Note: Site 28 yet to be installed.

5.3 Cultural Resources

This section summarizes relevant regulations and provides a description of historic properties within the project study area. An historic property, as defined by Section 106 of the National Historic Preservation Act, is any prehistoric or historic district, site, building, structure, or object, included in, or eligible for inclusion in, the National Register of Historic Places (36 CFR 800.16). Section 4(f) of the Department of Transportation Act references "historic sites." Both historic properties and historic sites refer to National Register eligible or listed properties.

5.3.1 Regulatory Context

Cultural resources, which include parklands and historic resources, are regulated under Section 4(f) of the Department of Transportation Act, the National Historic Preservation Act ("Section 106"), and by state regulations concerning historic properties.

5.3.1.1 Section 4(f) of the Department of Transportation Act

Section 4(f) of the Department of Transportation Act of 1966 (recodified as 303(c) of 49 USC) ,as amended, directs that the Secretary of Transportation shall not approve any program which requires the use of a significant publicly owned public park, recreation area, or wildlife and waterfowl refuge, or any significant historic site, unless there is no feasible and prudent alternative and the harm resulting from the use is minimized.

The potential use of a Section 4(f) property may be either direct or indirect. Direct use is typically considered to include physical involvement of a site, including property acquisition, or facilities modification or relocation. Indirect impacts include changes in access, visual impacts, increased noise levels, and other similar conditions. According to FAA Order 5050.4A:

> *"when there is no physical taking, but there is the possibility of use or of adverse indirect impacts to Section 4(f) land, the FAA must determine if the activity associated with the proposal conflicts with, or is compatible with the normal activity associated with this land. The proposed activity is compatible if it would not affect the normal activity or aesthetic value of a public park, recreation area, refuge, or historic site. When Section 4(f) applies and agencies which have jurisdiction agree that the effects of the action will be satisfactorily mitigated, the action may be considered not to have significant Section 4(f) impacts, and no further analysis is needed."*

5.3.1.2 Section 106 of the National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966, as amended (NHPA), established the Advisory Council on Historic Preservation (ACHP) to advise the President and

Congress on historic preservation matters, to recommend measures to coordinate federal historic preservation activities, and to comment on federal actions affecting properties included in or eligible for inclusion in the National Register of Historic Places. Under Section 106 of the NHPA, federal agencies are responsible for identifying National Register listed or eligible properties and sites and for assessing the effects of agencies' actions on them. The procedures prescribed in Section 106 are referred to as the "Section 106 process" and are set forth in regulations issued by the ACHP, "Protection of Historic Properties" (36 CFR 800). The ACHP regulations emphasize consultation among the responsible federal agency (in this case the FAA, and / or its designee, Massport), the Massachusetts State Historic Preservation Office (MASHPO) / Massachusetts Historical Commission (MHC), and other interested parties. The Section 106 process is being undertaken for the Logan Airside project and the FAA / Massport have consulted with the MASHPO / MHC.

5.3.1.3 Protection of Properties Included in the State Register of Historic Places

The proposed project is also subject to review by the MHC under the Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 and the implementing regulations, 950 CMR 71. This state law covers actions of Massachusetts agencies and involves a state process in addition to the federal process under Section 106 of the ACHP, which governs the actions of federal agencies. Standards for the state and federal review processes are similar, with the exception that properties subject to review under Chapter 254 are those listed in the State Register of Historic Places. Section 106 and Chapter 254 reviews are carried out simultaneously by the MASHPO / MHC.

5.3.2 Cultural Resources Context

The Preferred Alternative has the potential to increase noise-exposed populations. A review of MHC files, including the National Register of Historic Places and the Inventory of Historic and Archaeological Assets of the Commonwealth, and field survey were undertaken to identify historic resources within the project area and in surrounding communities.

5.3.2.1 Section 106 Resources

A review of MHC files, including the National Register of Historic Places and the Inventory of Historic and Archaeological Assets of the Commonwealth, and field survey were also undertaken to identify historic resources regulated under Section 106 within the project area and in surrounding communities. Refer to Figure 5.3-1 showing the 1998 65 dB DNL contour on a map of parklands.

5.3.2.2 Other Section 4(f) Resources

In response to the May 7, 1999 EOEA Scope , specific parklands have been identified for analysis, namely the Boston Harbor Islands, Arnold Arboretum, Franklin Park, and the Emerald Necklace. These resources are described below (see Figure 5.3-1).

Boston Harbor Islands

In November 1996, the Boston Harbor Islands became a national park area under the supervision of the National Park Service. The Boston Harbor Islands National Recreation Area recognizes that the islands and the shoreline beaches and access points are one natural and cultural resource system. As a National Recreation Area, the park preserves and protects the open spaces and natural and cultural features of the harbor islands.

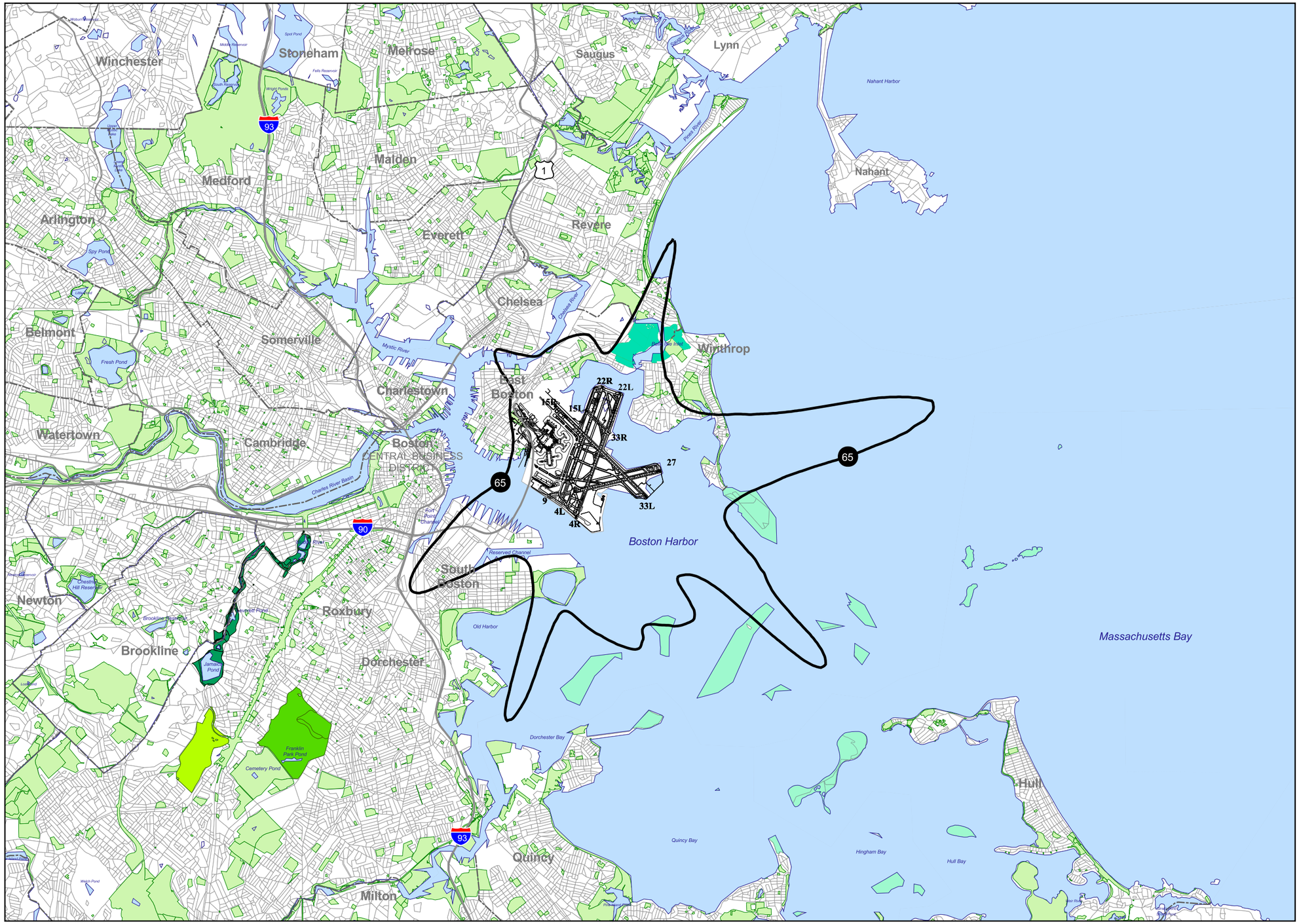
According to the legislation that established the Boston Harbor Islands Recreational Area:

> "*the present and future maintenance, operation, improvement, and use of Boston-Logan International Airport and associated flight patterns from time to time in effect shall not be deemed to constitute the use of publicly owned land or a public park, recreation area, or other resource within meaning of section 303(c) of title 49, United States Code, and shall not be deemed to have a significant effect on natural, scenic, and recreation assets with the meaning of section 47101(h)(2) of title 49, United States Code.*"[15]

Therefore, Boston Harbor's National Recreation Area is considered to be a compatible land use.

Part of Massachusetts Bay, Boston Harbor, touches six of Boston's neighborhoods (East Boston, Charlestown, Downtown, Fort Point, South Boston, and Dorchester) and seven other municipalities (Hull, Hingham, Weymouth, Quincy, Chelsea, Revere, and Winthrop). Linking the inner and outer harbor are more than thirty islands that range in size from less than one acre to 214 acres that together total 1,200 acres.

[15] Sec. 1029. Boston Harbor Island Recreation Area. Excerpted from P.L. 104-333, 110 Stat. 4093 the "Omnibus Public Lands Management Act of 1996."



Legend

1998 65 DNL

Parklands

- Arnold Arboretum
- Belle Isle Marsh Reservation
- Boston Harbor Islands
- Franklin Park
- Olmsted Park / Emerald Necklace
- Open Space
- Census Block Boundaries

N

0 0.5 1 1.5 Miles

massport

Figure 5.3-1

Parklands and 1998 65dB DNL Contour

Source: Harris Miller Miller & Hanson

Arnold Arboretum

Arnold Arboretum located in the Jamaica Plain section of Boston is recognized as the pre-eminent institution in the United States for the study of ligneous (woody) plants. Established in 1872 through a bequest from the estate of James Arnold, the Arboretum has since more than doubled in size and has assembled a collection of over 6,000 varieties of trees and shrubs from all over the Northern Temperate Zone. The Arboretum is listed on the National Register of Historic Places and is a National Historic Landmark.

Olmsted Park System including the Emerald Necklace and Franklin Park

The comprehensive park system, which Frederick Law Olmsted Sr. planned for the City of Boston in the late 1870s, is one of the nation's outstanding examples of a multi-use open space. Olmsted's original plan for the park system had three purposes: to create a much needed municipal open space while solving an engineering problem; to link annexed parts of the city with its historic center; and to provide a variety of forms of recreation. The Emerald Necklace includes a series of parks linked by continuous parkways. It curves from the mouth of the Muddy River to Franklin Park. The terminus of the system is at Franklin Park, one of Olmsted's masterpieces. In 1885, Olmsted designed this large rural park especially for working class people. The park, included in the earliest schemes for Boston's park system was financed in part by a bequest made to the City by Benjamin Franklin. The Emerald Necklace parks, including Franklin Park, are contributing elements to a National Register of Historic Places historic district and are a Boston City Landmark.

5.4 Air Quality/Odors

This section contains a general discussion of current air quality conditions in the vicinity of Logan and an overview of regulatory criteria. Specifically, this material includes:

- A summary of historic and current air monitoring data;
- An explanation of agency roles and requirements;
- The characterization of airport-related air emissions;
- An emissions inventory / dispersion modeling results for historic (i.e., 1993) conditions; and
- An emissions inventory for actual existing conditions in 1998.

5.4.1 Current Air Quality Conditions and Regulatory Criteria

5.4.1.1 Criteria Air Pollutants and Air Quality Standards

The US Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for the following six "criteria" pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM), ozone (O_3), and lead (Pb). The Massachusetts Department of Environmental Protection (DEP) has adopted these same standards.

The concentrations of these criteria air pollutants serve as indicators-of-quality of the outdoor (i.e., ambient) atmosphere. Notably, some criteria pollutants, like O_3, occur regionally (e.g., over many square kilometers); others, like CO, only disperse locally (i.e., over several square kilometers); and some, like PM, have characteristics that can be both regional and local. Those that are emitted directly into the atmosphere are called "primary" pollutants (e.g., CO and PM) in contrast to "secondary" pollutants (e.g., O_3), which are produced in the atmosphere from precursors (e.g., volatile organic compounds [VOCs] and NO_2). A general discussion of the EPA / DEP six criteria air pollutants is shown below in Table 5.4-1 and a detailed discussion of each can be found in Section 5.3-1 of the Airside Project Draft EIS / EIR.

Table 5.4-1
Sources of Criteria Pollutants

Pollutant	Major Sources of Pollutant
Carbon Monoxide (CO)	Natural and manmade; motor vehicles; incomplete combustion of fuels; fossil fuel combustion in utility and industrial boilers.
Nitrogen Dioxide (NO_2)	Natural and manmade; lightning, forest fires, combustion of fossil fuels in motor vehicles and utility/industrial boilers.
Particulate Matter (PM_{10}, $PM_{2.5}$)	Natural and manmade; emissions from fuel combustion; open burning, material handling, dust producing industries, fugitive dust; wind erosion, forest fires; sea spray.
Sulfur Dioxide (SO_2)	Natural and manmade combustion of sulfur bearing fuels (coal, oil, gasoline, diesel) and industrial processes.
Ozone(O_3)	Natural and manmade sources of NO_2 and VOCs, which are released during fuel combustion in engines, electric power generation units and space heaters, lead to formation under certain atmospheric conditions.
Lead (Pb)	Burning of lead-containing fuels and manufacturing.

The Massachusetts and NAAQS standards for these six criteria air pollutants are summarized in Table 5.4-2. Concentration units are micrograms of pollutant per cubic meter of air ($\mu g / m^3$). Notably, the one-hour value for NO_2 is a MA DEP policy guideline (not a regulatory standard in Massachusetts) which is only applicable to major stationary sources emitting over 250 tons / year of NO_2. Although it is not applicable to Logan in a regulatory sense, Massport has used this guideline value in the past in interpreting NO_2 measurements taken at and near runway ends. In general, for standards based on 24-hour (or less) averaging times, the second-highest concentrations are used to determine compliance with these standards. The U.S. EPA has recently introduced some changes to the O_3 and PM standards, which are reflected in Table 5.4-2.

5.4.1.2 Air Monitoring Information

The MA DEP, Division of Air Quality Control, Air Quality Surveillance Branch maintains a network of ambient air monitoring stations throughout the Commonwealth, including three in the general vicinity of Logan. Measurements of criteria air pollutants, their precursors, and meteorological conditions are recorded at these stations on a routine basis.

Table 5.4-2
Massachusetts and National Ambient Air Quality Standards

Pollutant	Averaging Time	Standard ($\mu g/m^3$)
CO	1-hour	40,000
	8-hours	10,000
NO_2	1-hour [1]	320
	Annual	100
PM_{10} ($PM_{2.5}$) [2,3]	24-hours	150 (65)
	Annual [4]	50 (15)
SO_2	3-hours	1,300 (secondary) [5]
	24-hours	365
	Annual	80
O_3	1-hour	235
	8-hours [3]	157
Lead	Calendar quarter arithmetic mean	1.5

1 DEP policy guideline for NO_2 applicable only to major stationary sources.

2 PM_{10} and $PM_{2.5}$ encompass particulate matter with diameters less than or equal to 10 and 2.5 microns, respectively.

3 The status of these standards is unsettled because of recent judicial action, but they are still in place.

4 The PM_{10} standard is based upon an estimated exceedance calculation described in Appendix K of the Airside Project Draft EIS/EIR of 40 CFR Part 50. The annual standard is met if the estimated annual arithmetic mean concentration does not exceed 50 $\mu g/m^3$.

5 Secondary standards are set to protect public welfare.

Source: Massachusetts Air Quality Standards, Title 310, Section 6.00 and 40 CFR 50.4-50.12.

The closest of these DEP air monitoring stations to Logan is located in East Boston, at 340 Bremen Street. Located adjacent to the northwest boundary of the airport, approximately 0.5 miles from Runway 15R, ambient concentrations of CO, SO_2, PM_{10}, and NOx (NO and NO_2) are recorded at this site (see Figure 5.4-1 for location). Another MA DEP station is located at the eastern portal of the Sumner/Callahan Tunnels (approximately 0.5 miles from Logan). This station will pick up CO levels from vehicles, including airport-related, passing into and out of the tunnels. The next closest DEP monitoring station is located on Powder Horn Hill in Chelsea. This is the closest O_3 monitor to Logan Airport. NO_2 and SO_2 are also monitored at this site.

A synopsis of the most recent monitoring data for these stations is provided in Table 5.4-3. As shown, there have been no violations of the NAAQS at the monitoring stations for any criteria air pollutant in at least the past five years.

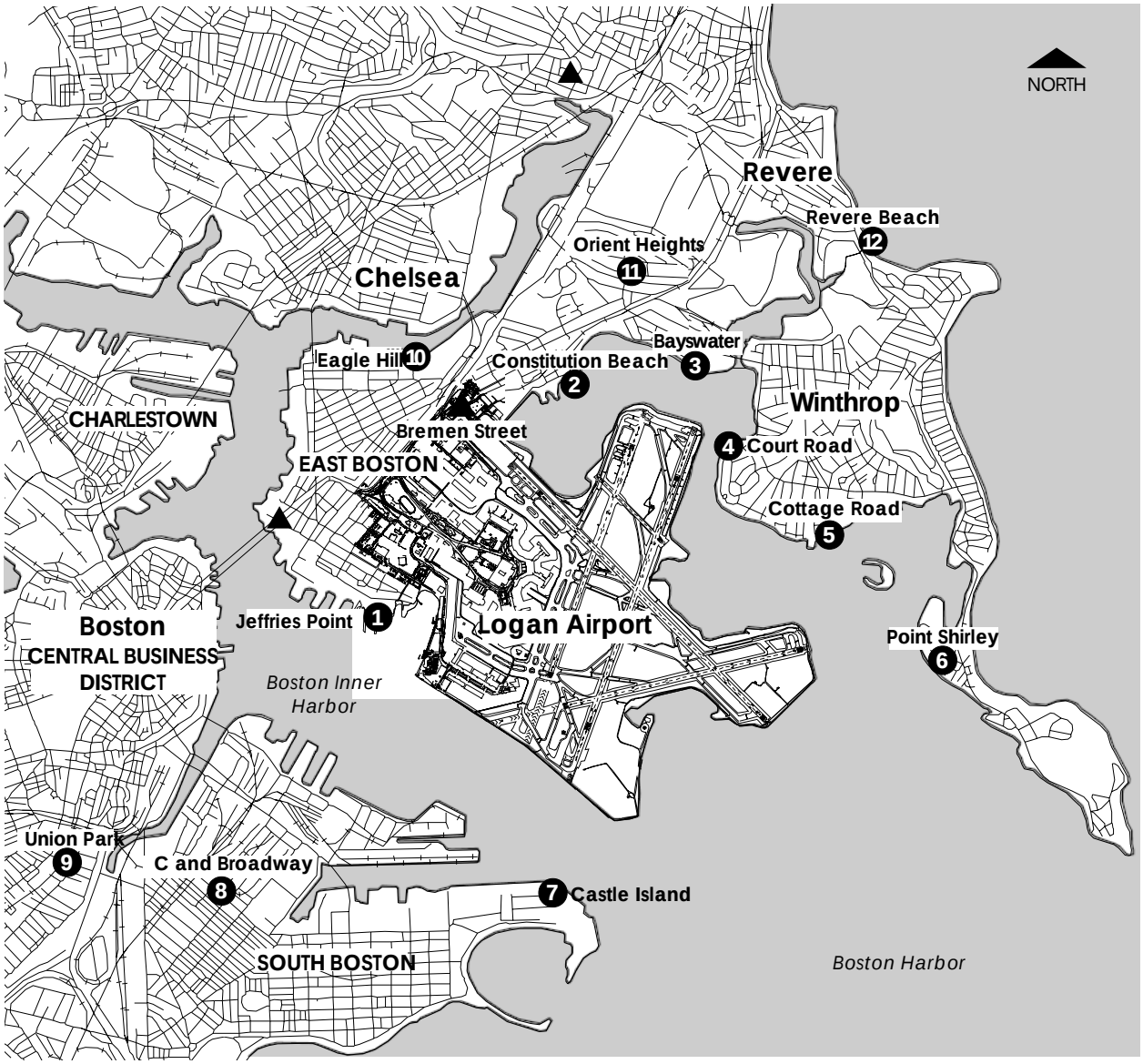
The following summaries generally describe these data.

- **Carbon Monoxide.** CO is an air pollutant characterized by ambient concentrations that correlate closely with local motor vehicle traffic and meteorological conditions. As a result, the Bremen Street station shows some variability in both the one- and eight-hour CO concentrations over the past five years. This is likely attributable to the influences of traffic, wind, and temperature in the immediate vicinity of the monitor. CO concentrations at the Sumner/Callahan Tunnels site are also heavily influenced by motor vehicle traffic passing into and out of the tunnel. Airport-related vehicles constitute approximately one-half the total tunnel traffic. Notwithstanding the above, CO levels at these two locations have remained well within the one- and eight-hour NAAQS over the past several years.

- **Nitrogen Dioxide.** The monitoring data from the Bremen Street site show neither an upward nor downward trend in NO_2 over the past several years. This is reflected in both the one-hour and annual mean concentrations.

- **Particulate Matter.** With only one exception, the highest 24-hour PM_{10} concentrations at the Bremen Street site have not exhibited a wide variability over the past few years. The annual mean PM_{10} levels similarly have not changed substantially over time. Although the $PM_{2.5}$ monitoring program has begun, the measurements are not yet available through the EPA. The $PM_{2.5}$ and eight-hour O_3 standards have been the subject of litigation, which is described in Section 5.4.1.3.

- **Sulfur Dioxide.** Since 1993, SO_2 levels exhibit slight downward trends at the Bremen Street and Chelsea Station sites.



LEGEND

- ● Modeling Receptors
- ▲ Monitor Location

Figure 5.4-1

Air Quality Modeling Receptor Locations

7466-FIG-5.4-1.pm65

- **Ozone.** O_3 is not measured at the Bremen Street station. The closest MA DEP ozone monitor to Logan is located at the Soldiers Home on Powder Horn Hill in Chelsea, Massachusetts, approximately 1.5 miles to the northwest. However, as previously discussed, O_3 is a regional air pollutant. Therefore, the monitoring data collected at the Chelsea site is considered representative of O_3 concentrations throughout the Chelsea / East Boston area. As shown in Table 5.4-3, between 1993 and 1997 the second highest one-hour O_3 concentrations have followed a downward trend. This trend turned slightly upward in 1998. Notably, no violations at the NAAQS for O_3 have been recorded at this site since 1992. Not enough data for the eight-hour averaging time are available to establish a trend. Data from 1997 to 1999 will be used to evaluate the area's compliance with the eight-hour standard, should this standard be implemented and become enforceable by the EPA.

Massport NO_2 Monitoring Program

Since 1982, Massport has collected ambient NO_2 data using diffusion tubes at up to 27 locations (on- and off-airport) in the vicinity of Logan. An analysis of the most recent results and historic trends can be found in the *1999 Environmental Status and Planning Report (ESPR).* The highest NO_2 concentrations recorded in the communities occur in locations that are likely not affected by emissions from Logan. For example, the station with the highest NO_2 concentration in 1997[16] was at Maverick Square and the elevated levels are likely due to the heavy motor vehicle traffic in the Sumner / Callahan Tunnels, Maverick Square and local traffic nearby. No violations of the NAAQS have been recorded at any of the off-airport sites and residential communities.

Soot Measurements

In response to complaints raised by residents living near Logan regarding soot and oily deposits, Massport commissioned two separate, but complementary, scientific studies to help establish the exact nature of this atmospheric fallout, the results of these studies are presented in Section 5.3.1.3 of the Airside Project Draft EIS / EIR.[17],[18]

Odor Assessment

Massport has also conducted an assessment of odor complaints received from communities surrounding the airport, the results of which can be found in Section 5.3.1.2 of the Airside Project Draft EIS / EIR.

▼

16 Year for which information is most recently available.

17 *Community Impact of Aircraft Particle Emissions,* prepared by TRC Environmental Corporation, presented to Massport, Logan International Airport, January 1997.

18 *Soot Deposition Study: Logan Airport and Surrounding Communities,* prepared for Massport, prepared by KM Chng Environmental, Inc., January 1997.

Table 5.4-3
DEP Air Monitoring Data Summary

Pollutant	Averaging Time	1993	1994	1995	1996	1997	1998	Standard[1]
Bremen Street Station[2]								
NO_2 (ppm)	2nd Highest 1 Hour[3]	0.09	0.09	0.09	0.12	0.08	0.028	0.17
	Annual Mean	0.032	0.030	0.027	0.028	0.027	0.08	0.053
CO (ppm)	2nd Highest 1-Hour	3	5	4	3	4	3	9
	2nd Highest 8-Hour	7	7	6	6	5	5	35
PM_{10} ($\mu g/m^3$)	2nd Highest 24-Hour[4]	45	48	52	41	48	49	150
	Annual Mean[4]	21	23	21	21	21	23	50
SO_2 (ppm)	2nd Highest 3-Hour	0.06	0.07	0.05	0.07	0.05	0.05	0.50
	2nd Highest 24-Hour	0.03	0.04	0.02	0.03	0.03	0.02	0.14
	Annual Mean	0.01	0.01	0.01	0.01	0.01	0.01	0.03
Chelsea Station[5]								
NO_2 (ppm)	2nd Highest 1-Hour	0.08	0.09	0.08	0.09	0.08	0.023	0.017
	Annual Mean	0.025	0.026	0.023	0.025	0.022	0.09	0.053
O_3 (ppm)	2nd Highest 1-Hour[6]	0.11	0.11	0.11	0.09	0.09	0.10	0.12
	Highest 8-Hour[7]			0.08	0.08	0.09	0.087	0.08
SO_2 (ppm)	2nd Highest 3-hour	0.07	0.07	0.21	0.19	0.09	0.05	0.50
	2nd Highest 24-Hour	0.04	0.04	0.03	0.04	0.05	0.03	0.14
	Annual Mean	0.01	0.01	0.01	0.01	0.01	0.01	0.03
Sumner/Callahan Tunnels[8]								
CO (ppm)	2nd Highest 1-Hour	7	8	5	7	5	3	35
	2nd Highest 8-Hour	4	5	3	3	4	4	9

Notes:
1 National Ambient Air Quality Standards, except for the case of the 1-hour NO_2 level, which is a MA DEP policy guideline applicable only to major stationary sources.
2 Located at 340 Bremen Street, East Boston.
3 As stated previously, the second-highest concentrations are used to determine NAAQS compliance for this averaging time.
4 Based on PM_{10} data; $PM_{2.5}$ data are unavailable.
5 Located at Soldiers Home, Powder Horn Hill, Chelsea.
6 Based on 1-hour O_3 measurements.
7 Data from years before 1995 are unavailable for this averaging time. The standard states that the average of the annual 4th highest daily 8-hour maximum over a three-year period is not to exceed 0.08 ppm. Therefore, a single exceedance does not constitute a violation of the standards. This standard is not currently enforceable, although it remains in place.
8 Located at portal to Sumner Tunnel at Visconti Street.

5.4.1.3 Attainment/Non-attainment Designations

In accordance with the Federal Clean Air Act (CAA), all areas within the State of Massachusetts are designated as either attainment, non-attainment, unclassifiable, or maintenance with respect to the NAAQS. Simply stated, areas that meet the NAAQS are designated as attainment. Conversely, areas that have violated the NAAQS are designated as non-attainment. Classifications (or degrees) of non-attainment areas are also given as extreme, severe, serious, and moderate. Areas where data are insufficient for classification as either attainment or non-attainment are designated as unclassifiable. Finally, areas that have been re-designated from nonattainment to attainment since 1990 are labeled maintenance.

As shown in Table 5.4-4, the airshed around Logan is designated by MA DEP as an attainment area for CO, NO_2, SO_2, PM_{10}, and Pb meaning that the NAAQS for these five criteria air pollutants are being met. As explained below, the study area is classified as a nonattainment area for O_3.

In June 1999, the Boston-Lawrence-Worcester area was identified as an area that attains the one-hour ozone standard and, as such, an area where the one-hour standard no longer applies. A May 1999 D.C. Circuit Court case, however, questioned the EPA's authority to set the new ozone and particulate matter standards. Because of this case, the EPA had no authority to implement the eight-hour standard, which applied once the one-hour standard was attained. In order to provide some form of ozone standard, the EPA reinstated the one-hour ozone standard nationwide. In doing this, the EPA designated attainment classifications for nearly 3,000 counties, including Suffolk County, which has been reclassified as *serious nonattainment*. At the Chelsea monitoring station (1.5 miles northwest of Logan), the last exceedance of the 1-hour O_3 standard occurred in 1991. On February 27, 2001, the Supreme Court rejected the D.C. Circuit Court's findings and upheld the EPA's authority to set the revised O_3 and $PM_{2.5}$ standards. However, the revised standards are not immediately subject to implementation because the Supreme Court is requiring the EPA to revisit its implementation policy, specifically for O_3. The EPA must develop a reasonable interpretation of the non-attainment implementation provisions of the CAA.

▼

19 Year for which information is most recently available.
20 Year for which information is most recently available.
21 *Community Impact of Aircraft Particle Emissions,* prepared by TRC Environmental Corporation, presented to Massport, Logan International Airport, January 1997.
22 *Soot Deposition Study: Logan Airport and Surrounding Communities,* prepared for Massport, prepared by: KM Chng Environmental, Inc., January 1997.

Table 5.4-4
Attainment/Non-Attainment Designations for the Boston Area[1]

Pollutant	Designation	Classification
Carbon monoxide (CO)	Attainment	N/A
Sulfur dioxide (SO_2)	Attainment	N/A
Ozone (O_3)	Non-attainment (1)	Serious
Nitrogen dioxide (NO_2)	Attainment	N/A
Particulate matter (PM_{10})	Attainment	N/A
Lead (Pb)	Attainment	N/A

1 Designated area is Boston-Lawrence-Worcester.
N/A not applicable.

The Massachusetts State Implementation Plan (SIP) for O_3 identifies the strategies that have been, and will be, implemented to reduce emissions of VOCs and NOx to target levels needed to achieve compliance. In the Boston area, the Boston Metropolitan Planning Organization (MPO) works closely with the MA DEP to develop and update the SIP, Rate-of-Progress Plans and other supporting materials. In addition, the MPO is responsible for implementing the emissions reduction strategies presented in the SIP in this area. As a member of the Boston MPO, Massport plays a key role in this process. For example, all of Massport's planning efforts are developed to be consistent with the policies in the SIP including the East Boston / Logan parking freezes.

5.4.2 Sources of Air Emissions

5.4.2.1 Airport-Related Sources of Air Emissions

In general terms, the primary sources of air emissions at major air carrier airports such as Logan are aircraft, ground service equipment (GSE), and motor vehicles. Other sources include fuel storage facilities and transfer operations, a variety of other stationary sources (e.g., space heating, emergency electrical generation, food preparation), and construction activities. Table 5.4-5 provides a listing of air emissions sources at Logan, the pollutants emitted, and their general characteristics.

These emissions are described in greater detail in the Airside Project Draft EIS/EIR, Section 5.3.2.1. The amounts of emissions generated by these sources are given later in Sections 5.4.3.2 and 6.4.2 in the form of existing and future-year air emission inventories.

5.4.2.2 Modeled Emissions

For the purposes of evaluating the air quality impacts attributable to a project, it is important to distinguish between “direct” and “indirect” emissions. Direct emissions are generally defined as air pollutants, or their precursors that are caused directly by the project, including its construction, and occur at the same time and place as the action. Aircraft taxi, takeoff roll, landing, and delay periods; GSE; fuel storage and distribution facilities; on-site motor vehicle traffic; and stationary point sources (i.e., steam boilers and electrical generators) are all potential generators of direct emissions.

By comparison, indirect emissions are caused by the project, but

- Occur later in time,
- Are removed in distance, and
- Are reasonably foreseeable.

Examples may include off-site airport-related motor vehicle traffic. All other emissions, such as those from non-airport motor vehicle traffic or ancillary development are considered incidental, or "background" as they are not caused by the project and are not controllable or anticipated by the sponsor.

Table 5.4-5
Sources of Air Emissions

Sources	Emission(s)	Characteristics
Aircraft	Carbon monoxide Volatile organic compounds Nitrogen oxides Particulate matter	Exhaust products of fuel combustion which vary greatly depending on aircraft engine type, power setting, and period of operation. Except for short periods of take-off and approach, aircraft altitude precludes measurable off-site ground level impacts.
Ground service vehicles and equipment	Carbon monoxide Volatile organic compounds Nitrogen oxides Particulate matter	Exhaust products of fuel combustion (diesel, gasoline, and natural gas) from service trucks, tow tugs, belt loaders, and other portable equipment.
Fuel storage and transfer facilities	Volatile organic compounds	Formed from the evaporation and vapor displacement of fuel from storage tanks and fuel transfer facilities. Emissions vary with fuel use, type of storage tank, refueling method, fuel type, vapor recovery system, climate, and ambient temperature.
Space heating and emergency electrical generation facilities	Carbon monoxide Volatile organic compounds Nitrogen oxides Particulate matter Sulfur dioxide	Exhaust products of fossil fuel combustion from boilers dedicated to indoor heating requirements and emissions from incinerators used for waste reduction. Emissions are permitted by MA DEP, and are generally well controlled with operational techniques and post-burn collection methods.
Motor vehicles	Carbon monoxide Volatile organic compounds Nitrogen oxides Particulate matter Sulfur dioxide	Exhaust products of fuel combustion from passenger, employee, and cargo traffic approaching, departing, and moving about the airport site. Emissions vary greatly depending on vehicle type, distance traveled, operating speed, and ambient conditions. On-site emissions are confined to access/egress roadways and parking facilities.
Construction activities	Carbon monoxide Volatile organic compounds Nitrogen oxides Particulate matter Sulfur dioxide	Dust (e.g., soil and concrete) generated during construction and land-clearing activities released into the air by wind and machinery. The amount of particulate emissions varies with the material type, the amount of area exposed, wind, rain, and the use of Best Management Practices to reduce fugitive dust. Also includes emissions from construction vehicle exhaust.

5.4.2.3 Previous Air Quality Impact Assessments

The assessment of air quality impacts associated with Logan is an ongoing process that is continually updated. Table 5.4-6 summarizes some important mileposts in this process.

The results contained in these studies compare favorably with each other largely because forecasts of aircraft operations were generally consistent. Any differences in the results are attributable to updated emission factors, fleet mix characteristics, and/or ground-based delay periods. Moreover, there were no significant increases in airport-related emissions and no predicted violations of any NAAQS.

Table 5.4-6
Previous Air Quality Impact Assessments

Project/Assessment	Analyses
Logan Airside Project Improvements Feasibility Study - Phase 1 Report	Simulation of 1993 and 1999 conditions using the Logan Dispersion Modeling System to predict ambient levels of CO, HC, NO_2, PM_{10}, and odor at six community receptors.
Logan GEIR 1994/5; Annual Updates 1993 and 1996-98	Annually updated air emission inventories of VOCs, NOx, and CO from all Logan sources and calculated both on and off the airport for the years 1987, 1990, 1993-97, 1999 and 2010.
1991/1992 Final Logan GEIR (1993)	In addition to analysis listed above, microscale atmospheric dispersion modeling for CO at several Logan receptors and receptors in the surrounding communities.
Logan Growth and Impact Control (LOGIC) Study(1993)	Emission inventories and atmospheric dispersion modeling for 1987 and 2010.
West Garage Project Draft and Final EIR (1994 and 1995)	Emission inventories for 1993, 1996, and 1999; microscale CO dispersion modeling for landside motor vehicle traffic.
International Gateway Draft and Final EIR and Environmental Assessment (1996)	Used future year emissions inventories of all Logan airside-related sources and determined that reduced hardstand use resulted in air quality benefits.

5.4.3 Existing and Historic Air Emissions and Dispersion

In order to establish a benchmark of existing air quality impacts associated with Logan, an air emission inventory and atmospheric dispersion modeling was conducted for 1993 conditions. This procedure is consistent with FAA guidelines for preparing an EIS and meets the MEPA requirements for this project. Essentially, this analysis permits the comparison of future year forecasts to current year conditions.

The approach for conducting this work is summarized below followed by separate presentations of the emission inventory and dispersion modeling results.

5.4.3.1 Assessment Approach

The approach for quantifying the Airside Project 1993 baseline air quality conditions was subdivided into two elements: an emissions inventory and atmospheric dispersion modeling.

The emissions inventory serves several purposes: First, the various sources of air emissions identified in the Airside Project Draft EIS/EIR Section 5.4.2.1 (i.e., aircraft, ground service equipment, motor vehicles, fuel facilities, etc.) are individually quantified, thus apportioning the relative contribution of each source. Second, the results are compared to other previous analyses discussed in the Airside Project Draft EIS/EIR Section 5.4.2.3 in order to insure consistency among the various assessments. Third, when compared to future year conditions (presented in the Airside Project Draft EIS/EIR Section 6.4.2) the effect of growth and, more importantly, the Airside Project on air emissions can be evaluated. Finally, the emissions inventory serves as important input to the atmospheric dispersion model.

Because the emission inventory results are not directly comparable to the NAAQS, atmospheric dispersion modeling is also conducted. Using the emission inventory data, combined with a full year of meteorological data, predictions of ambient pollutant concentrations are made.

The Logan Dispersion Modeling System and FAA/EPA methods were used to develop the emission inventories and perform the dispersion modeling. The modeling input parameters, assumptions and assessment methods are described in detail in Airside Project Draft EIS/EIR Section 6.4.

5.4.3.2 1993 Historic Modeled and 1998 Actual Condition Emissions Inventories

This section presents the results of the emissions inventory for the 1993 Historic Modeled Condition, followed by the results of the emissions inventory for the 1998 Actual Condition.

The results of the Airside 1993 Historic Modeled Condition emissions inventory for Logan are contained in the Airside Project Draft EIS/EIR Table 5.4-7. For comparison, the GEIR results for 1993 are also shown. The results of the 19*98 Annual Update* Emissions Inventory are shown in Table 5.4-8. Given in units of kilograms (kg) per day (1 kg = 2.2 pounds), emission totals are given for the pollutants CO, NOx, and VOCs for both 1993 and 1998 and for PM_{10} in 1993. For ease in viewing these data, Figures 5.4-2 and 5.4-3 provide illustrative summaries in the form of pie-charts of the 1993 and 1998 Emissions Inventories, respectively.

As shown for both 1993 and 1998, aircraft and GSE constitute the two largest sources of CO at Logan, each representing between 41 and 44 percent, respectively, of the total in both years. Airport-related motor vehicles, which represent the third largest CO source, contributed ten percent of the total CO in both 1993 and 1998. Other sources are negligible in both years.

Aircraft also constitute the majority (approximately 75 and 80 percent, respectively) of the NOx emissions in 1993 and 1998. This is primarily attributable to high-power operating modes (i.e., take off and climbout). GSE and airport-related motor vehicles are again the second and third largest sources of NOx emissions, respectively, in both years.

Table 5.4-7
1993 Modeled Condition Emissions Inventory for Logan (kg/day)[1]

Source Categories	CO	NOx	VOC	PM_{10} [2]
Aircraft [3]	**7,060**	**3,811**	**2,410**	**208**
Service Vehicles	**6,613**	**651**	**565**	**12**
Airport-Related Motor Vehicles				
Parking/Curbside	879	25	63	<1
On-airport motor vehicle sources	1,465	237	215	13
Total Motor Vehicle Sources	**2,344**	**262**	**278**	**13**
Other Sources				
Fuel storage/handling	0	0	408	0
Miscellaneous sources [4]	26	278	5	8
Total Other Sources	**26**	**278**	**143**	**8**
Total Airport Sources	**16,043**	**5,002**	**3,666**	**241**
(tpy)	**(6,454)**	**(2,012)**	**(1,475)**	**(97)**
1993 Data from *GEIR* [5]	**17,704**	**5,964**	**4,501**	**N/A**
(tpy)	**(7,122)**	**(2,399)**	**(1,811)**	

1 For consistency with previous analyses, units of kg/day are used. 1 kg/day is equal to 0.4023 tons per year (tpy).
2 Assumes all PM emissions are PM_{10}
3 Includes air carriers, commuter, cargo, and general aviation aircraft throughout the entire landing/take-off cycle (i.e., approach landing, taxi-in, taxi-out, take-off, and climb-out, including any delay periods).
4 Includes the central heating/cooling plant and emergency electricity generation.
5 *1997 Annual Update, Logan Airport GEIR*, August 1998. Not included in *1998 Annual Update*.

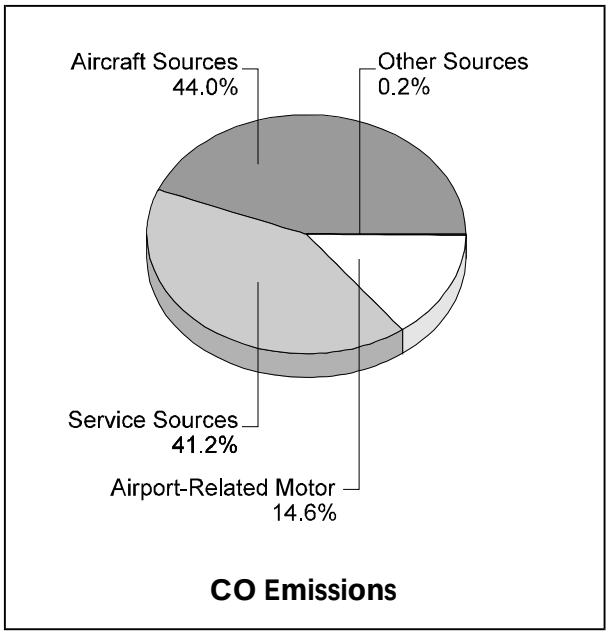
Table 5.4-8
***1998 Annual Update* Emissions Inventory for Logan (kg/day)**

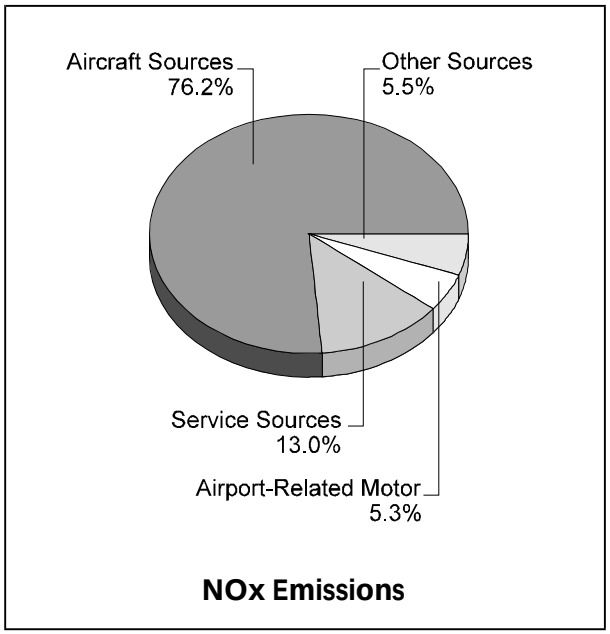
Source Categories	CO	NOx	VOC
Aircraft [1]	**5,577**	**4,685**	**1,648**
Service Vehicles [2]	**5,787**	**608**	**496**
Airport-Related Motor Vehicles			
Parking/Curbside	587	24	102
On-airport motor vehicle sources [3]	1,332	252	212
Total Motor Vehicle Sources	**1,919**	**276**	**314**
Other Sources			
Fuel storage/handling	0	0	372
Miscellaneous sources [4]	37	284	2
Total Other Sources	**37**	**284**	**374**
Total Airport Sources	**13,320**	**5,853**	**2,832**
(tpy)	**(5,359)**	**(2,355)**	**(1,139)**

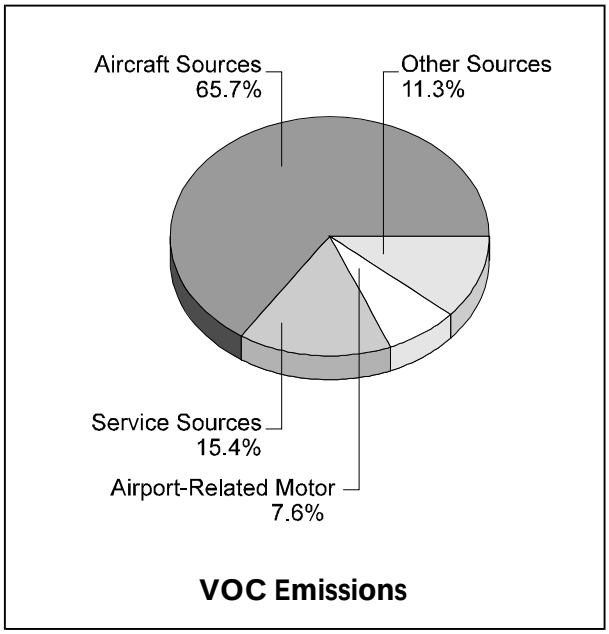
1 Includes air carriers, commuter, cargo, and general aviation aircraft throughout the entire landing/take-off cycle (e.g., approach landing, taxi-in, taxi-out, take-off, and climb-out, including any delay periods).
2 Includes vehicles and equipment converted to alternative fuels.
3 Includes through traffic from the Ted Williams Tunnel not destined for Logan Airport.
4 Includes the Central Heating and Cooling Plant and emergency electricity generation.

Similarly, aircraft emissions of VOCs represent 65 and 58 percent of the airport total in 1993 and 1998, respectively, followed by GSE at 15 percent in 1993 and 18 percent in 1998. Fuel storage and transfer operations, classified under "other sources," emit roughly 11 percent of the total VOCs in 1993 and 13 percent in 1998. Emissions of PM_{10} in 1993 are generated primarily by aircraft (86 percent) followed by motor vehicles, GSE, and other sources.

When compared to the 1993 emissions inventory as presented in the *1997 Annual Upda*te, the Airside Project results are lower. This difference arises from the availability of updated emission factors for aircraft, service vehicles, and motor vehicles and the refined assessment of airfield operational conditions developed in support of this Airside Project Supplemental DEIS/FEIR







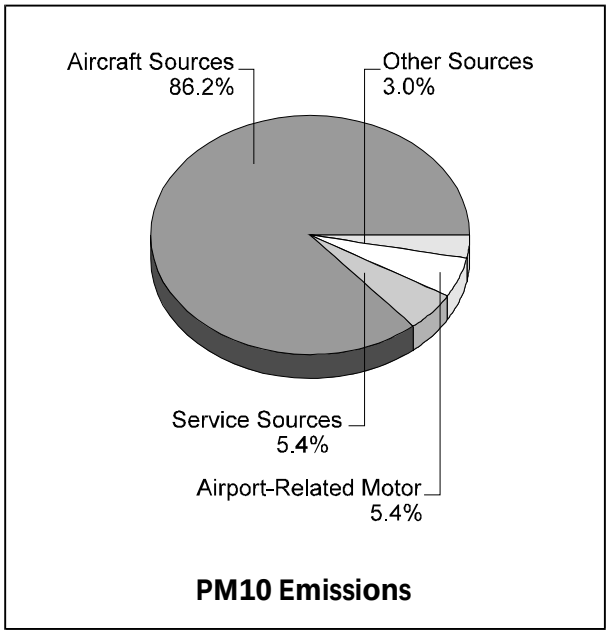
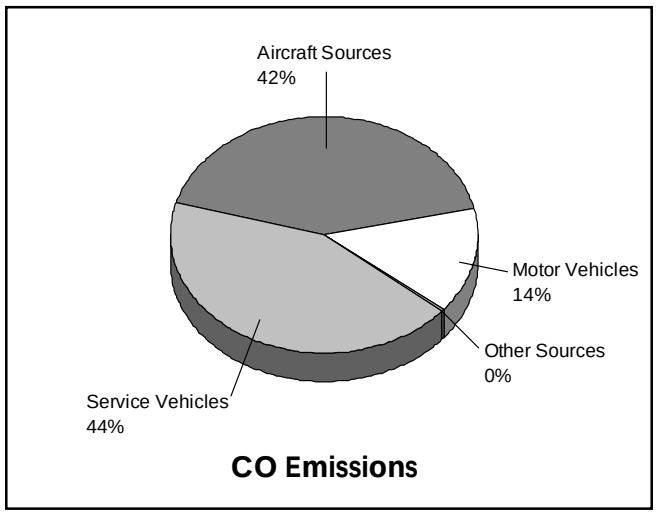
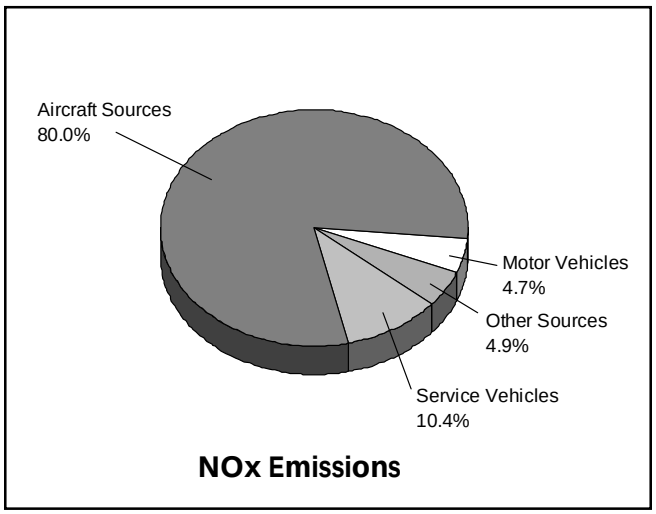


Figure 5.4-2
1993 Baseline Emission Inventory

7466-FIG-5.4-2.p65





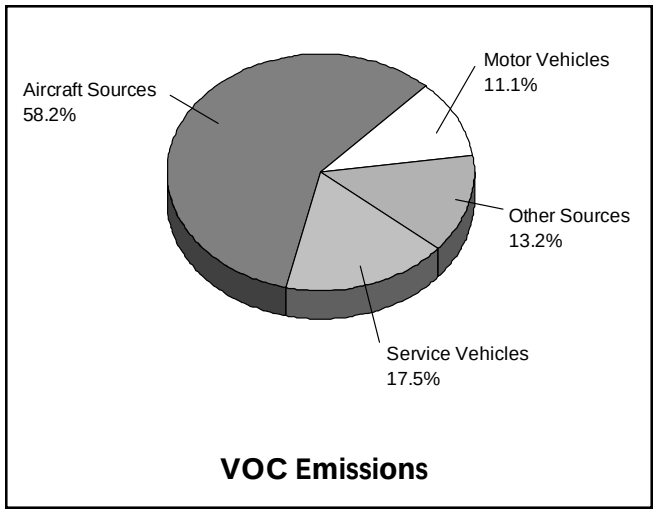


Figure 5.4-3
1998 Annual Update Emission Inventory

7466-FIG-5.4-3.p65

Off-site motor vehicle emissions associated with Logan were computed separately and are presented in Table 5.4-9. Representative of "indirect emissions," this source is subdivided into two categories: (1) Motor vehicle emissions generated on local streets within the East Boston Area and (2) emissions generated by motor vehicles traveling to and from the airport on major regional highways and arterials.[23] For comparative purposes, emissions attributable to non-airport-related motor vehicles on these same roadway networks are also shown. These off-site motor vehicle emissions were computed from traffic data contained in the *1994/95 GEIR* and MOBILE5b emission factors.

Table 5.4-9
1993 Off-site Motor Vehicle Emissions (kg/day)

Source Categories	CO	NOx	VOC	PM_{10} [2]
East Boston Study Area[1]				
Airport-related motor vehicles	1,162	158	166	23
Other vehicles	3,413	410	476	23
Total East Boston Study Area	**4,575**	**568**	**642**	**32**
Regional Study Area[3]				
Airport-related motor vehicles	5,195	1,300	765	61
Other vehicles	61,231	15,244	9,019	711
Total Regional Study Area	**66,426**	**16,544**	**9,784**	**772**
Total airport-related vehicles	6,357	1,458	931	70
Total other vehicles	64,644	15,654	9,495	734
Total All Vehicles	**71,001**	**17,112**	**10,426**	**804**
(tpy)	**(28,564)**	**(6,884)**	**(4,194)**	**(323)**

1 Airport-related motor vehicles using local East Boston streets.
2 Assumes all PM emissions are PM_{10}
3 Airport-related motor vehicles on major regional arterials.
Note: Not conducted for the *1998 Annual Update*.

[23] The regional study area for the air quality assessment includes access routes to Logan Airport and major highways that are significant carriers of airport-related traffic. Roadways include Route 1 (north of Boston); I-93/Route 3 (south of Boston); and I-90/ Massachusetts Turnpike (west of Boston). The limits of the regional study area for vehicle travel analyses are defined by the intersection of these radial highways with I-95/Route 128.

5.4.3.3 Dispersion Model Results for 1993

For the purposes of this assessment, ambient levels of air pollutants were predicted at 12 community sites (receptors) in the vicinity of the airport. (See Figure 5.4-1 for receptor locations.) Using the Logan Dispersion Modeling System (LDMS) and 1993 local meteorological data, the model results were combined with appropriate "background" concentrations to obtain these levels. For ease in assimilating these findings, only the highest levels predicted from among all 12 receptors are reported in Table 5.4-10. Even these fall below the NAAQS. Appendix F provides a complete presentation of dispersion modeling results. A comparison between LDMS and the FAA's Emissions Dispersion Modeling System (EDMS) is provided in Section 6.4.1, of Chapter 6, Environmental Consequences.

Exceptions to this reporting technique are the reported ozone and odor indicator levels, which are given as spatially averaged values. The highest spatial average of 24-hour VOC concentrations (as ozone indicators) are not predicted to be higher than 20 (μg / m3). One-hour VOC levels (as odor indicators) are shown to be below 121 (μg / m3). There are no NAAQS for these pollutants. Rather, these results will be used in Section 6.4 for comparison to future year conditions with and without the Preferred Alternative.

Table 5.4-10
1993 Dispersion Model Results Summary

Pollutant/Parameter(1)	Community Air Concentration ($\mu g/m^3$)	Air Quality Standard ($\mu g/m^3$)
CO, 1-hour 1	6,840	40,000
CO, 8-hour 1	3,311	10,000
NO_2, 1-hour 1	257	320
NO_2, annual, highest	60	100
PM_{10}, 24-hour 1	50	150
PM_{10}, annual, highest	23	50
Ozone indicator, Total VOCs, 24-hour, spatially-averaged highs	20	N/A
Odor indicator, Aircraft Idle Mode VOCs, 1-hour, spatially-averaged highs	121	N/A

1 The "highest second high" data are provided as the maximum value determined by taking the second highest value of the dispersion modeling results at each receptor and then reporting the maximum value for that data set of twelve. (Background levels are included).

N/A There are no standards applicable to this pollutant, which is used as an indicator of potential ozone or odor formation.

Note: Not conducted for the *1998 Annual Update*.

5.5 Biotic Communities

Biotic Communities refers to the vegetation communities, water resources, and wildlife habitats of an area. The ecosystems of the project area consist primarily of the upland vegetative communities associated with the Logan airfield. The urban character of the project area limits the extent of upland vegetation, and hence, wildlife habitat.

5.5.1 Vegetation

Vegetation occurring on the airfield, including the area of the Centerfield Taxiway and other vegetated areas proposed for construction, is primarily herbaceous, with some areas of sparse vegetation and bare ground. Herbaceous vegetation is regularly mowed to a maximum height of approximately 6 inches. The plant community consists of grasses and forbs characteristic of lawns, fields, and upland coastal habitats.

5.5.2 Wetlands

While federal and state-regulated wetlands do occur along the perimeter of the airfield (see Figure 5.1-2), no elements of the Airside Project improvements, require work in these wetland resource areas, although certain of the alternatives would unavoidably require construction in the buffer zone.

The rock-faced bulkhead that forms the southern boundary of Logan is considered a Coastal Bank under the Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40) and associated regulations (310 CMR 10.00 et. seq.). As defined at 310 CMR 10.30(2), Coastal Banks are "the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland."

The coastal bank is significant to storm damage prevention and flood control. At Logan, this coastal bank was initially constructed to confine materials placed as fill for the airfield. The bank continues to provide storm damage protection along this edge of the airfield. The top of the bank is above the 100-year flood elevation, which is 10 feet above mean sea level for Boston Harbor.

Land within 100 feet of the coastal bank is designated as the "buffer zone," and extends the length of the coastal bank for the perimeter of the airfield. In the area of construction for proposed unidirectional Runway 14/32, the buffer zone presently consists of the airfield perimeter roadway, guard rail, taxiway, and paved runway safety area. Limited areas of grass are also present between the perimeter road and the taxiways and safety areas.

5.5.3 Wildlife

The airfield is an urbanized environment with herbaceous vegetation between paved surfaces such as runways, taxiways, the perimeter road and aprons which is isolated from off-site vegetation by airport facilities and East Boston streets and neighborhoods. The airfield is only accessible to wildlife that is able to fly, travel through an urban environment, or swim via Boston Harbor.

5.5.3.1 Typical Species

As a result of the developed nature of the airfield, difficulty of access and the lack of diversity in cover types, airfield wildlife is low in diversity and predominantly avian. However, some mammals such as muskrats, mice, rats and other rodents have been observed on the airfield.

With regard to avian species, the Logan airfield provides a relatively large expanse of grassland habitat in a region of the country (i.e., New England) dominated by forests. As a result, seasonal migrants associated with this habitat type, such as lapland longspur, snow buntings, killdeer, horned lark, upland sandpipers, and savannah sparrows, have been recorded on the Logan airfield. Snowy owls (*Nyctea scandiaca*) are common winter visitors. A wide range of waterfowl, waders, and shorebirds uses the adjacent marine habitat of Boston Harbor and areas around the airport perimeter that are not seawall. Table 5.4-2 of the Airside Project Draft EIS/EIR provides a list of bird species observed at Logan.

5.5.3.2 Endangered and Threatened Species

Based on correspondence with the U.S. Fish and Wildlife Service (USFWS) dated April 1, 1997, no federal-listed endangered and threatened plant or animal species are known to occur on the Logan airfield. There are also no state-listed plant species known to occur at Logan. (A copy of the letter from the USFWS is included in Appendix G) A copy of the most recent USFWS list dated December 8, 2000, indicates that while the statewide list has been modified, the initial 1997 findings remain relevant.

The upland sandpiper (*Bartramia longicauda*), a state-listed endangered animal species, is associated with the Logan airfield, and this species accounts for mapped habitat shown in the Massachusetts Natural Heritage and Endangered Species Program (NHESP) Massachusetts Natural Heritage Atlas (2000-2001 Edition).

For several years, upland sandpipers have been observed on the airfield during the spring migratory season, breeding and nesting periods, and through the summer. Upland sandpipers typically arrive at Logan airfield in April or early May, although they may arrive as early as the beginning of March, and were observed to nest on the airfield in 1990 and 1996. Since 1996, upland sandpiper have been observed seasonally.

Table 5.4-2 in the Airside Project Draft EIS/EIR summarized field observations for this species made during 1990 and in 1996. The 1990 field observations were made as part of the Central Artery/ Tunnel (CA/T) Project's siting studies for the Governors Island dredged materials storage area.

5.6 Water Quality

This section discusses Boston Harbor water quality and describes Logan's existing drainage system and water quality resulting from existing operations.

5.6.1 Boston Harbor

Boston Harbor, which surrounds Logan on three sides, is classified by the Massachusetts Department of Environmental Protection (DEP) as Class SB water. As defined at 314 CMR 4.00, Class SB waters are to be suitable for primary contact recreation (swimming, boating and other water activities), fishing, industrial water uses and the protection, propagation and growth of fish and wildlife. Many of the intertidal flats surrounding Logan are used for the harvesting of shellfish by Master Diggers. However, because of the presence of combined sewer overflows in the vicinity (not associated with Logan), the shellfish must be depurated before sale. More acres of shellfish beds have recently opened to harvesting due to the construction of combined sewer overflows (CSO) treatment facilities at certain outfall points in Boston Harbor by the Massachusetts Water Resources Authority (MWRA). All of these CSOs are non-Massport structures located off the airport. Water quality has also improved due to efforts by the Boston Water & Sewer Commission to investigate and remove illegal sewage connections by others to the storm drainage systems, and to improve the sewerage collection and treatment system around the harbor and the remainder of the MWRA Service Area. Logan's sewer system does not have any illegal connections to the storm drainage system.

The MWRA collects and analyzes water quality data at various locations around Boston Harbor, three of which are in the general vicinity of Logan. Data from these locations were reviewed and analyzed as the basis for characterizing harbor water quality adjacent to Logan. (See Table 5.5-1 in the Airside Project Draft EIS/EIR) The data indicate that the Class SB water quality standards are being met under average conditions.

5.6.2 Airport Drainage and Water Quality

Stormwater runoff from the airfield discharges to Boston Harbor through a complex drainage system. Airfield runoff flows across the grass infield to catch basins located primarily in the areas between the runways and taxiways. The catch basins are connected by underground drain lines leading to a series of outfalls along the perimeter of the airfield which discharge to Boston Harbor. Groundwater also

discharges through this drainage system in those areas of the airfield where an under drain system exists.
There are also four principal discharge points (West Outfall, Porter Street Outfall, Maverick Street Outfall and North Outfall) which drain the terminal areas and portions of the airfield. These four Logan outfalls are permitted through the EPA's National Pollutant Discharge Elimination System (NPDES) program.

A simplified illustration of the drainage system for the terminal and airfield areas is shown in Figure 5.6-1. As illustrated in the figure, much of the terminal and apron area and portions of the southwest corner taxiway system presently discharges to the West Outfall. The West Outfall incorporates pollution control devices, including a mechanically cleaned bar screen, oil skimmer, grinder pump, sedimentation tank, and an oil / water separator. Oil from the separator is collected in an off-line waste oil storage tank. The remainder of the airfield areas included in the Preferred Alternative drain to the perimeter outfall system.

Massport monitors the quality of its major terminal area discharges as part of the NPDES Permit (Permit No. MA 0000787) that was issued by the U.S. EPA for the four main airport outfalls identified above. Massport and the Logan tenants applied in October 1992, as co-applicants, for an individual NPDES Permit for the entire airport which would supersede the existing permit. The U. S. EPA is expected to issue the draft permit in 2001. In addition, a NPDES Permit (Permit No. MA 0032751) has been issued for discharge from the water treatment facility at the Fire Training Facility.

5.6.3 Airport Deicing

Deicing activities at Logan include both anti-icing, which is to prevent snow and ice buildup, and deicing, which is the removal of snow and / or ice once it has built-up on the ground or on an aircraft. (The term "deicing" as used in this document refers both to anti-icing and deicing.) Massport is responsible for operations relating to the deicing of roadways, runways, and taxiways. Roadways at Logan are treated using salt and sand similar to those used on other public roadways. The runways and high speed turn-offs are deiced by applying a liquid mixture of ethylene glycol, urea, and water in an approximate ratio of 50 percent ethylene glycol, 25 percent urea, and 25 percent water. The rates of application on the runways and taxiway exits are in the range of 0.5 to 1.5 gallons per 1,000 square feet, depending on ground conditions, air temperature, precipitation and other weather factors. Occasionally, taxiways may be deiced in a similar manner, under controlled applications. Aircraft deicing practices and volumes will not change as a result of the Airside Project Improvements.

In the Logan NPDES application, Massport assessed the environmental impact of the discharge of deicing materials to Boston Harbor. The assessment resulted in the conclusion that the deicer applied to the runways does not significantly affect water quality because runway runoff flows overland upgradient of the catch basins; the approximately 50 outlets are dispersed around the airfield; and the glycol deicing compounds are relatively harmless with respect to aquatic toxicity (U.S. Fish and Wildlife Service) and quickly biodegrade. The combination of overland runoff and a

large number of small discharge locations helps to attenuate and disperse the deicing compounds used on the airfield.

During preparation of the NPDES application, runoff samples were collected from the drainage system (Outfall A-12) at the departure end of Runways 22R and 22L (see Figure 5.6-1), and analyzed for a number of water quality parameters. The sampling results related to the deicing activities were briefly summarized in Table 5.2-2 of the Airside Project Draft EIS/EIR.

5.7 Soil/Sediment Characterization

This section contains information on the existing quality of soil and subgrade materials that may be removed or relocated during runway and taxiway construction. It also provides a description of the characteristics of the CA/T Project materials which are managed on Governors Island. Construction will not take place in Boston Harbor and therefore, marine sediment quality is not discussed.

5.7.1 Existing Soil Quality

Construction of the runway and taxiway improvements will require the excavation of unsuitable or excess soils. The Airside Project Draft EIS/EIR contained preliminary information on soil quality based on existing data from previous airfield soil sampling programs. Following the Airside Project Draft EIS/EIR, a soil pre-characterization program was conducted by Massport in July and August 1999 in areas where excavation would be required for construction. The goal of the program was to develop both structural and environmental information to assist in the design and construction of the various airfield improvements. Structural soil data will be used for the engineering design and the environmental data will indicate any areas of possible contamination and provide guidance on reuse of the excavated materials, where appropriate.

The soil pre-characterization program involved the installation of 93 soil borings within or in proximity to airside areas proposed for construction of runway and taxiway improvements. Soil samples were collected at three depths from each of the 93 boring locations: 0 - 2 feet below ground surface, 5-7 feet below ground surface, and 8-10 feet below ground surface. In addition, soil borings on Governors Island (B-46, B-47, B-50 and B-51) were installed to a depth of 20 feet below ground surface due to the presence of fill in that area. None of these soil borings were within of 100 feet of wetlands or waterways regulated under the Massachusetts Wetlands Protection Act.

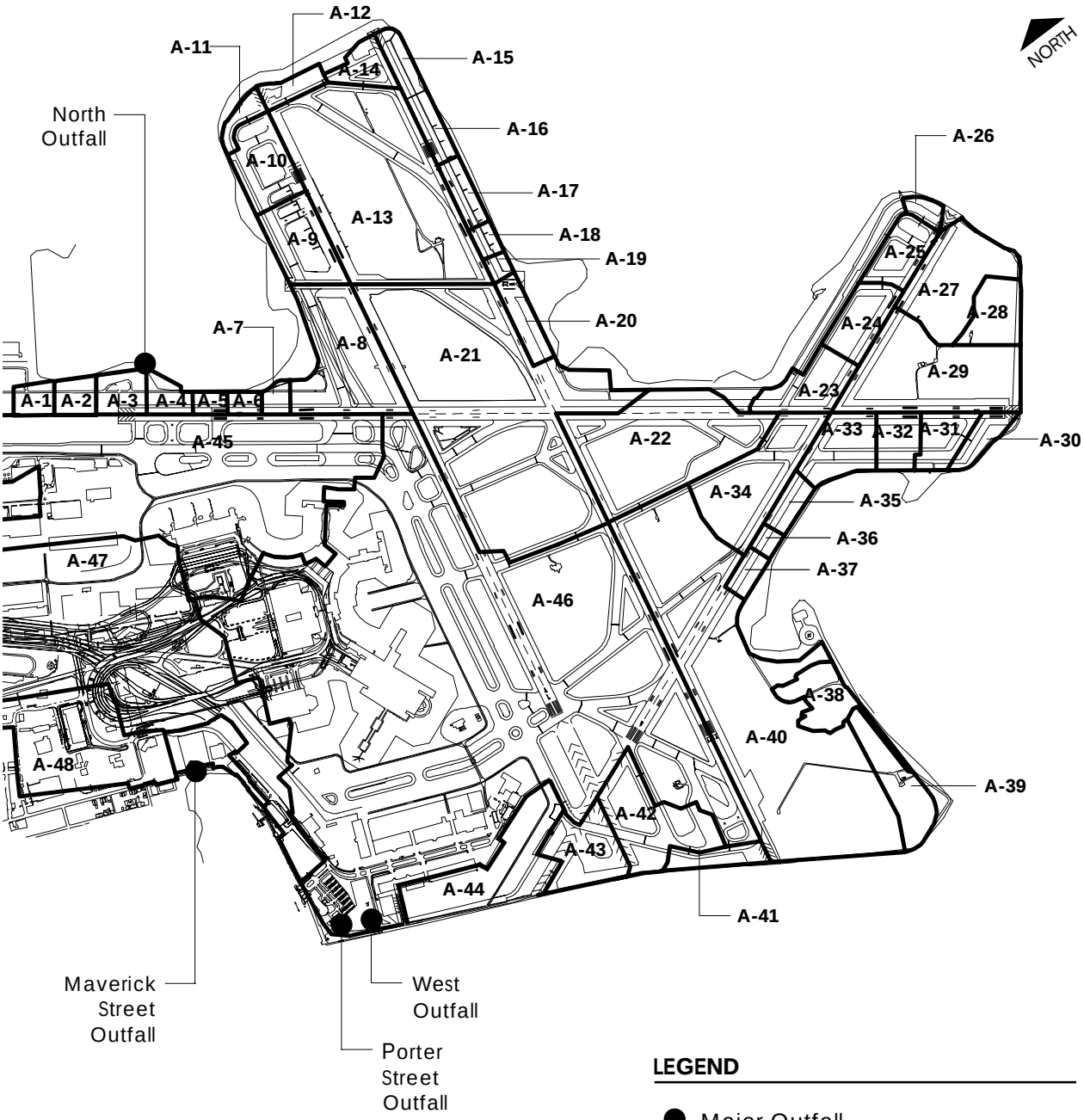


Figure 5.6-1

Existing Drainage Areas

7466-FIG-5.6-1.pm65

Soil samples were analyzed at a DEP-certified analytical laboratory for the following parameters:

- Volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH), DEP method 98-1
- Priority pollutant metals, EPA methods 6010/7471/7740/7840
- Pesticides and polychlorinated biphenyls (PCBs), EPA Method 8080
- Soil conductivity, EPA method 120.1/9050

The Massachusetts Contingency Plan (MCP) contains categories for reporting contamination of oil and hazardous materials. These reporting categories are based on land use and groundwater use. Reporting Category S-1 applies to soil that is within 500 feet of dwellings, residentially zoned property, schools, playgrounds, recreational areas, parks and within areas that have been designated as part of groundwater aquifer supply zones. Reporting Category S-2 is for all other land areas. For Logan, the S-2 Category applies. If soil contamination levels exceed the applicable Reportable Concentrations (RC) for oil and hazardous materials, they are considered to be regulated and must be reported to the DEP.

The S-1 and S-2 categories have specific contamination concentrations for oil and hazardous materials. The laboratory results were compared to S-2 Reporting Concentrations established in the MCP at 310 CMR 40.1600. The Toxicity Characteristic Leaching Procedure (TCLP) test is one measure of the toxicity of a sample and upon exceeding regulatory limits it is determined to be TCLP hazardous. The data indicate that the soil was not found to be TCLP-lead hazardous. There are, however, areas where the DEP's Reportable Concentrations are exceeded for various chemical constituents. The analytical results of the soil pre-characterization program are summarized in Table 5.7-1 and are described below.

5.7.1.1 Runway 14/32

The soil pre-characterization data indicate that the soil under the footprint of the proposed unidirectional Runway 14/32 does not exceed the Reportable Concentrations for S-2 soil.

Table 5.7-1
Airfield Soil Data Summary for Exceedances of S-2 Reportable Concentrations

Soil Contaminants	Reportable Concentration S-2 Soil	Proposed Runway 14/32	Proposed Centerfield Taxiway	Proposed Taxiway November Realignment	Proposed Southwest Corner Taxiway Realignment
Total Petroleum Hydrocarbons (mg/kg)					
Volatile Petroleum Hydrocarbons		No Exceedance	No Exceedance	No Exceedance	No Exceedance
Extractable Petroleum Hydrocarbons					
Aliphatic Hydrocarbons		No Exceedance	No Exceedance	No Exceedance	No Exceedance
Polynuclear Aromatic Hydrocarbons (PAHs)		No Exceedance			
Benzo(a)anthracene	1	No Exceedance	ND-19[1]	ND-5.8	ND-4.7
Chrysene	10	No Exceedance	ND-18	No Exceedance	No Exceedance
Benzo(b)flouranthene	1	No Exceedance	ND-20	ND-12	ND-6.7
Benzo(a)pyrene	0.7	No Exceedance	ND-22	ND-6.3	ND-4.5
Dibenzo(a,h)anthracene	0.7	No Exceedance	ND-3.8	No Exceedance	No Exceedance
Indeno(1,2,3-c,d)pyrene	1	No Exceedance	ND-13	ND-2.6	ND-2.1
Priority Pollutant Metals (mg/kg)					
Beryllium	0.8	No Exceedance	<0.59-1.2	No Exceedance	No Exceedance
Polychlorinated Biphenyls (mg/kg)	1	No Exceedance	No Exceedance	No Exceedance	No Exceedance
Pesticides (mg/kg)					
Dieldrin	0.04	No Exceedance	ND-2.1	ND-0.62	ND-3.1

1 Not Detectable to-19mg/kg

5.7.1.2 Centerfield Taxiway

The soil pre-characterization data indicate that soil underlying the proposed Centerfield Taxiway contains variable levels of contamination. The soil data indicate that no volatile compounds were present nor were any of the aliphatic fractions from the total petroleum hydrocarbon tests. The soil was found to exceed the S-2 Reportable Concentrations (RC S-2) for the polynuclear aromatic hydrocarbons, as determined in the EPH analysis. The PAH contamination was found from Taxiway Echo north to Taxiway Romeo. Beryllium was the only priority pollutant metal to exceed the RC S-2. This condition was found adjacent to Runway 15L/33R and between Taxiways Echo and Charlie. Lead in the soil was found to exceed the 100 mg/Kg TCLP trigger level by a slight amount (110 to 120 mg/kg) at three scattered locations. The results of the TCLP testing indicate that the soil did not exceed the TCLP regulatory limit of 5.0 mg/l for lead and is, therefore, not hazardous. The insecticide dieldrin was found in the soil at 8 locations. It is believed that the dieldrin originated from historical mosquito control programs. The soil was not found to contain polychlorinated biphenyls.

5.7.1.3 Taxiway November Realignment

Soil underlying the area for the realignment of proposed Taxiway November was found to be contaminated in excess of the Reportable Concentrations for S-2 soil with four polynuclear aromatic hydrocarbon (PAH) compounds, and the insecticide dieldrin. This contamination was only found in the surface soils (0-2 ft). The soil data indicate that no volatile compounds were present nor were any of the aliphatic fractions from the total petroleum hydrocarbon tests.

5.7.1.4 Southwest Corner Taxiway Reconfiguration

The soil sampling and analysis data indicate that the soil in the area of the proposed Southwest Corner Taxiway Reconfiguration contains concentrations of four PAH compounds and the insecticide dieldrin which exceed the Reportable Concentrations for S-2 soil. The soil data indicate that no volatile compounds were present nor were there any of the aliphatic fractions from the total petroleum hydrocarbon tests.

5.7.2 Governors Island Central Artery/Tunnel Materials Storage Site

Section 5.6.2 of the Airside Project Draft EIS/EIR presented an extensive discussion of the temporary Massachusetts Highway Department (MassHighway) Central Artery/Tunnel project soil stockpile at Governors Island. The discussion was included because at that time it appeared that a portion of the stockpiled materials would need to be relocated if unidirectional Runway 14/32 was to be constructed.

In 1999, Massport was approached by the Court-appointed Receiver of the Rubchinuk Landfill in Middleton, Massachusetts to assist in the closure of the landfill in accordance with a Landfill Closure Plan approved by the DEP. As a result of this request, in June 1999, Massport developed a third amendment to the 1993 Grant of Easement with MassHighway. This 1999 amendment facilitated a partial release (removal) of soil from Governors Island for transfer to the Rubchinuk Landfill. The first amendment to the Grant of Easement allowed Massport to use a portion of the area for storage and disposal of Massport soils from the Logan 2000 projects. A second amendment in 1996 allowed the MassHighway to use stockpiled materials for construction of the I-90 Airport Interchange at Logan. The 1999 amendment releases MassHighway from all of its right, title and interest to obligations from this "released area," totaling approximately 24.8 acres.

The removal of soil from the Governors Island release area was initiated in June, 1999 at a rate of approximately 1,400 tons/day (1,000 cubic yards). In total, 380,000 tons (approximately 240,000 cubic yards) of the MassHighway soil was removed from Governors Island by November 2000. As a result, no MassHighway soil will need to be removed from Governors Island for runway construction.

5.8 Other Environmental Categories

The FAA's Airport Environmental Handbook (5050.4A) requires that a range of issues be addressed in terms of potential environmental consequences. Several of these potential impact categories are not applicable to the Airside Project. Specific impact categories that are not relevant to the proposed Airside Project improvements are discussed below.

5.8.1 Coastal Barriers

There are no coastal barrier resources as defined by the Coastal Barrier Resources Act (PL97-348) in the project area. As such the project will not affect these resources.

5.8.2 Wild and Scenic Rivers

Logan Airport is not adjacent to, nor will it affect any body of water included in the Wild and Scenic Rivers System Inventory. Accordingly, the project will have no impact on a river subject to the Wild and Scenic Rivers Act (PL 90-542).

5.8.3 Farmland

Logan Airport does not include any areas of farmland and therefore the project will not result in the conversion of any farmland to nonagricultural purposes. The project is consistent with the Farmland Protection Act (PL 97-98).

5.8.4 Energy Supply and Natural Resources

The addition of runway and taxiway elements will necessitate a slight increase in airfield energy use, primarily for construction and permanent airfield navigational lighting and signage. There is adequate energy to meet the energy needs of these temporary and long-term demands.

5.8.5 Light Emissions

As noted above, implementation of the taxiway and or runway improvements will require the installation and operation of new ground-mounted airfield navigational lighting and new airfield signage. All lighting and signage will be consistent with current equipment and operations. Proposed Runway 14/32 will not require the installation of a light pier.

5.8.6 Solid Waste

The Airside Project improvements will not generate the need for additional solid waste collection, control or disposal other than that associated with construction. Section 6.8.1 describes construction impacts of the Preferred Alternative.

6 Environmental Consequences

Key Points

This chapter repeats much of the analysis presented in the Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report (Airside Project Draft EIR/EIS). It is focused primarily on the comparison between the Preferred Alternative (Alternative 1A) and the No Action Alternative (Alternative 4) for representative fleets: the 29M Low Fleet and the 37.5M High Fleet scenarios. These fleets were chosen because they reflect the full range of potential impacts, including the worst case in terms of noise.[1]

Recent trends at Logan Airport indicate an increased presence of regional jet aircraft in the fleet mix. In order to examine the potential impacts that these 30-70 seat jet aircraft may have on the operational and environmental analysis of the proposed airside improvements, an additional long-term 37.5 million annual air passenger scenario was developed for this Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report (Supplemental DEIS/FEIR). This fleet scenario, referred to as the 37.5M High Regional Jet (RJ) Fleet, reflects a significantly higher percentage of regional jet aircraft and a lower percentage of non-jet operations than any of the prior fleet forecasts presented in the Airside Project Draft EIS/EIR.

To further clarify the impacted areas, the analysis is presented through Geographic Information System (GIS) mapping with a more detailed base map and a different scale than was presented in Chapter 6 of the Airside Project Draft EIS/EIR.

Chapter 6 of this Supplemental DEIS/FEIS also includes an in-depth discussion of Environmental Justice requirements and additional Environmental Justice analyses requested by the Massachusetts Secretary of Environmental Affairs. In response to the Federal Aviation Administration's (FAA's) direction following the Supplemental Draft EIS Panel (SDEIS Panel) process, a school day/school year contour[2] is also included for the 29M Low Fleet scenario. Finally, the presentation of the flight tracks has been expanded to show the tracks over a wider geographic area.

1 Appendices E and F contain a summary of environmental impacts for other fleets analyzed in the Airside Project Draft EIS/EIR.
2 Contour provided in Appendix E of this Supplemental DEIS/FEIR.

Noise Benefits

- The Preferred Alternative reduces noise exposure in the most highly affected communities around Logan Airport: Winthrop, parts of East Boston, and Revere. Depending on the fleet forecast, all three communities have residents exposed to Day-Night Sound Level (DNL) values of 70 dB and above. Under the 29M Low Fleet scenario, use of Runway 14/32 will remove approximately 180 people in these communities from areas exposed to noise above 75 dB DNL, and some 60 people from areas of 70 dB DNL and above. Under the 37.5M High forecast, 199 people in areas of above 75 dB DNL and 2,800 people in areas of 70 dB DNL and above will no longer be exposed to those high noise levels. These numbers represent 77 percent and 73 percent reductions, respectively, in the total population residing in the 70 dB DNL and above and the 75 dB and above noise contours.

- The reduction in exposure at the highest DNL values is achieved by redistributing aircraft onto other runways and increasing the number of over-water operations. This redistribution causes increases in exposure at lower DNL values. Under the 29M Low Fleet scenario, the Preferred Alternative is estimated to increase the number of people exposed to noise above 65 dB DNL by 378, 2 percent of the total population in that contour compared to the No Action Alternative. Under the 37.5M High Fleet scenario, the Preferred Alternative increases the number of people above 65 dB DNL by 508, a 4 percent increase.

- Under the 29 M Low Fleet scenario, no one residing in an area exposed to noise above 65 dB DNL is projected to experience a noise level increase greater than 1.5 dB due to the Preferred Alternative. Approximately 400 people in Winthrop will experience decreases in noise of more than 1.5 dB compared to the No Action Alternative.

- In addition to reducing noise exposure at the highest DNL levels, the Preferred Alternative allows for more flights over water rather than over populated areas, as well as a more balanced geographic distribution of jet operations. Under the 37.5M High Fleet scenario, the Preferred Alternative results in 41 percent of jets utilizing runways affecting communities north and south of the airport, compared to 91 percent for the No Action Alternative. The percentage of jets flying over the water increases significantly, from 6 percent in the No Action Alternative to 30 percent with the Preferred Alternative.

- The Preferred Alternative, with its unidirectional Runway 14/32 and Centerfield Taxiway, reduces delay and consequently the number of nighttime (10 PM to 7 AM) operations by approximately 5 percent compared to the No Action Alternative under the 29M Low Fleet scenario.

- The Preferred Alternative is even more effective at reducing delays under the 37.5M High Fleet forecast. As a result, in that scenario the number of nighttime operations is reduced by approximately 20 percent compared to the No Action Alternative.

- Under the 37.5M High RJ Fleet scenario, the Preferred Alternative also reduces noise in the most-highly exposed communities. Proposed Runway 14/32 removes an estimated 164 people from exposure to noise above a DNL of 75 dB, a reduction of 74 percent compared to the No Action Alternative. It also removes approximately 1,433 people from exposure to DNL levels above 70 dB.

- Under the 37.5M High RJ Fleet scenario, the reduction in the highest exposure levels achieved with the Preferred Alternative causes increases in exposure for 364 people at DNL values above 65 dB. This is a 3 percent increase compared to the No Action Alternative.
- Under the 37.5M High RJ Fleet scenario, the Preferred Alternative reduces the number of nighttime operations by 13 percent compared to the No Action Alternative.
- The Preferred Alternative generally reduces the noise from ground movements, lowering DNL levels due to taxi operations by a few tenths to as much as 3 dB at seven close-in monitoring locations.

Land Use and Social Impacts

- The Preferred Alternative will have no significant impacts on land uses adjacent to or in the immediate vicinity of Logan Airport. The only relocation required for construction of Runway 14/32 involves the tenants of Building 60 in the South Cargo Area. Massport will provide relocation assistance as required under applicable law to mitigate impacts to affected tenants.

Historic Resources

- Providing sound insulation for the few historic residential properties within the 65 dB DNL contour associated with the Preferred Alternative will be undertaken in accordance with historic building rehabilitation standards established by the Secretary of the Interior (36 CFR 800.5(b)).
- The FAA and the Massachusetts Historical Commission have concurred that the proposed project will have no adverse effect on significant historic properties (see Appendix H for a copy of the letter from the Massachusetts Historical Commission, December 21, 1999.)

Other Section 4(f) Resources

- The FAA found that implementation of the Preferred Alternative will neither incorporate land from a Section 4(f) resource, nor affect the normal activity or aesthetic value of a public park, recreation area or wildlife refuge.
- The Preferred Alternative does not add any new parklands within the 65 dB DNL contour. The Boston Harbor Islands are already within the No Action 65 dB DNL contour, while the Arnold Arboretum, Emerald Necklace and Franklin Park are well outside the 65 dB DNL contour and will not experience new noise impacts.

Air Quality Benefits

- Implementation of any of the Airside Project alternatives produces a reduction in emissions and an improvement in ambient air quality when compared to the No Action Alternative, due to improved airfield efficiency and shorter aircraft delay periods.

- None of the Alternatives will result in any violations of federal or state air quality standards.
- Due to improved airfield efficiency and shorter delay periods, the Preferred Alternative results in a reduction of air pollutant emissions when compared to the No Action Alternative.
- The Airside Improvements Planning Project does not require a Federal General Conformity determination for the purposes of air quality, because it will not exceed general conformity thresholds – therefore it is assumed to conform to the State Implementation Plan.

Biotic Communities

- By constructing the Centerfield Taxiway and the Taxiway Delta extension, approximately 37 acres of existing grassland will be converted to pavement, resulting in the loss of an area of Upland Sandpiper habitat. An on-site and off-site mitigation plan has been developed in consultation with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) to mitigate impacts to the upland sandpiper consistent with aircraft safety.
- There are no significant impacts to terrestrial vegetation, wetlands or typical wildlife.

Water Quality

- Construction of Runway 14/32 and the Taxiway components (the Preferred Alternative) will create additional impervious surfaces at Logan Airport and will increase the peak rate of runoff from Logan Airport to Boston Harbor by approximately 3.8 percent. The combination of overland flow across grass areas and the large number of discharge locations helps to attenuate and disperse contaminants in the runoff, and therefore the general quality of runoff under the Preferred Alternative is expected to be similar to present runoff.
- Since the existing water quality in Boston Harbor will not be affected by the construction of the runway or taxiway improvements, there are no adverse water quality impacts that would result from the Preferred Alternative.

Soil Removal

- All soils removed from the site will be managed in accordance with State regulations and Massport policy to minimize impacts. Appropriate sediment and erosion controls will be employed during construction and disturbed soils will be revegetated.
- The Airside Project Draft EIS/EIR identified a potential need to remove soil materials stockpiled on Governors Island for construction of Runway 14/32. In response to a request from the Court-appointed receiver for the Rubchinuk Landfill, Massport arranged for the transport of the Massachusetts Highway Department (MassHighway) soils from Governors Island to the Rubchinuk Landfill in Middleton. This work has since occurred as part of a separate initiative. The transportation of the MassHighway soils began in June 1999 and was completed in November 2000, therefore none of these soils will need to be moved offsite for construction of Runway 14/32.

Environmental Justice

- There is no disproportionate high and adverse impact on minority and low-income populations caused by the Preferred Alternative. Adverse noise impacts of the Preferred Alternative are not predominately borne by a minority or low-income population. Only 21 percent of the population within the resulting 65 dB DNL is minority, compared to the Suffolk County population which is 38 percent minority. Less than 2 percent of the population within the 65 dB DNL contour has a household income of less than 150 percent of poverty level.
- The additional area within the 65 dB DNL contour associated with the Preferred Alternative includes a predominantly Hispanic neighborhood in Chelsea which is predicted to experience an increase of 0.6 dB or less under the near-term 29M Low Fleet, the worst case scenario based on total noise exposure. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise will be provided to the affected community in the form of residential sound insulation.

Construction

- Construction of the runway and taxiway improvement components of the Preferred Alternative will occur on the existing airfield. Construction will be managed to minimize noise, air and water pollution, and other impacts to the adjacent community.
- The total period for the phased construction of the runway and taxiway improvement components of the Preferred Alternative is approximately five years. Construction vehicles would access the airport on designated haul routes via the Ted Williams Tunnel or Route 1A, and thus would not impact local residential streets adjacent to Logan Airport .
- Construction traffic associated with the Preferred Alternative will be reduced significantly from the number of truck trips presented in the Airside Project Draft EIS / EIR as a result of the reduction of soil material to be moved off-site.

Irretrievable Commitment of Resources

- The Preferred Alternative causes no irretrievable commitment of natural resources. Construction of the runway and taxiway improvement components of the Preferred Alternative will consume fuel and result in the consumption of raw materials such as gravel, concrete and other materials required for the construction process.
- Measures will be implemented to mitigate both short- and long–term impacts on natural resources to the greatest extent practicable.

6.1 Introduction

This chapter of the Supplemental DEIS/FEIR focuses on the benefits and impacts of two Airside Project Improvements Alternatives – the No Action Alternative and the Preferred Alternative which includes all improvements except Peak Period Pricing. It includes a discussion of long-term impacts relating to airfield operations, as well as a description of shorter-term construction impacts.

The environmental consequences of the proposed Airside Project improvements were evaluated against a near-term demand level of 29 million annual passengers and long-term levels of 37.5 and 45 million passengers (referred to in this document as 29M, 37.5M, and 45M). These demand levels are expected in the years 2003, 2015, and 2024, respectively. At each passenger level, two different operations forecasts were developed. The High and Low Fleet scenarios, presented in the Airside Project Draft EIS/EIR, reflect differing aircraft fleet mix assumptions. The Low Fleets assume more large jet operations than non-jet operations, similar to current conditions. The High Fleets assume a greater proportion of non-jet aircraft and thus a higher level of total operations for the same passenger level.

Recent trends at Logan Airport indicate an increased presence of regional jet aircraft. In order to examine the potential impacts that these 30-70 seat jet aircraft may have on the operational and environmental analysis of the proposed airside improvements, an additional long-term 37.5 million passenger scenario was developed for this Supplemental DEIS/FEIR. This fleet scenario, referred to as the 37.5M High Regional Jet (RJ) Fleet, reflects a much higher percentage of regional jet aircraft and a lower percentage of non-jet operations than do any of the prior fleet forecasts presented in the Airside Project Draft EIS/EIR.

The Supplemental DEIS/FEIR includes updated operational and environmental analyses of 1998 conditions similar to that contained in the 1998 Annual Update prepared in October 1999. While the 1999 Environmental Status and Planning Report (ESPR, formerly the GEIR) published in December 2000 includes updated analyses for 1999, the differences between the two study years are small. Between 1998 and 1999, operations declined by 2.5 percent, primarily due to a reduction in regional carrier operations. Since the fleet mix and runway use varied little, the noise contours and population impacts were also similar, with slightly less impact in Winthrop and Boston and slightly more in Chelsea and Revere in 1999 compared to 1998. The air quality and other environmental analyses also yielded similar results. Since the relevant comparison for evaluating the proposed airside improvements is the comparison between the No Action and Preferred Alternatives, and since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS/FEIR maintains the 1998 modeling analysis as a representation of recent conditions at Logan Airport.

The Supplemental DEIS/FEIR focuses on the 29M Low and 37.5 High Fleet scenarios, because these represent the full range of environmental impacts, as well as the newly added 37.5 M High Regional Jet fleet scenario. Appendices E and F contain a summary of environmental impacts for other fleets analyzed in the Airside Project Draft EIS/EIR.

Specific studies and analyses conducted to assess the environmental consequences in this Supplemental DEIS/FEIR include:

- Review of potential benefits and impacts of each Alternative, but with a focused comparison of the Preferred Alternative (all actions except Peak Period Pricing) to the No Action Alternative for the 29 M Low and 37.5M High Fleet scenarios.
- Environmental analyses associated with an additional future fleet scenario – the 37.5M High RJ Fleet scenario.
- Inclusion of GIS mapping with a more detailed base map for noise contours showing land use at a larger scale.
- Tabular and graphic comparison of the Preferred Alternative and No Action Alternative showing the number and location of people who are exposed to noise.
- Discussion of the relationship between the noise analyses conducted for the Airside Project and the Runway 27 EIS.
- Focused noise contour analysis comparing the *1998 Annual Update*, Runway 27 EIS, and the Airside Project noise contours.
- Reevaluation of construction impacts (truck trips and air quality) associated with construction of Runway 14/32 due to the reduced amount of soil materials that will need to be removed from Governors Island.
- Expanded discussion of environmental justice and related mitigation.
- A school day/school year contour for the 29M Low Fleet scenario which results in the largest noise-exposed area (See Appendix E).

6.2 Noise

This section presents the results of the noise modeling analysis of the Airside Project Alternatives, focusing on the Preferred Alternative and comparing its noise impact with the No Action Alternative under two different aircraft fleet assumptions.

The smaller fleet assumes a demand level of 29 million passengers and a lower percentage of non-jet operations (29M Low Fleet scenario). It is forecast to occur in the year 2003. The second fleet scenario assumes a demand level of 37.5 million passengers and a higher percentage of non-jet operations (37.5M High Fleet scenario). This is the long-term outlook, and is forecast to occur around 2015. As described in Chapter 4, a third fleet, the 37.5M High Fleet Regional Jet scenario (37.5MHigh RJ Fleet) has been added in this Supplemental DEIS/FEIR. It reflects replacement of many non-jet commuter operations by small 30-70 seat regional jets, such as the Canadair Regional Jet and the Embraer 145. These fleets were described in detail in Chapter 4, and together they bracket a range of potential exposure levels. Noise impacts of other fleets were analyzed in Section 6.2 of the

Airside Project Draft EIS/EIR. Summary noise results for the other fleets are contained in Appendix E of this Supplemental DEIS/FEIR.

This section also addresses the exposure levels associated with the Preferred Alternative and the No Action Alternative in the context of the noise that occurred in 1998 due to actual operations that year. It discusses DNL noise contours and other metrics common to all three scenarios, and presents population counts under each Alternative as determined by the Integrated Noise Model (INM). To address noise exposure caused by aircraft taxiing between runway and apron areas, this section also summarizes findings from the Airside Project Draft EIS/EIR pertaining to noise from taxiway and other ground operations. See Section 5.2 of the Airside Project Draft EIS/EIR for a description of the noise models used in these analyses and Section 6.2 of the Airside Project Draft EIS/EIR for additional information on the effects of ground noise under action alternatives other than the Preferred Alternative.

Finally, the noise section concludes with an evaluation of all Airside Project alternatives using the new 37.5M High RJ Fleet scenario described in Chapter 4.

6.2.1 INM Inputs for the Evaluation of Flight Noise

6.2.1.1 Fleet Mix and Operations

Operation summaries for 1998 and for the No Action and Preferred Alternatives under each of the future fleet forecasts are presented in Table 6.2-1. Summaries based on the 1993 Historic Modeled condition were presented in the Airside Project Draft EIS/EIR. Modeled activity includes both scheduled and unscheduled operations by major air carriers, commuter airlines, and air cargo operators, as well as general aviation jet and turboprop aircraft.

The Preferred Alternative has no effect on the total number of flights in and out of Logan Airport -- air carriers and cargo operators will schedule their aircraft to meet the public's travel and shipping needs. However, there *are* important noise implications between the No Action and Preferred Alternatives in the manner that these flights are accommodated. Some runway and taxiway configurations have lower capacities than others, and when those combinations have to be used because of poor weather or other circumstances, aircraft delays grow rapidly. The effect of aircraft delays on noise exposure is twofold:

- As delays increase, daytime and evening flights slip into nighttime hours, causing greater noise disturbance and an increase in thosenoise measures (DNL, LeqN, and TAN, in particular) that are sensitive to late night activity; and
- Use of low capacity runway configurations makes achieving the Preferential Runway Advisory System (PRAS) goals more difficult for air traffic controllers.

The Preferred Alternative, which includes unidirectional Runway 14/32 and the Centerfield Taxiway, is estimated to reduce the number of nighttime operations from approximately 132 to 125, a decrease of 7 operations per night or 5 percent of the projected nighttime operations that would otherwise occur under the No Action Alternative for the 29M Low Fleet scenario.

Table 6.2-1
Average Daily Operations for 1998 and for Future 29M Low and 37.5M High Fleet Scenarios for the No Action Alternative and the Preferred Alternative

	Stage 2 Jets	Stage 3 Jets	Turboprops	Totals		
Fleet Forecast	**Day/Night**	**Day/Night**	**Day/Night**	**Day**	**Night**	**Daily**
1998 Actual	90/6	572/100	590/38	1,252	144	1,396
29M Low Fleet						
No Action (Alt. 4)	16/6	699/114	550/13	1,265	132	1,397
Preferred (Alt.1A)	16/5	703/108	553/12	1,272	125	1,397
37.5M High Fleet						
No Action (Alt. 4)	0/0	819/209	615/22	1,434	231	1,665
Preferred (Alt.1A)	0/0	843/166	635/18	1,478	184	1,662

Note: "Day" is defined as 7:00 AM to 10:00 PM and "Night" is defined as 10:00 PM to 7:00 AM, consistent with the definitions as used in DNL calculations.

For the long-term 37.5M High Fleet scenario, the difference is even more significant. The Preferred Alternative reduces the number of nighttime jet operations by an estimated 43 per night and the number of nighttime turboprops by another four, for a total reduction in nighttime flights of 47, or about 20 percent compared to the No Action Alternative, all as a result of fewer delays.

The significant reduction in nighttime operations under the Preferred Alternative is enhanced by the fact that overall noise exposure is expected to decrease further in the near future. Both the 1998 fleet as well as the 29M Low Fleet scenario include several noisy Stage 2 jets with maximum takeoff weights greater than 75,000 pounds. However, beginning January 1, 2000, every aircraft at Logan greater than 75,000 pounds met FAR Part 36 Stage 3 noise limits. Furthermore, many of the Stage 2 jets that have been hushkitted to meet Stage 3 requirements are expected to be retired over the next ten years and replaced with newer and quieter Stage 3 aircraft. The number of Stage 2 aircraft in the 29M Low Fleet scenario is insignificant.

Some operators at Logan Airport have already announced and implemented plans for fleet renewals. As indicated in the *1998 Annual Update*, the US Airways and Delta Shuttles planned to replace 78 daily operations flown in hushkitted Boeing 727-200s. These aircraft meet Massport's as well as the FAA's noise regulations, but Massport lobbied the carriers to update their fleets to newer and quieter aircraft. Since those discussions, the Delta Shuttle replaced its 727 aircraft with new, quieter 737-800 aircraft, and US Airways took delivery of new Airbus 320s to replace its older 727s. These fleet improvements and the reductions in night operations with the Preferred Alternative will each contribute to meaningful reductions in noise exposure.

6.2.1.2 Flight Tracks

Flight tracks were developed for Runway 14/32 with input from the FAA in order to evaluate noise impacts for both Alternative 1 and the Preferred Alternative. These tracks are shown in Figures 6.2-1 through 6.2-4. They indicate that all arrivals to unidirectional Runway 14/32 come from the harbor over water and that all departures climb out in the opposite direction over the water. While aircraft that use Runway 14/32 do fly over land, they are considered over-water flight paths because they cross land further from the runway and at higher altitudes than operations to or from other Logan Airport runways.

In Figure 6.2-1, jet arrivals to Runway 32 coming into the area from the north and west approach Logan Airport on a downwind leg well east of the airport together in the same flow of traffic with other jet arrivals to Runway 33L, then make a right turn crossing over to a final approach that is over the harbor and parallel to the approach for Runway 33L. Propeller aircraft from the north and west (see Figure 6.2-2) are separated from the flow of jet traffic well northwest of Logan Airport and fly south over the Airport making a left turn to join the final approach to Runway 32. Both types of aircraft coming into the area from southerly directions approach the airport and make a left turn (as is done now) to line up on their final approaches over the harbor.

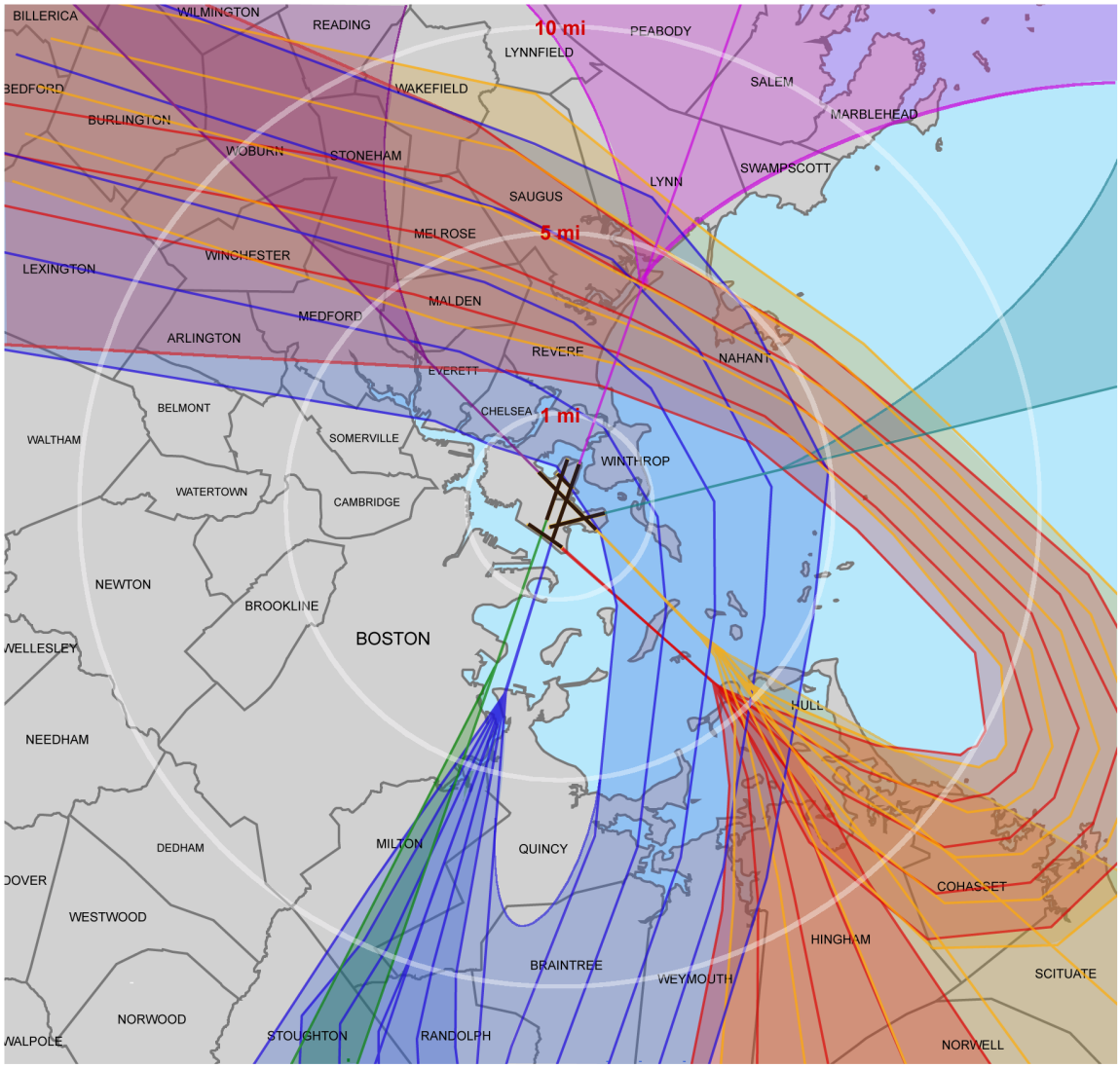
The closest populated land area overflown by arrivals to Runway 32 is tip of the Hull peninsula, approximately 5 miles from the runway end. In contrast, arrivals to Runways 4L/R and 22L/R fly over populated land areas until they are within one mile of the runway ends. In the case of departing aircraft, Figures 6.2-3 and 6.2-4 show jet aircraft turning to a heading that takes them out of the harbor over water, similar to the current jet departure procedure for Runway 15R. Most of these jet aircraft do not cross back over land until they are at or above 6,000 feet .The propeller aircraft climb initially over the water and then are vectored within the indicated zone by ATC towards their enroute headings.

For the lowest-altitude portions of flights to and from the proposed runway, aircraft are flying over water. In addition, the flight tracks for the runway demonstrate that aircraft using Runway 14/32 will fly over cities or towns that are currently overflown by aircraft utilizing Logan Airport 's existing runways.

6.2.1.3 Runway Use

Summaries of effective runway use projections for the Preferred and No Action Alternatives under both the 29M Low Fleet and the 37.5M High Fleet scenarios are shown in Tables 6.2-2 and 6.2-3 below. [3](See Appendix H of the Airside Project Draft EIS/EIR for jet runway usage for the 29M High Fleet, 37.5M Low Fleet, and 45M High Fleet scenarios.) Effective jet utilizations for 1998 operations appeared in Table 5-12 of the *1998 Annual Update* and are reproduced here in Table 6.2-4 for reference along with the corresponding PRAS goals discussed in Chapter 4.

3 Effective operations include jet operations, only with nighttime operations weighted by a factor of 10. Thus one nighttime operation is equivalent to 10 daytime jet operations.



Aircraft Altitude Along the Flight Path (from runway touchdown)

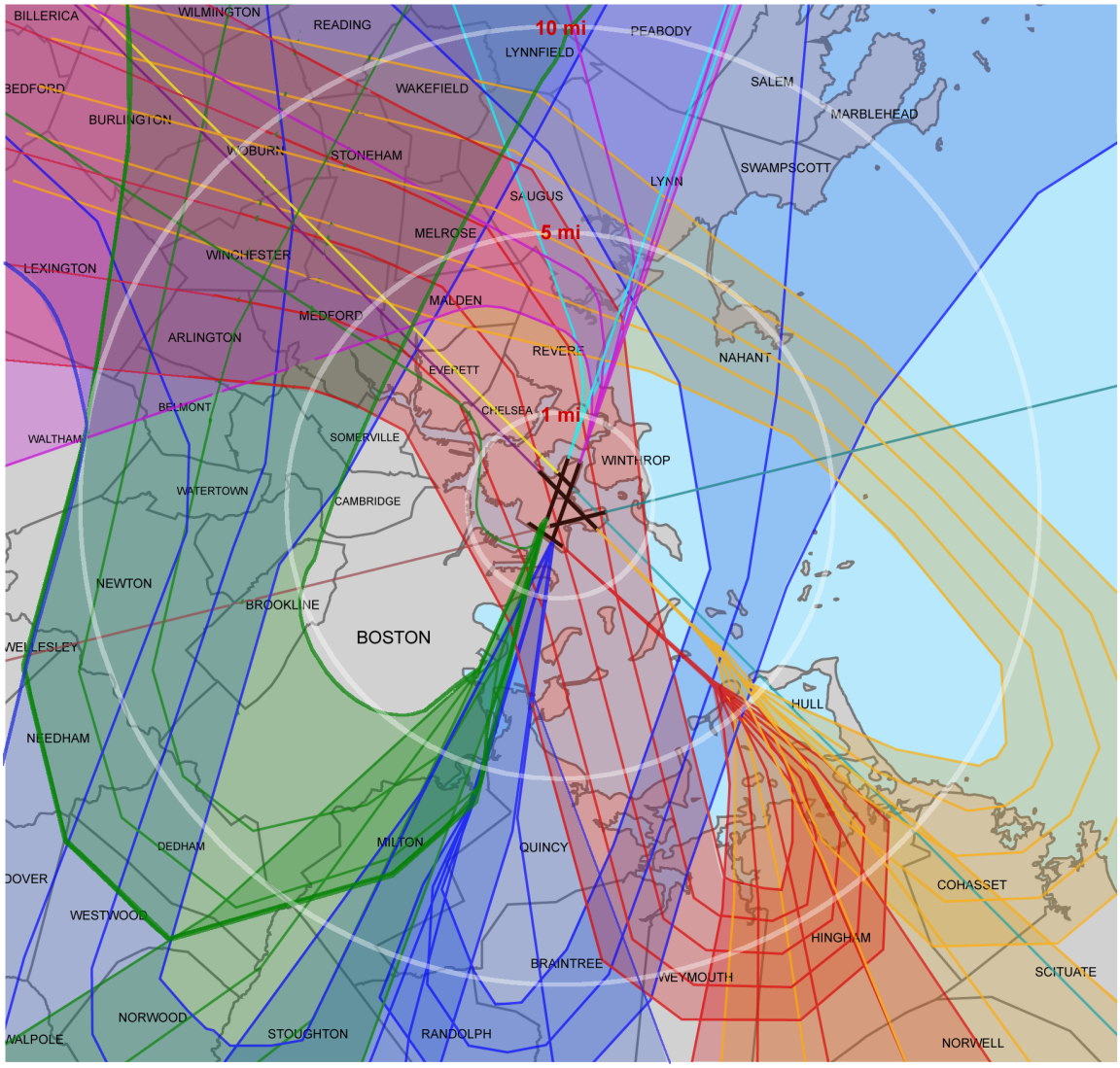
1 Mile from Touchdown = 500 ft. or Less 5 Miles from Touchdown = 2,000 ft. or Less 10 Miles from Touchdown = 3,000 ft. or Less

Notes: Mileage rings are for reference only and do not indicate actual distance along the flight path
All jet arrivals descend from 11,000 ft. to 6,000 ft. entering final approaching airspace

massport

Figure 6.2-1
Flight Tracks for Arriving Jet Aircraft on All Runways

7466-FIG-6-2/.4pm65



Aircraft Altitude Along the Flight Path (from runway touchdown)

1 Mile from Touchdown = 500 ft. or Less 5 Miles from Touchdown = 2,000 ft. or Less 10 Miles from Touchdown = 3,000 ft. or Less

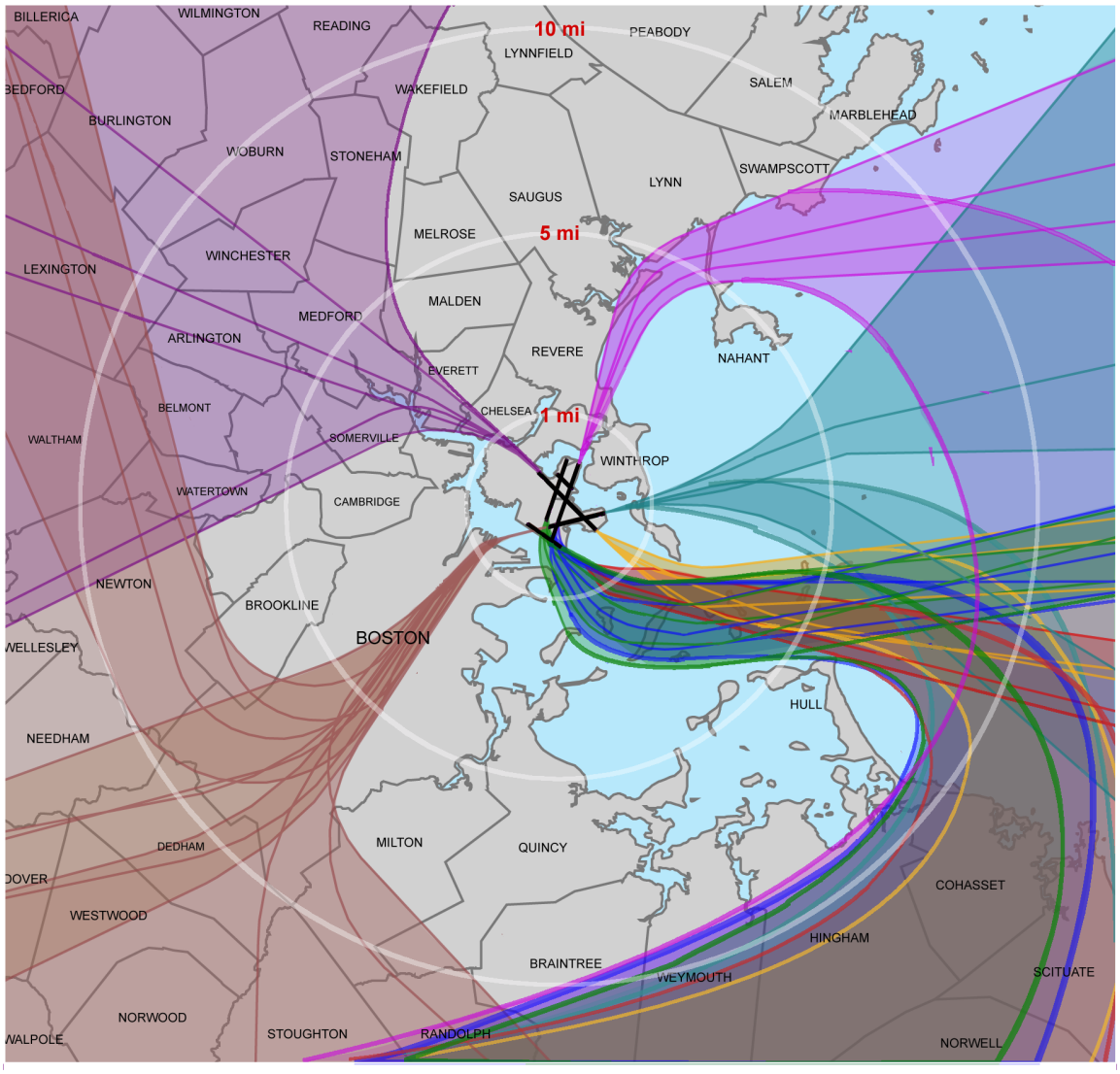
Notes: Mileage rings are for reference only and do not indicate actual distance along the flight path

massport

Figure 6.2-2

Flight Tracks for Arriving Turboprop Aircraft on All Runways

7466-FIG-6-2/.4pm65



Aircraft Altitude Along the Flight Path (from runway departure)

1 Mile from Takeoff= 1,000 ft. or Less 5 Miles from Takeoff = 2,000 ft. or More 10 Miles from Takeoff = 4,000 ft. or More

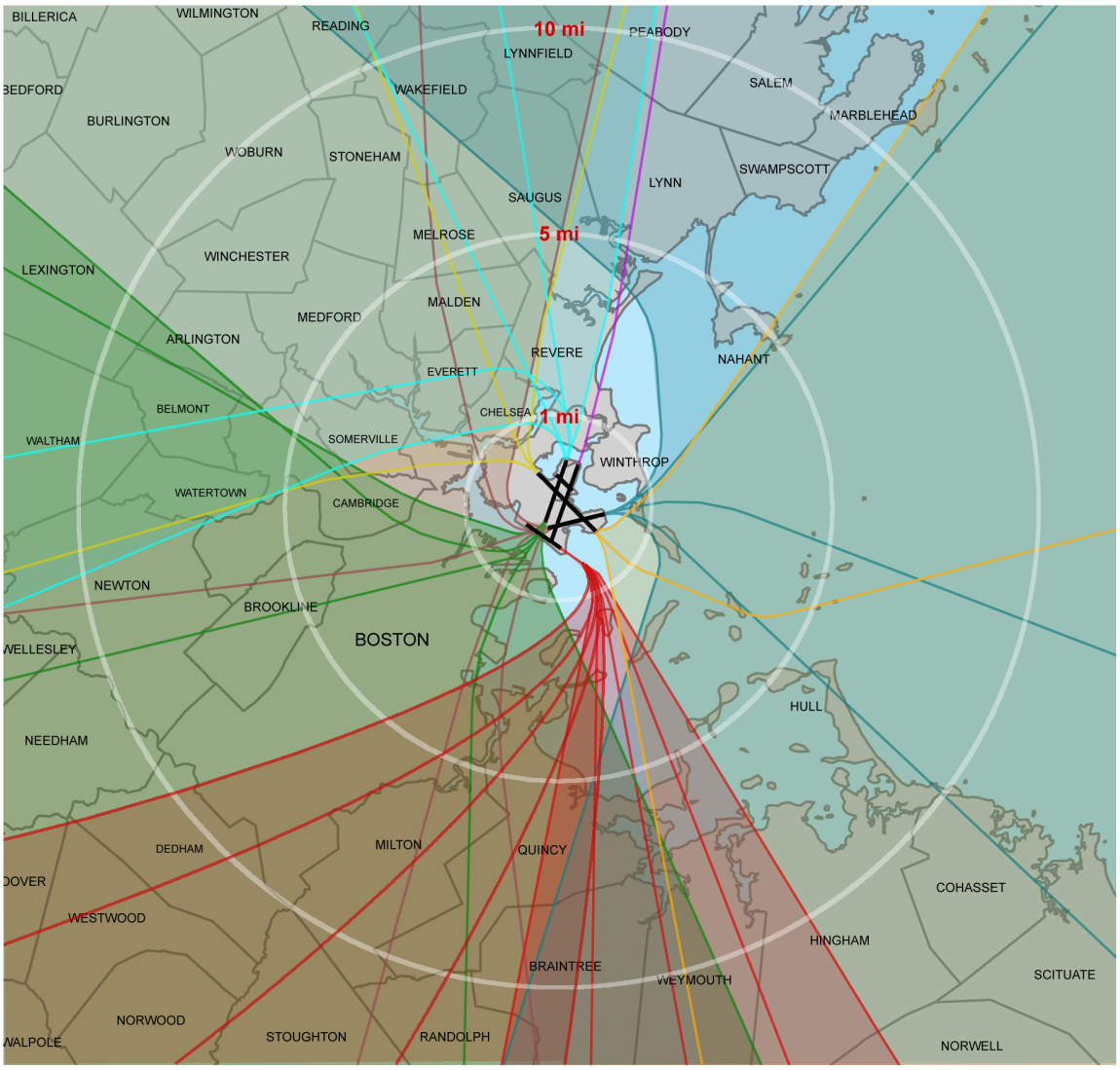
Notes: Mileage rings are for reference only and do not indicate actual distance along the flight path
Jet departures cross the shoreline of the Southshore at or above 6,000 ft.

massport

Figure 6.2-3

Flight Tracks for Departing Jet Aircraft on All Runways

7466-FIG-6-2/.4pm65



Aircraft Altitude Along the Flight Path (from runway departure)

1 Mile from Takeoff= 1,000 ft. or Less 5 Miles from Takeoff = 2,000 ft. or More 10 Miles from Takeoff = 4,000 ft. or More

Note: Mileage rings are for reference only and do not indicate actual distance along the flight path

Figure 6.2-4

Flight Tracks for Departing Turboprop Aircraft on All Runways

Table 6.2-2
Effective Arrivals by Fleet and Runway End

Runway End and Improvement Concept	Percent Effective Arrivals by Fleet		
	1993 Historic	29M Low	37.5M High
Runway 4L/R			
PRAS Goal	**21.1**	**21.1**	**21.1**
Alternative 1 - All Actions	--	24.6	30.0
Preferred Alternative - All Except Peak Period Pricing	--	24.6	29.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	34.1	45.4
Alternative 4 - No Action	35.8	34.8	47.3
Runway 15L/R			
PRAS GOAL	**8.4**	**8.4**	**8.4**
Alternative 1 - All Actions	--	7.7	6.0
Preferred Alternative - All Except Peak Period Pricing	--	7.7	4.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	4.1	2.1
Alternative 4 - No Action	3.7	4.9	1.2
Runway 22L/R			
PRAS Goal	**6.5**	**6.5**	**6.5**
Alternative 1 - All Actions	--	12.2	12.0
Preferred Alternative - All Except Peak Period Pricing	--	12.3	16.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	12.1	13.9
Alternative 4 - No Action	11.7	12.4	21.6
Runway 27			
PRAS Goal	**21.7**	**21.7**	**21.7**
Alternative 1 - All Actions	--	18.6	16.0
Preferred Alternative - All Except Peak Period Pricing	--	18.6	13.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	14.6	23.7
Alternative 4 - No Action	16.9	14.6	15.7
Runways 33L and 32			
PRAS Goal	**42.3**	**42.3**	**42.3**
Alternative 1 – All Actions	--	36.8	35.9
Preferred Alternative - All Except Peak Period Pricing	--	36.8	37.0
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	35.0	14.9
Alternative 4 – No Action	31.8	33.2	14.2

Table 6.2-3
Effective Departures By Fleet and Runway End

Runway End and Improvement Concept	Percent Effective Departures by Fleet		
	1993 Historic	29M Low	37.5M High
Runway 4L/R			
PRAS Goal	**5.6**	**5.6**	**5.6**
Alternative 1 - All Actions	--	7.6	11.1
Preferred Alternative - All Except Peak Period Pricing	--	7.8	6.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	7.0	13.9
Alternative 4 - No Action	10.3	7.7	7.7
Runway 15L/R and 14			
PRAS Goal	**23.3**	**23.3**	**23.3**
Alternative 1 - All Actions	--	18.1	11.6
Preferred Alternative - All Except Peak Period Pricing	--	18.0	14.6
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	13.0	9.5
Alternative 4 - No Action	12.9	12.5	12.2
Runway 22L/R			
PRAS Goal	**28.0**	**28.0**	**28.0**
Alternative 1 - All Actions	--	26.9	24.8
Preferred Alternative - All Except Peak Period Pricing	--	27.0	25.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	26.1	37.3
Alternative 4 - No Action	27.5	26.3	33.4
Runway 27			
PRAS Goal	**17.9**	**17.9**	**17.9**
Alternative 1 - All Actions	--	17.0	17.1
Preferred Alternative - All Except Peak Period Pricing	--	16.9	20.5
Alternative 2/3 - All Except Runway 14/32 and No Build	--	15.2	5.4
Alternative 4 - No Action	12.3	14.1	5.5
Runway 33L			
PRAS Goal	**11.9**	**11.9**	**11.9**
Alternative 1 - All Actions	--	12.0	9.8
Preferred Alternative - All Except Peak Period Pricing	--	12.0	9.9
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	11.5	1.7
Alternative 4 - No Action	11.7	11.1	3.0
Runway 9			
PRAS Goal	**13.3**	**13.3**	**13.3**
Alternative 1 - All Actions	--	18.5	25.7
Preferred Alternative - All Except Peak Period Pricing	--	18.4	23.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	27.3	32.3
Alternative 4 - No Action	25.2	28.3	38.2

Table 6.2-4
1998 Effective Jet Runway Utilization

	1998 Effective		PRAS Goals	
Runway End	Arrivals	Departures	Arrivals	Departures
4L/R	36.7%	6.6%	21.1%	5.6%
9	0.0%	29.9%	0.0%	13.3%
15R	1.2%	10.9%	8.4%	23.3%
22L/R	11.9%	30.9%	6.5%	28.0%
27	21.7%	16.6%	21.7%	17.9%
33L	28.6%	5.2%	42.3%	11.9%
Totals	100.1%	100.1%	100.0%	100.0%

Because of random variations in wind and weather conditions, as well as fluctuations in demand, it is unlikely that the annual PRAS goals will ever be achieved exactly. However, comparing 1998 conditions with the stated goals, there are several areas where improved compliance would help reduce noise in the most highly exposed neighborhoods. Use of Runway 9 for departures is currently more than double the desired utilization and directly contributes to high exposure levels in Winthrop. Also, lower-than-desired use of Runway 15R for departures and 33L for arrivals means that more noise is occurring over populated areas rather than over water to the southeast of Logan Airport.

Over use of Runways 4L and 4R for arrivals creates higher noise exposure in the vicinity of City Point in South Boston and other South Shore communities. In addition, excessive use of Runway 22L for arrivals and 4R for departures creates more noise for areas of Winthrop and Bayswater Street in East Boston. Each of these situations is exacerbated further under the 37.5M High Fleet scenario.

Only portions of East Boston and Chelsea have benefited from this current use; Runway 33L is used for departures less than half as much as its PRAS goal, and Runway 15R is used for arrivals only one-seventh as much as its PRAS utilization goal.

Under the 29M Low Fleet scenario, the Preferred Alternative, which includes Runway 14/32, offers a dramatic improvement in Air Traffic Control's (ATC's) ability to achieve the PRAS goals compared to the No Action Alternative. For example, under the 29M Low Fleet scenario effective use of Runway 9 for departures over Winthrop decreases from 30 percent in 1998 and 28 percent in the future No Action Alternative down to approximately 18 percent with the Preferred Alternative; the PRAS goal for Runway 9 is 13 percent. Similarly, to the south, effective utilization of Runways 4L and 4R for landings over City Point decreases from 37 percent in 1998 and 35 percent in the future No Action Alternative to 25 percent with the Preferred Alternative. The PRAS goal for those runways is 21 percent.

The Preferred Alternative also increases the use of overwater flight paths. Under the 29M Low Fleet scenario, departures on Runway 15R increase from 13 percent with the No Action Alternative up to 18 percent (Runways 15R and 14) with the Preferred Alternative, consistent with the PRAS objective to maximize over-water routings. In the opposite

direction, arrivals to Runway 33L increase from 33 percent with the No Action Alternative up to 37 percent with the Preferred Alternative (Runways 33L and 32).

Collectively, these changes clearly show that the added flexibility of the new Runway 14/32 plays a significant role in ATC's ability to better achieve the current PRAS goals, especially those that involve over-water operations. The resulting noise benefits are discussed in the following section.

6.2.2 INM Modeled In-flight Noise Levels

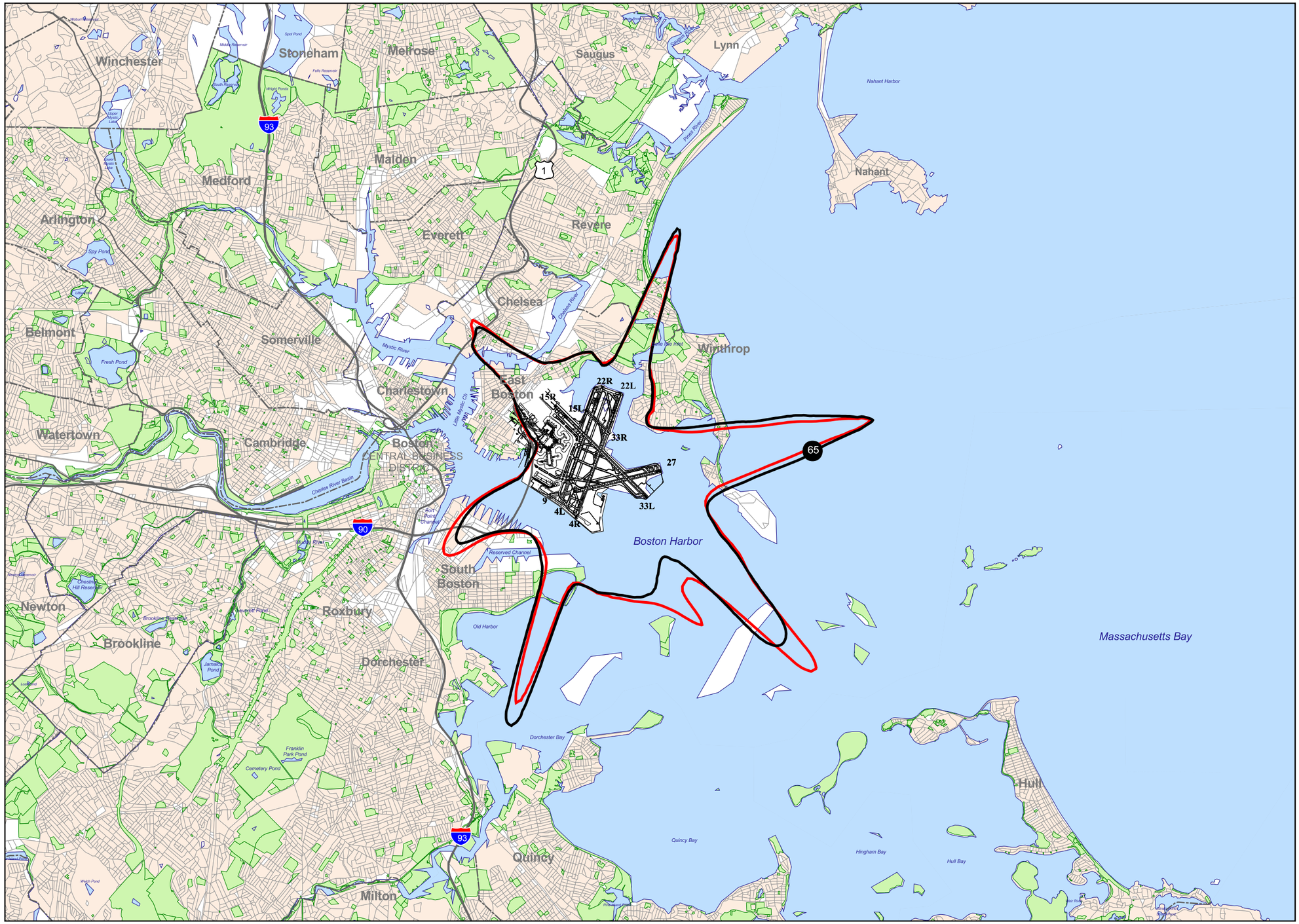
As the discussion in the prior sections indicates, with a growing number of operations at Logan represented by the 29M Low Fleet scenario and 37.5M High Fleet scenario, the No Action Alternative will cause Runways 4L/R and 27to be utilized for increasing numbers of arrivals and Runways 22L/R and 9 for increasing numbers of departures. These increases will occur despite the fact that even present runway usages exceed the PRAS goals. Without the addition of Runway 14/32, these runway combinations are the only ones that can accommodate the increasing demand. Noise exposure off these runway ends will increase, as well.

Unidirectional Runway 14/32, on the other hand, will give air traffic controllers two or three runways to use during northwest winds (instead of the current one or two), and will offer greater flexibility to achieve both long-term annual PRAS goals and short-term dwell and persistence relief. This benefits the neighborhoods experiencing the most aircraft noise, accomplishing exactly what PRAS was designed to do.

The next sections document the noise contour results of the INM modeling for the No Action and Preferred Alternatives.

6.2. 3 Area-wide Cumulative Noise Exposure Contours

Appendix L of the Airside Project Draft EIS/EIR presented a complete set of DNL contours covering the full range of project Alternatives and fleet forecasts addressed in this study. A summary of the noise results for fleets analyzed in the Airside Project Draft EIS/EIR is in Appendix E of this Supplemental DEIS/FEIR. The 65 dB DNL contours for the No Action and Preferred Alternatives under the 29M Low and 37.5M High Fleets are presented in Figures 6.2-5 and 6.2-6 to show the relative effects of each of the study cases on an improved base map. Figures 6.2-7 and 6.2-8 compare DNL contour values of 60, 65, and 70 dB under each of the two fleet assumptions. Their differences are discussed in the following section.



Legend

No Action Alternative 29M Low

65 DNL

Preferred Alternative 29M Low

65 DNL

Open Space

Census Blocks

Populated

Non-Populated

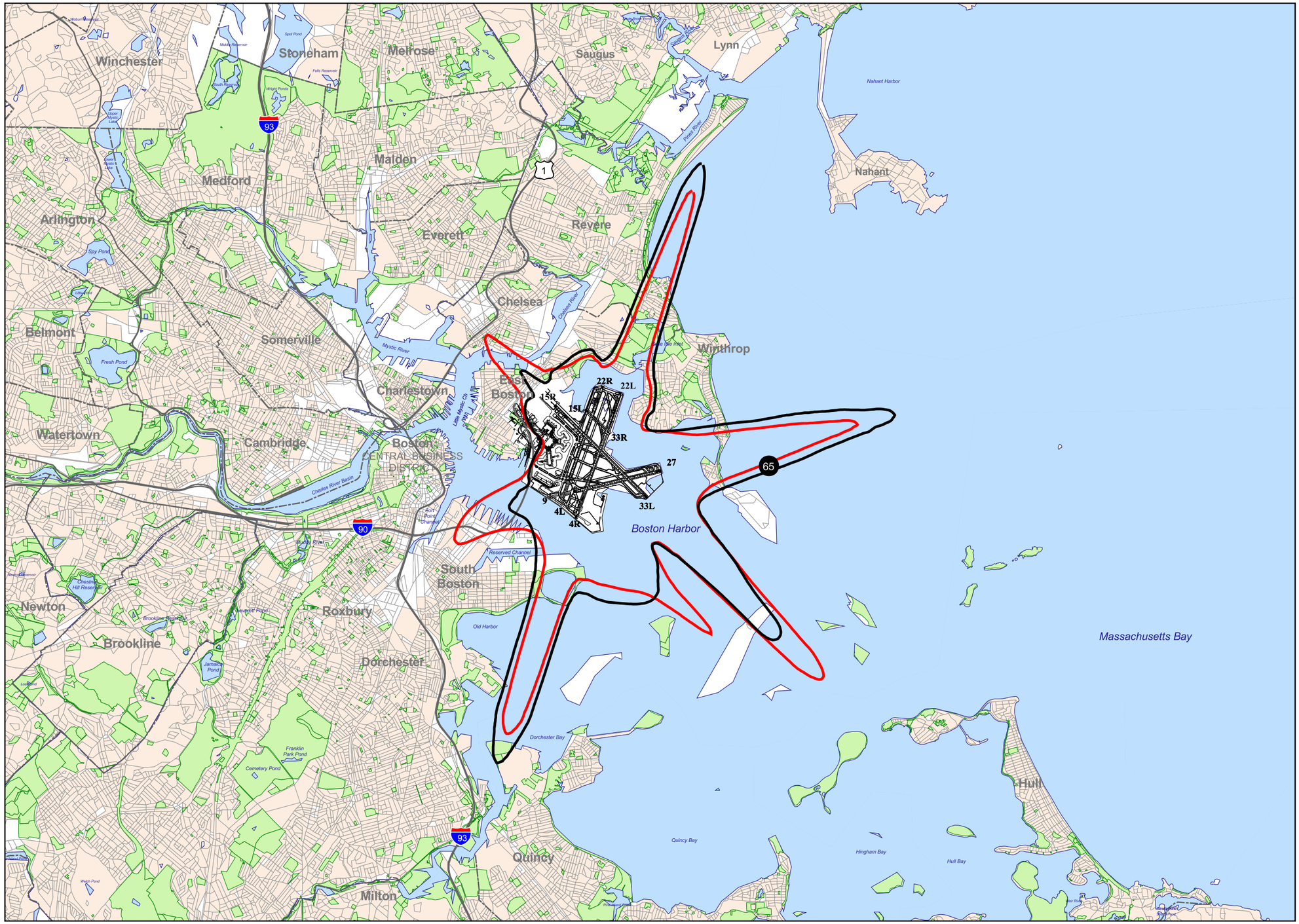
N

0 0.5 1 1.5 Miles

Figure 6.2-5

Day/Night Sound Levels
65 DNL Contours, 29M Low - No Action and Preferred Alternatives

Source: Harris Miller Miller & Hanson



Legend

No Action Alternative 37.5M High

65 DNL

Preferred Alternative 37.5M High

65 DNL

Open Space

Census Blocks

Populated

Non-Populated

N

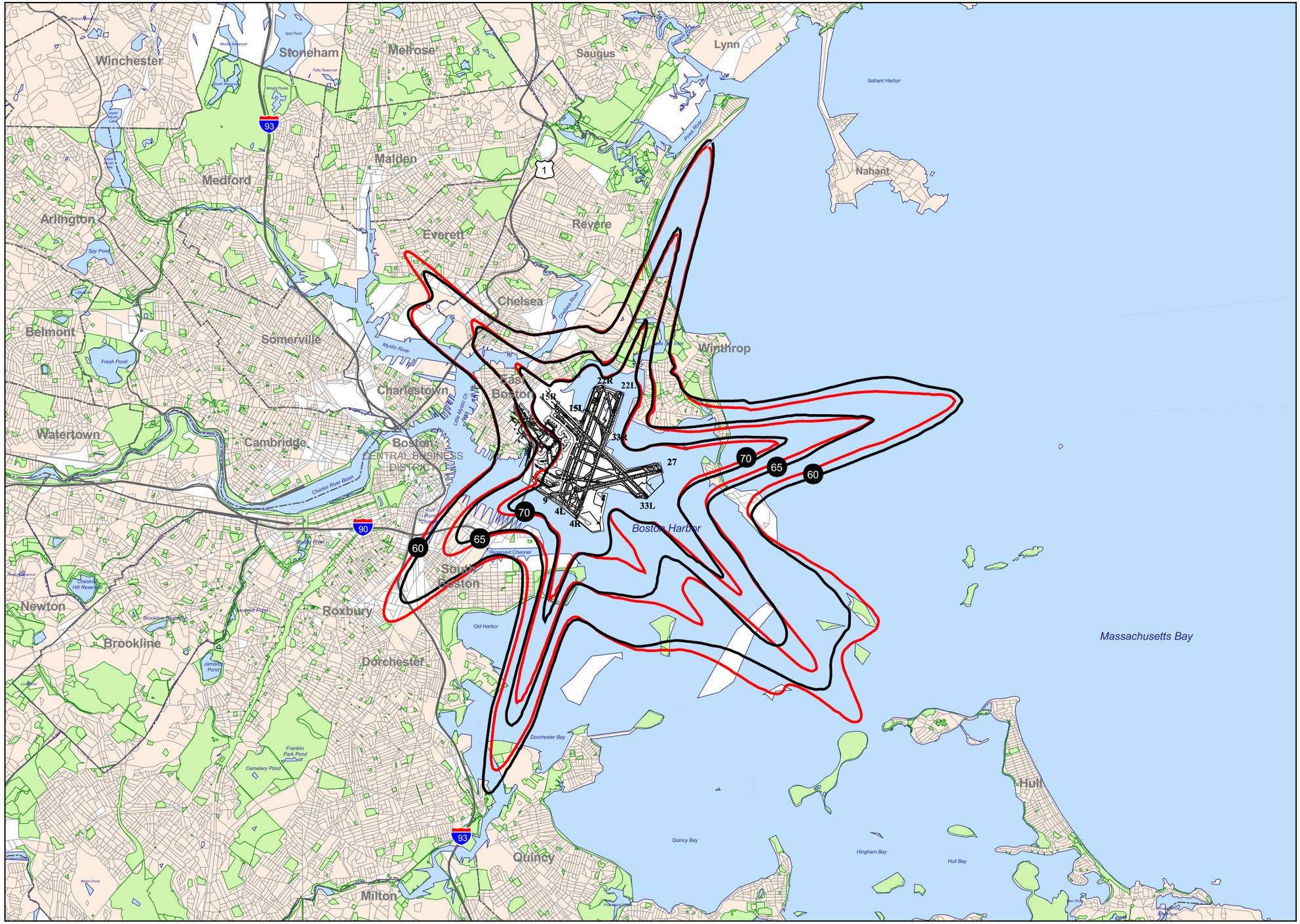
0 0.5 1 1.5 Miles

massport

Figure 6.2-6

Day/Night Sound Levels
65 DNL Contours, 37.5M High, No Action and Preferred Alternatives

Source: Harris Miller Miller & Hanson



Legend

No Action Alternative 29M Low

60, 65 and 70 DNL

Preferred Alternative 29M Low

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

massport

Figure 6.2-7

Day/Night Sound Levels - 60, 65 and 70 DNL Contours, 29M Low, No Action and Preferred Alternatives

Source: Harris Miller Miller & Hanson

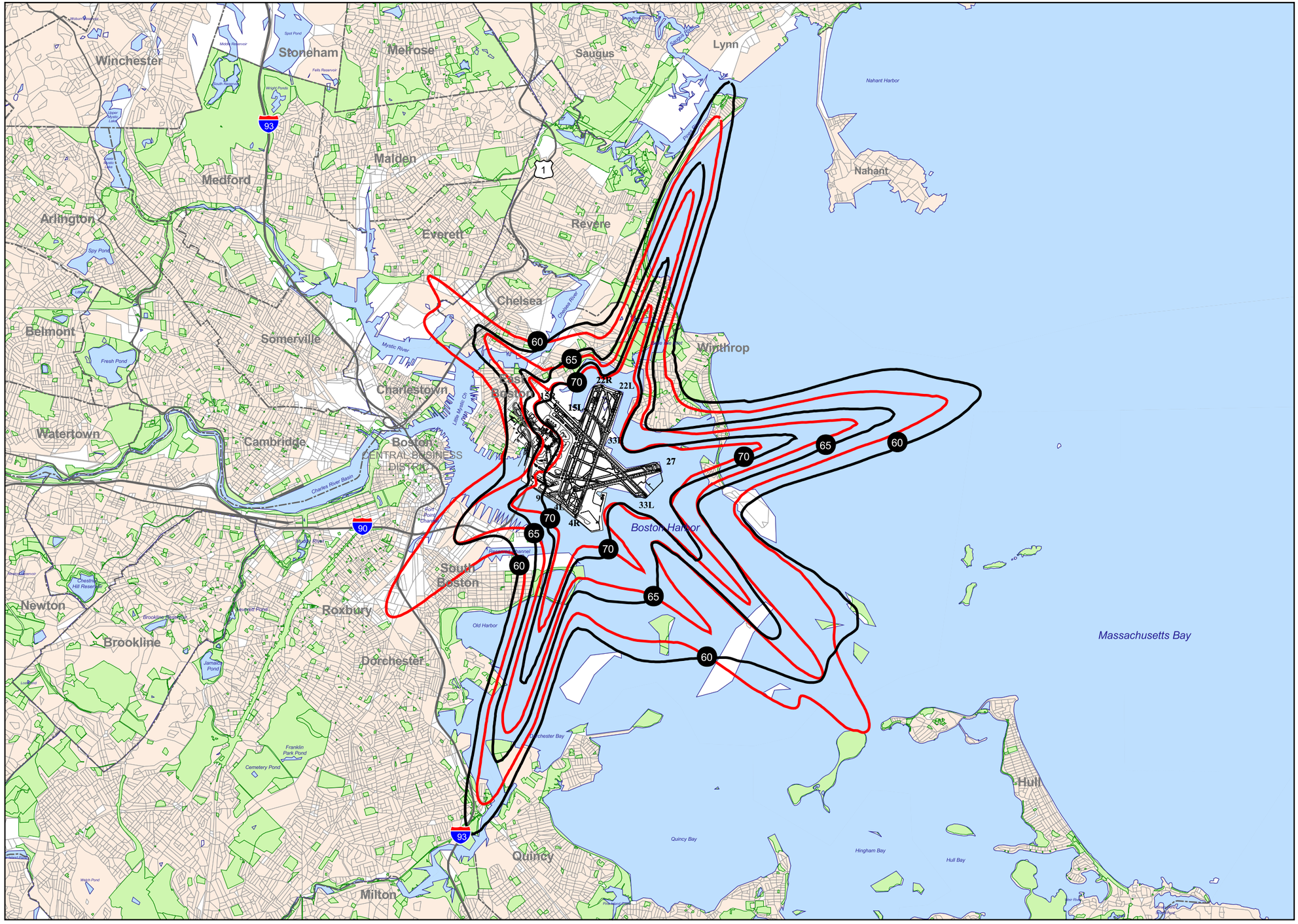


Figure 6.2-8

Day/Night Sound Levels - 60, 65 and 70 DNL Contours, 37.5M High, No Action and Preferred Alternatives

Source: Harris Miller Miller & Hanson

6.2.3.1 Comparison of The No Action Alternative and the Preferred Alternative

29M Low Fleet Scenario

Figure 6.2-7 compares the DNL contours for the Preferred Alternative with the No Action Alternative for the near-term 29M Low Fleet. In general, the No Action Alternative produces more delay and poorer compliance with PRAS goals.

With the addition of Runway 14/32, noise exposure decreases off the approach end of Runway 4R in the City Point area of South Boston but only at lower levels of exposure between DNL 60 dB and 65 dB; no one in this area is exposed to noise above a DNL of 65 dB. To the southwest, consistent with achievement of PRAS goals, departure noise from Runway 27 increases with the addition of Runway 14/32, adding to the exposure in that area of South Boston both in the increment from DNL 65 dB to 70 dB and also further to the southwest in the increment from 60 to 65 dB, though the increases are less than 1.5 dB in both areas. Exposure due to takeoffs over East Boston and Chelsea is relatively unchanged under the Preferred Alternative given that there are only minor differences in runway use between the No Action and Preferred Alternative, and aircraft departing from Runway 33L generally make 15 degree left turns up the Mystic River. However, in those neighborhoods directly aligned with Runway 33L/15R there are small increases in exposure of less than 1.5 dB due to increases in arriving air traffic on Runway 15R.

Exposure in Revere is very slightly reduced, while the remaining areas of Winthrop, near and on Point Shirley, experience decreased exposure due to decreased use of Runway 9 for departures. Increased use of both Runway 15R and the new Runway 14 for departures, combined with their added use in the opposite direction for landings (to Runways 33L and 32) , will cause increased exposure over Long Island and other Boston Harbor Islands, generally in the range of DNL 60 dB to 65 dB. Noise exposure further to the southeast in Hull is expected to be less than DNL 60 dB.

37.5M High Fleet Scenario

Under the long-term 37.5M High Fleet, the above noise exposure patterns are more pronounced, as seen in Figure 6.2-8. Exposure in South Boston, east of D Street, which is affected by departures from Runway 27, increases approximately 5 dB DNL. Increased departures on Runway 33L and increased arrivals on Runway 15R produce approximately 4 dB DNL higher exposure in portions of East Boston and Chelsea. For other communities surrounding Logan noise exposure declines by 2 to 3 dB DNL under the Preferred Alternative.

The Harbor Islands will generally receive increases in DNL from 3 to 5 dB due to better achievement of the PRAS goals for departures on Runway 15R and arrivals on Runway 33L.

6.3.2.2 Comparison of 1998 Actual Exposure with the 29M Low No Action Alternative

To give additional context, Figure 6.2-9 compares the 60, 65, and 70 dB DNL contours for the 29 M Low Fleet scenario with 1998 exposure levels. The 29M Low Fleet scenario is used in this discussion because it most closely resembles current activity levels at Logan Airport.

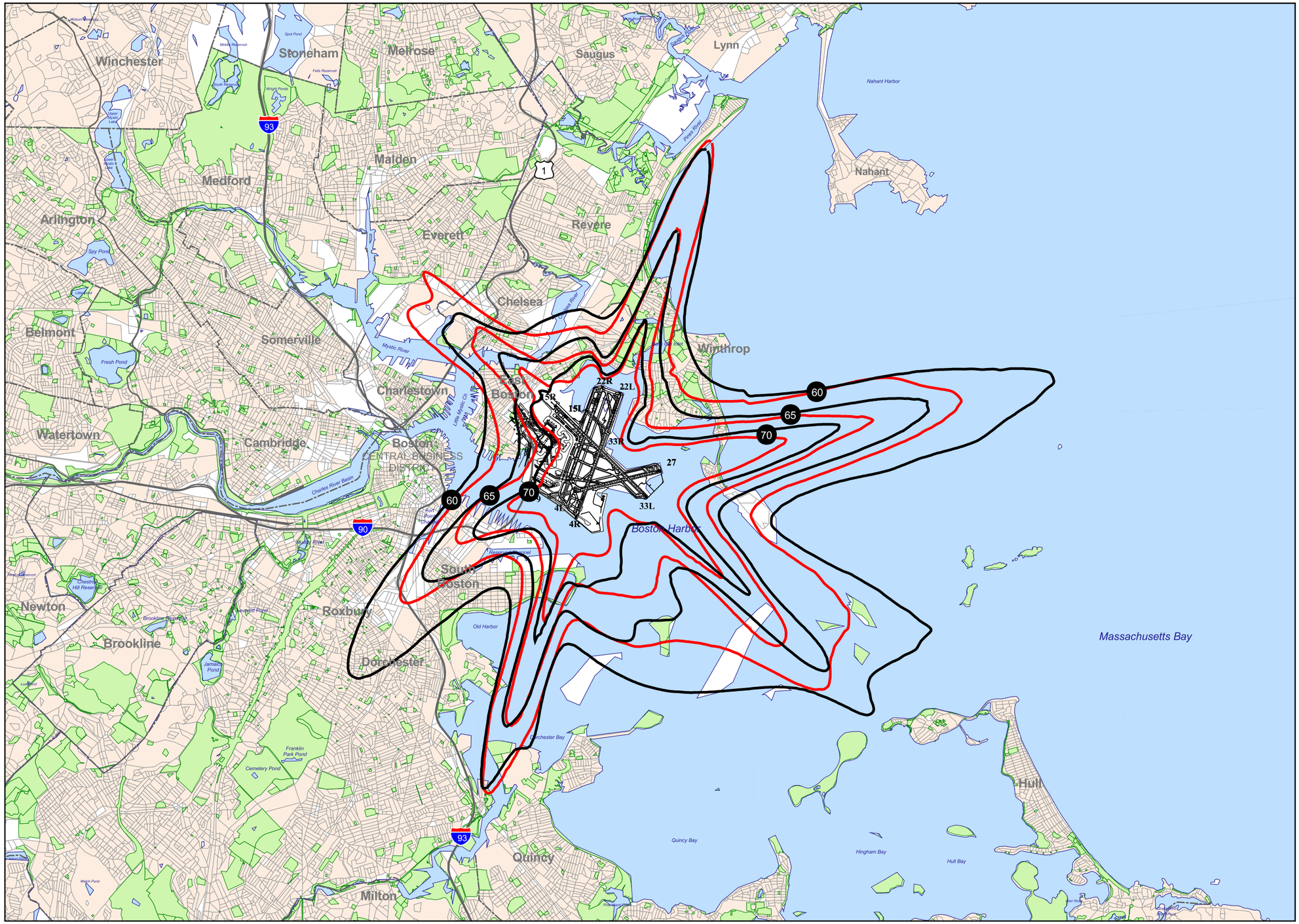
Differences between the two cases occur in several areas– the 1998 contours are larger than the 29M Low Fleet No Action contours over much of Winthrop (including Point Shirley) and in South Boston off of Runway 27. Conversely, in East Boston and Chelsea off the departure end of Runway 33L, the 1998 contours are smaller than the 29M Low Fleet No Action Alternative. There are three basic reasons for these differences.

The 1998 contours are generally larger than those for the 29M Low Fleet scenario because the latter has fewer Stage 2 aircraft, including 17 percent fewer at night (see Table 6.2-1). Thate smaller number accounts for a 3 to 4 dB improvement in average exposure around the entire airport when compared to 1998. A reduction of similar magnitude was anticipated in the *Logan Airport 1998 Annual Update*, where Figure 5-8 depicted the anticipated improvement in exposure off of Runway 27 if *no* Stage 2 aircraft were to remain in the 1998 fleet. Based on this analysis, the fact that fleet differences exist between 1998 and the No Action Alternative should not imply that the 29M Low Fleet scenario is inaccurate or unrepresentative of the future. The No Action Alternative is based on passenger demand that exceeds 1998 levels by only 2.5 million people, and it assumes a higher use of Stage 3 aircraft than occurred in 1998. The 29M Low Fleet represents an upper bound on near-term noise exposure since all US aircraft with maximum gross takeoff weights greater than 75,000 pounds must comply with Stage 3 criteria as of January 1, 2000.

Another important difference between the 1998 and the No Action Alternative noise contours pertains to the departure corridor for Runway 27. The 1998 corridor is based on a large sample of radar data taken from Massport's noise monitoring system after the FAA implemented a new jet departure procedure in accordance with the FAA Record of Decision (ROD) on the Runway 27 EIS. The Airside Draft EIS/EIR, however, was under way well before the ROD, and could only approximate how the new departure procedure would be specified by the FAA. The difference in model inputs creates a slight clockwise (westward) shift to the contours off of Runway 27 for each of the Airside Project Alternatives compared to 1998. It does not represent a real difference in corridor location or noise between the two scenarios. It does, however, contribute to the large difference in population counts between 1998 and the 29M Low No Action Alternative in South Boston.

A third cause for differences in the noise contours is due to variations in assumed runway utilization. For valid statistical modeling purposes the Airside Project alternatives utilize 10-year weather data and corresponding runway assignments. Since weather patterns have a major effect on runway use, and since weather varies substantially from year to year, modeled results will invariably differ from any actual year.

In sum, the fleet, flight track, and runway assignment differences all help explain the differences in noise contours shown in Figure 6.2-9.



Legend

1998 No Action

60, 65 and 70 DNL

No Action Alternative 29M Low

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

N

0 0.5 1 1.5 Miles

Figure 6.2-9

Day/Night Sound Levels
60, 65 and 70 DNL Contours
1998 No Action & 29M Low Fleet

Source: Harris Miller Miller & Hanson

6.2.4 Area-wide Cumulative Noise Exposed Population

Estimates of the number of people residing within various 5 dB increments of noise exposure for the 29M Low Fleet and 37.5M High Fleet scenarios under the No Action and Preferred Alternatives are summarized in Table 6.2-5. Included in this table are the 1998 populations for reference (population summaries for the 29M High Fleet, 37.5M Low Fleet, and 45M High Fleet scenarios are found in Appendix L of the Airside Project Draft EIS/EIR and Appendix E of this Supplemental DEIS/FEIR). It is notable that under all of the improvement alternatives, the population exposed to each value of DNL (greater than or equal to 60 through 75 dB) is significantly less than that of either the 1993 modeled historical or the 1998 actual noise-exposed populations. This improvement is due to the January 1, 2000 phase-out of the noisier Stage 2 aircraft having a maximum gross takeoff weight greater than 75,000 pounds.

Table 6.2-5
Summary of Noise-Exposed Population

Day-Night Sound Level in dB	1998 Actual	No Action Alternative (Alt. 4)	Preferred Alternative (Alt. 1A)	Preferred Alt. Compared to No Action	Percent Change *re* No Action
29M Low Fleet					
DNL 75 dB and above	577	257	77	-180	-70%
DNL 70 dB and above	2,679	1,521	1,459	-62	-4%
DNL 65 dB and above	23,296	17,531	17,909	378	2%
DNL 60 dB and above	93,860	59,523	60,418	895	2%
37.5M High Fleet					
DNL 75 dB and above	577	257	58	-199	-77%
DNL 70 dB and above	2,679	3,828	1,028	-2,800	-73%
DNL 65 dB and above	23,296	11,499	12,007	508	4%
DNL 60 dB and above	93,860	41,659	52,153	10,494	25%

1 Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

2 References to 29M Low Fleet and 37.5M High Fleet scenarios do not apply to 1993 or 1998; they are applicable only to The Preferred and No Action Alternatives.

3 Where applicable, counts now include 502 institutional residents of Long Island in Boston Harbor. None of these individuals is exposed to noise greater than DNL of 65 dB under any of the study scenarios; they do, however, experience DNL values of 60 to 65 dB in some cases but were not previously counted in the Airside Project Draft EIS/EIR or the Logan Airport GEIR and its Annual Updates.

As shown in Table 6.2-5, the Preferred Alternative significantly reduces the population exposed to DNL values greater than or equal to 70 and 75 dB. The benefits range from 70 to 77 percent for exposures greater than or equal to 75 dB, and from 4 to 73 percent for values of 70 dB and more. These reductions are a direct result of the implementation of Runway 14/32, which enables FAA controllers to better achieve PRAS goals that were specifically designed to give relief to the populations experiencing the most airport noise.

These benefits at high exposure levels cause increases in population within the 65 dB contour for the Preferred Alternative; they range from 2 to 4 percent, while increases within the 60 dB DNL contour range from 1 to 25 percent.

Noise exposed populations are broken down by community area in Tables 6.2-6 and 6.2-7. The first presents the exposed populations for the 29M Low Fleet scenario while Table 6.2-7 presents similar data for the 37.5M High Fleet scenario. At a DNL of 70 dB or greater, the most heavily affected communities are East Boston and Winthrop. Revere becomes heavily affected at these exposure levels with the higher fleet forecast. At 65 dB or greater, Chelsea and South Boston are added to the list of impacted communities (similar tables for the other fleets were in Appendix L of the Airside Project Draft EIS/EIR, and are summarized in Appendix E of this Supplemental DEIS/FEIR).

An analysis of the neighborhoods exposed to noise levels greater than or equal to 70 dB indicates that Runway 14/32 is projected to reduce impacts for those areas most affected by airport noise. For example, under the No Action Alternative for the 29M Low Fleet scenario, approximately 200 residents of Point Shirley are projected to reside within the 75 dB DNL contour; however, under the Preferred Alternative, 60 percent, or about 120 Point Shirley residents, would benefit from a reduction in noise sufficiently large to remove them from the 75 dB DNL contour. In addition, a total of approximately 860 residents of Point Shirley are exposed to noise above a DNL of 70 dB if no action is taken; this number is reduced to about 675 with the Preferred Alternative. Still larger numbers of Point Shirley residents benefit from the Preferred Alternative at lower DNL levels. In addition, East Boston's Orient Heights neighborhood is projected to experience a small reduction in population within the 75 and 70 dB contours with the Preferred Alternative compared to the No Action Alternative. These reductions are the result of the additional flexibility available to air traffic controllers in the selection of runways and hence a greater ability to achieve PRAS long-term and short-term noise goals.

Table 6.2-6
Noise-Exposed Population by Town or Neighborhood Area – 29M Low Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative 4	Preferred Alternative 1A	Preferred Alt. Compared to No Action	Percent Change *re* No Action
Chelsea					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	3,056	3,300	244	8%
DNL 60 dB and above	9,222	10,232	10,370	138	1%
Everett					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	0	220	340	120	54%
E. Boston – Eagle Hill					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	280	280	0	0%
DNL 65 dB and above	2,280	4,134	4,134	0	0%
DNL 60 dB and above	19,040	15,921	15,921	0	0%
E. Boston – Orient Hts/ Bayswater St.					
DNL 75 dB and above	58	58	0	-58	-100%
DNL 70 dB and above	239	157	118	-39	-25%
DNL 65 dB and above	1,742	612	751	139	23%
DNL 60 dB and above	5,128	4,332	4,457	125	3%
Other East Boston					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	351	0	0	0	0%
DNL 65 dB and above	3,940	2,371	2,371	0	0%
DNL 60 dB and above	6,228	5,782	5,782	0	0%
Total East Boston(1)					
DNL 75 dB and above	58	58	0	–58	–100%
DNL 70 dB and above	590	437	398	–39	–9%
DNL 65 dB and above	7,962	7,117	7,256	139	2%
DNL 60 dB and above	30,396	26,035	26,160	125	<1%
Long Island					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	502	0	502	502	n/a

Table 6.2-6 (Cont'd.)
Noise-Exposed Population by Town or Neighborhood Area – 29M Low Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative 4	Preferred Alternative 1A	Preferred Alt. Compared to No Action	Percent Change *re* No Action
Revere					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	3,168	3,001	2,999	–2	<–1%
DNL 60 dB and above	5,300	5,227	5,115	–112	<–1%
South Boston[2]					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	48	0	0	0	0%
DNL 65 dB and above	3,553	66	98	32	48%
DNL 60 dB and above	22,511	6,010	6,603	593	9%
Boston (Other)[3]					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	10,809	0	0	0	0%
Winthrop - Point Shirley					
DNL 75 dB and above	519	199	77	–122	–61%
DNL 70 dB and above	1,266	862	673	–189	–22%
DNL 65 dB and above	2,195	1,924	1,649	–275	–14%
DNL 60 dB and above	4,080	2,973	2,657	-316	-11%
Winthrop - Court Road					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	731	222	388	166	75%
DNL 65 dB and above	3,387	1,523	1,763	240	16%
DNL 60 dB and above	3,387	3,387	3,387	0	0%
Rest of Winthrop					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	44	0	0	0	0%
DNL 65 dB and above	3,031	844	844	0	0%
DNL 60 dB and above	7,653	5,439	5,284	-155	-3%
Total Winthrop					
DNL 75 dB and above	519	199	77	–122	–61%
DNL 70 dB and above	2,041	1,084	1,061	–23	–2%
DNL 65 dB and above	8,613	4,291	4,256	–35	–1%
DNL 60 dB and above	15,120	11,799	11,328	–471	–4%
Total Population Summary					
DNL 75 dB and above	577	257	77	-180	-70%
DNL 70 dB and above	2,679	1,521	1,459	–62	-4%
DNL 65 dB and above	23,296	17,531	17,909	378	2%
DNL 60 dB and above	93,860	59,523	60,418	895	2%

1. The only area in South Boston included within the 60 dB DNL contour for these scenarios is the D Street area.
2. "Boston (Other)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End.
3. Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.
4. References to 29M Low and 37.5M High Fleet scenarios do not apply to 1998; they are applicable only to Alternatives 1A and 4.

Table 6.2-7
Noise-Exposed Population by Town or Neighborhood Area - 37.5M High Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative 4	Preferred Alternative 1A	Preferred Alt. Compared to No Action	Percent Change *re* No Action
Chelsea					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	1,415	1,415	n/a
DNL 60 dB and above	9,222	3,095	8,488	5,393	174%
Everett					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	0	0	0	0	0%
E. Boston – Eagle Hill					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	2,280	237	2,593	2,356	994%
DNL 60 dB and above	19,040	5,058	12,379	7,321	145%
E. Boston – Orient Hts/ Bayswater St.					
DNL 75 dB and above	58	58	58	0	0%
DNL 70 dB and above	239	355	157	–198	–56%
DNL 65 dB and above	1,742	1,170	596	–574	–49%
DNL 60 dB and above	5,128	5,128	3,451	-1,677	-33%
Other East Boston					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	351	0	0	0	0%
DNL 65 dB and above	3,940	1,599	1,058	–541	–34%
DNL 60 dB and above	6,228	4,602	5,170	568	12%
Total East Boston[(1)]					
DNL 75 dB and above	58	58	58	0	0%
DNL 70 dB and above	590	355	157	–198	–56%
DNL 65 dB and above	7,962	3,006	4,247	1,241	41%
DNL 60 dB and above	30,396	14,788	21,000	6,212	42%
Long Island					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	502	0	502	502	n/a

Table 6.2-7 (cont.)
Noise-Exposed Population by Town or Neighborhood Area -- 37.5M High Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative 4	Preferred Alternative 1A	Preferred Alt. Compared to No Action	Percent Change *re* No Action
Revere					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	2,260	172	–2,088	–92%
DNL 65 dB and above	3,168	3,799	3,293	–506	–13%
DNL 60 dB and above	5,300	8,472	5,658	–2,814	–33%
South Boston[2]					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	48	0	0	0	0%
DNL 65 dB and above	3,553	55	48	–7	–13%
DNL 60 dB and above	22,511	3,094	6,002	2,908	94%
Boston (Other)[3]					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	10,809	674	432	–242	–36%
Winthrop - Point Shirley					
DNL 75 dB and above	519	199	0	–199	–100%
DNL 70 dB and above	1,266	825	417	–408	–49%
DNL 65 dB and above	2,195	1,863	1,395	–468	–25%
DNL 60 dB and above	4,080	2,828	2,401	-427	-15%
Winthrop - Court Road					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	731	388	282	–106	–27%
DNL 65 dB and above	3,387	1,661	1,234	–427	–26%
DNL 60 dB and above	3,387	3,387	3,387	0	0%
Rest of Winthrop					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	44	0	0	0	0%
DNL 65 dB and above	3,031	1,115	375	–740	–66%
DNL 60 dB and above	7,653	5,321	4,283	-1,038	-20%
Total Winthrop					
DNL 75 dB and above	519	199	0	–199	–100%
DNL 70 dB and above	2,041	1,213	699	–514	–42%
DNL 65 dB and above	8,613	4,639	3,004	–1,635	–35%
DNL 60 dB and above	15,120	11,536	10,071	–1,465	–13%
Total Population Summary					
DNL 75 dB and above	577	257	58	–199	–77%
DNL 70 dB and above	2,679	3,828	1,028	–2,800	–73%
DNL 65 dB and above	23,296	11,499	12,007	508	4%
DNL 60 dB and above	93,860	41,659	52,153	10,494	25%

1. "Boston (Other)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End.
2. Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.
3. References to 29M Low and 37.5M High Fleets do not apply to 1998; they are applicable only to Alternatives 1A and 4.

In the 37.5M High Fleet scenario, greater benefits are realized. Approximately 100 more residents of Winthrop located along Court Road plus more than 2,000 residents of Revere and nearly 200 people in Orient Heights are no longer included in the highest exposure levels. In fact in this scenario, some 2,800 people would no longer be exposed to DNL levels above 70 dB if Runway 14/32 were constructed and used as projected. The tradeoff for this improvement is that a net of some 500 people (approximately 4 percent of the total noise-exposed population around Logan Airport) have their exposure increased to DNL 65 dB.

6.2.4.1 Population Experiencing Significant Shifts in Noise Exposure

FAA Criteria

The FAA standards for assessing changes in noise-exposed populations center around two factors: the absolute levels of noise which residents experience and the magnitude of the change to which they are exposed. In particular, both FAA Order 1050.1D entitled *Policies and Procedures for Considering Environmental Impacts* and FAA Order 5050.4A entitled *Airport Environmental Handbook* indicate that changes in DNL of 1.5 dB or more are considered significant when DNL values are greater than 65 dB. Further, if there are populated areas above 65 dB DNL where the project-related noise does change by more than 1.5 dB, then areas between 60 dB DNL and 65 dB DNL are also examined to determine if there are any residential areas where the project–related noise changes by more than 3.0 dB. This analysis must be conducted for all reasonably foreseeable scenarios, which for this Supplemental DEIS/FEIR are considered to be the No Action and Preferred Alternatives for the near-term 29M Low Fleet scenario. The 37.5M High Fleet and the 37.5M High RJ Fleet which are considered later in this chapter are considered to be longer-term forecasts and are more speculative in nature.

Table 6.2-8 summarizes the numbers of people who meet these criteria for assessing noise exposure for the No Action and the Preferred Alternatives under the 29M Low Fleet scenario. The table is divided into two sections – the top half addresses the segment of population that becomes newly included within the specified criteria under the Preferred Alternative; the bottom half summarizes those people whose noise exposure declines as a result of the Preferred Alternative. A zero indicates that no one will experience a change of the magnitude specified if the Preferred Alternative is implemented.

Table 6.2-8
Population Affected by Significant Shifts in Noise Exposure Resulting From the Preferred Alternative, Per FAA Criteria for Significant Impact - 29M Low Fleet Scenario

	Newly Included Population		
	DNL 65 to 70 dB	DNL 70 to 75 dB	DNL greater than 75 dB
Community	Increase of 1.5 or more dB	Increase of 1.5 or more dB	Increase of 1.5 or more dB
Chelsea	0	0	0
Dorchester	0	0	0
E. Boston	0	0	0
Everett	0	0	0
Long Island	0	0	0
Revere	0	0	0
Roxbury	0	0	0
S. Boston	0	0	0
Winthrop	0	0	0
Total	0	0	0
	Decrease of 1.5 or more dB	**Decrease of 1.5 or more dB**	**Decrease of 1.5 or more dB**
Chelsea	0	0	0
Dorchester	0	0	0
E. Boston	0	0	0
Everett	0	0	0
Long Island	0	0	0
Revere	0	0	0
Roxbury	0	0	0
S. Boston	0	0	0
Winthrop	219	189	0
Total	219	189	0

Secretary of the Office of Environmental Affairs Request under MEPA

In addition to standard FAA impact criteria used to judge this project, the May 7, 1999 EOEA Certificate on the Airside Project Draft EIS/EIR requested that the Final EIR report on the number of people located within the 60 to 65 dB DNL whose noise exposure had changed by 1.5 dB or more. Table 6.2-9 reports these counts.

Table 6.2-9
Population Affected by Significant Shifts in Noise Exposure Resulting From The Preferred Alternative, 29M Low Fleet Scenario Per MEPA Request

Community	Newly Included Population							
	DNL 60 to 65 dB		DNL 65 to 70 dB		DNL 70 to 75 dB		DNL greater than 75 dB	
	Increase of less than 3 dB	Increase of 3 or more dB	Increase of less than 1.5 dB	Increase of 1.5 or more dB	Increase of less than 1.5 dB	Increase of 1.5 or more dB	Increase of less than 1.5 dB	Increase of 1.5 or more dB
Chelsea	138	0	347	0	0	0	0	0
Dorchester	0	0	0	0	0	0	0	0
E. Boston	125	0	139	0	0	0	0	0
Everett	120	0	0	0	0	0	0	0
Long Island	0	502	0	0	0	0	0	0
Revere	0	0	0	0	0	0	0	0
Roxbury	0	0	0	0	0	0	0	0
S. Boston	1,001	0	32	0	0	0	0	0
Winthrop	76	0	240	0	166	0	0	0
Total	1,460	502	758	0	166	0	0	0
	Newly Excluded Population							
	DNL 60 to 65 dB		DNL 65 to 70 dB		DNL 70 to 75 dB		DNL greater than 75 dB	
	Decrease of less than 3 dB	Decrease of 3 or more dB	Decrease of less than 1.5 dB	Decrease of 1.5 or more dB	Decrease of less than 1.5 dB	Decrease of 1.5 or more dB	Decrease of less than 1.5 dB	Decrease of 1.5 or more dB
Chelsea	0	0	103	0	0	0	0	0
Dorchester	0	0	0	0	0	0	0	0
E. Boston	0	0	0	0	39	0	58	0
Everett	0	0	0	0	0	0	0	0
Long Island	0	0	0	0	0	0	0	0
Revere	112	0	2	0	0	0	0	0
Roxbury	0	0	0	0	0	0	0	0
S. Boston	408	0	0	0	0	0	0	0
Winthrop	547	0	56	219	0	189	122	0
Total	1,067	0	161	219	39	189	180	0
	Net Change (Newly Included – Newly Excluded)							
Total	393	502	597	(219)	127	(189)	(180)	0

This analysis shows that the Preferred Alternative reduces the number of people exposed to high noise levels in portions of Winthrop, East Boston and Revere. To achieve these reductions, the noise is redistributed more in line with the PRAS goals causing increased noise at lower exposure levels in the communities of Chelsea, East Boston (near the departure end of Runway 33L), and South Boston.

6.2.5 Other Indicators of Changed Exposure

Besides population counts, other metrics such as computed noise levels at specific points also are used to identify changes in aircraft noise. In these analyses, the selected points coincide with 21 of Massport's permanent noise monitoring locations along with two temporary measurement sites that were used to collect additional data for the Airside Project. These sites and respective analyses are presented in Chapter 5 of the Airside Project Draft EIS/EIR. They have been updated to show results for 1998 actual operations where available. The five additional metrics reported at each site are:

- Day-Night Sound Level (DNL)
- Nighttime (10:00 PM to 7:00 AM) Equivalent Sound Level (LeqN)
- Maximum Sound Level (Lmax)
- Time-Above 55, 65, 75, 85, and 95 dBA during Nighttime hours (TAN), and
- Time-Above 55, 65, 75, 85, and 95 dBA for full 24 hour periods (TA24).

6.2.5.1 Day Night Sound Levels (DNL)

The calculations of DNL by noise monitoring location for the 29M Low Fleet scenario and the 37.5M High Fleet scenario are presented in Table 6.2-10 and Table 6.2-11, respectively. Similar tables for all other study fleets were contained in Appendix L of the Airside Project Draft EIS/EIR. The future year noise is less than that in 1998 at most locations and both Alternatives, reflecting the replacement of Stage 2 aircraft with quieter Stage 3 aircraft.

At the bottom of Tables 6.2-10 and 6.2-11, average changes in noise level for the 29M Low Fleet and 37.5M High Fleet scenarios are compared for different exposure levels. The Preferred Alternative, which includes Runway 14/32, shows the greatest reduction in DNL when compared to the No Action Alternative under the 37.5M High Fleet scenario. At three of the four close-in sites where projected DNL levels exceed 70 dB under the No Action Alternative for the 29M Low Fleet scenario, the Preferred Alternative reduces exposure levels by 0.1 to 0.9 dB. Under the 37.5M High Fleet scenario, the Preferred Alternative decreases noise at sites above 70 dB by 1.4 dB to 2.2 dB. (See Table 6-2.14 in the Airside Project Draft EIS/EIR for comparisons to other alternatives). The differences in the DNL between the Preferred Alternative and the No Action Alternative are principally the result of the airfield improvements that affect the Air Traffic Control Tower's ability to achieve PRAS recommendations.

Table 6.2-10
INM-Computed Day-Night Sound Levels (DNL) due to Flight Operations - 29M Low Fleet

Noise Monitor	Location	1998 Existing Fleet	Alternative 4 No Action	Alternative 1A Full Build Without Peak Period Pricing	Change (in dB) Alt 1A – Alt 4
1	Andrews Street, South End	58.7	56.0	56.9	0.9
2	B & Bolton, South Boston	66.7	63.4	64.5	1.1
3	South Boston Yacht Club, South Boston	64.5	62.8	61.3	-0.5
4	Bayview & Grandview, Winthrop	79.4	76.1	75.2	-0.9
5	Harborview & Faun Bar, Winthrop	71.4	69.8	68.1	-1.7
6	Somerset & Johnson, Winthrop	68.2	65.3	65.5	0.2
7	Loring Road Near Court Road, Winthrop	76.1	73.6	75.1	1.5
8	Morton & Amelia, Winthrop	67.5	64.8	64.7	-0.1
9	Bayswater & Nancia, East Boston	72.4	70.6	70.4	-0.2
10	Bayswater & Shawsheen, East Boston	66.3	64.7	65.1	0.4
11	Don Orione, East Boston	62.2	60.3	60.4	0.1
12	East Boston Yacht Club, East Boston	74.0	70.1	70.0	-0.1
13	East Boston High School, East Boston	64.2	66.2	66.0	-0.2
A	Sumner near Lamson, East Boston	N/A	61.2	61.2	0.0
14	Jeffries Point Yacht Club, East Boston	64.9	62.6	62.5	-0.1
15	Admiral's Hill, Chelsea	61.1	63.7	63.7	0.0
16	Bradstreet Avenue & Sales, Revere	69.0	69.1	68.7	-0.4
17	Carey Circle, Revere	58.3	59.0	58.7	-0.3
23	Myrtlebank/Hilltop, Dorchester	52.0	53.4	52.0	-1.4
24	Cunningham Park, Milton	51.9	52.3	51.0	-1.3
25	Squaw Rock Park, Quincy	51.2	49.1	48.7	-0.4
26	Hull High School, Hull	58.1	54.8	55.0	0.2
E	Farragut @ 2nd, South Boston	N/A	62.5	61.3	-1.2
Average change from 70 dB and above Between Alts 4 and 1A (4 Sites)					**0.1**
Average change from 65 dB and above Between Alts 4 and 1A (8 Sites)					**-0.2**
Average change from all values Between Alts 4 and 1A (23 Sites)					**-0.2**

Table 6.2-11
INM-Computed Day-Night Sound Levels (DNL) due to Flight Operations - 37.5M High Fleet

Noise Monitor	Location	1998 Actual Fleet	Alternative 4 No Action	Alternative 1A Full Build Without Peak Period Pricing	Change (in dB) Alt 1A – Alt 4
1	Andrews Street, South End	58.7	52.3	56.9	4.6
2	B & Bolton, South Boston	66.7	58.7	63.8	5.1
3	South Boston Yacht Club, South Boston	64.5	65.4	62.6	-2.8
4	Bayview & Grandview, Winthrop	79.4	76.2	74.1	-2.1
5	Harborview & Faun Bar, Winthrop	71.4	69.4	67.0	-2.4
6	Somerset & Johnson, Winthrop	68.2	65.2	64.7	-0.5
7	Loring Road Near Court Road, Winthrop	76.1	75.5	74.1	-1.4
8	Morton & Amelia, Winthrop	67.5	66.0	64.0	-2.0
9	Bayswater & Nancia, East Boston	72.4	72.7	70.5	-2.2
10	Bayswater & Shawsheen, East Boston	66.3	65.9	64.3	-1.6
11	Don Orione, East Boston	62.2	61.2	59.5	-1.7
12	East Boston Yacht Club, East Boston	74.0	70.4	68.8	-1.6
13	East Boston High School, East Boston	64.2	60.9	64.4	3.5
A	Sumner near Lamson, East Boston	N/A	60.0	60.1	0.1
14	Jeffries Point Yacht Club, East Boston	64.9	61.7	61.6	-0.1
15	Admiral's Hill, Chelsea	61.1	58.8	62.5	3.7
16	Bradstreet Avenue & Sales, Revere	69.0	72.3	70.1	-2.2
17	Carey Circle, Revere	58.3	62.5	60.3	-2.2
23	Myrtlebank/Hilltop, Dorchester	52.0	56.3	54.0	-2.3
24	Cunningham Park, Milton	51.9	55.3	53.1	-2.2
25	Squaw Rock Park, Quincy	51.2	51.0	49.4	-1.6
26	Hull High School, Hull	58.1	54.4	55.6	1.2
E	Farragut @ 2nd, South Boston	N/A	64.5	61.7	-2.8
Average change from 70 dB and above Between Alts 4 and 1A (5 Sites)					**-1.9**
Average change from 65 dB and above Between Alts 4 and 1A (10 Sites)					**-1.9**
Average change from all values Between Alts 4 and 1A (23 Sites)					**-0.6**

6.4.5.2 Nighttime Equivalent Sound Level (LeqN)

Table 6.2-12 presents the calculations of nighttime equivalent sound level (LeqN) for the 29M Low Fleet scenario. The LeqN is lower than DNL because the number of nighttime operations is much smaller than the number of daytime operations and because there is no 10dB nighttime penalty as in the DNL. The change in (LeqN) ranges from an increase of 3.2 dB to a decrease of 3.1 dB, with sites overall averaging a decrease of 0.1 dB for the Preferred Alternative compared to the No Action Alternative. Similar LeqN tables for other fleets, including the 37.5M High Fleet scenario, are contained in Appendix L of the Airside Project Draft EIS/EIR.

6.2.5.4 Maximum Sound Level (Lmax)

Table 6.2-13 compares the maximum sound level (Lmax) of the Preferred Alternative to the Lmax of the No Action Alternative for the 29M Low Fleet and 37.5M High Fleet scenarios. These values are for the aircraft operation that has the highest Lmax, whereas the values in the previous tables were for the cumulative noise exposure for all aircraft operations. In Table 6.2-13, the same aircraft operation is usually responsible for the highest value of Lmax in each fleet for all Alternatives, even though the number of its operations varies among the Alternatives. The values of Lmax in the 37.5M High Fleet scenario are generally less than those in the 29M Low Fleet scenario, primarily because of differences in the scheduled air carrier aircraft types – some Stage 2 aircraft that appear in the lower fleet forecast have been replaced with quieter Stage 3 aircraft in the longer-termforecast. These Lmax values are not as useful for assessing the relative noise among various locations and fleets as are the cumulative metrics such as DNL because they represent extreme values, rather than typical values, and because they do not consider how often the noise events occur. Similar Lmax tables for all fleets are contained in Appendix L of the Airside Project Draft EIS/EIR.

6.2.5.5 Time-Above 24-Hour (TA24)

Table 6.2-14 shows the 24-hour time-above (TA24) calculated for threshold values of 55 dB to 95 dB for the Preferred Alternative and the No Action Alternative under the 29M Low Fleet scenario. Comparison of these TA24 data show that the Preferred Alternative reduces the time-above various thresholds at most locations by about 20 to 40 percent. Maximum values of TA24for the No Action Alternative are found at locations 4 (Bayview and Grandview) and 7 (Loring Road near Court Road in Winthrop) which have 2 and 1 minutes above 95 dB, and 17 and 11 minutes above 85 dB, respectively. These two locations also have the highest DNL values. The other locations that have more than one minute per day above 85 dB have DNL values of 69 to 70 dB.

6.2.5.6 Time-Above Night (TAN)

Table 6.2-15 presents the corresponding time-above data for the nine hour nighttime period (TAN). These time-above values are much smaller than those for the entire 24- hour day because of the shorter time period and the reduction in the level of aircraft operations.

Table 6.2-12
Comparisons of INM-Computed Nighttime Equivalent Sound Levels (LeqN) from Flight Operations for the 29M Low Fleet Scenario

Noise Monitor	Location	No Action Alternative	Preferred Alternative	Change (in dB) No Action - Preferred
1	Andrews Street, South End	48.8	46.0	-2.8
2	B & Bolton, South Boston	56.3	53.2	-3.1
3	South Boston Yacht Club, South Boston	54.0	54.1	+0.1
4	Bayview & Grandview, Winthrop	67.3	67.7	+0.4
5	Harborview & Faun Bar, Winthrop	61.8	61.1	-0.7
6	Somerset & Johnson, Winthrop	57.6	57.7	+0.1
7	Loring Road Near Court Road, Winthrop	65.1	68.3	+3.2
8	Morton & Amelia, Winthrop	55.8	56.7	+0.9
9	Bayswater & Nancia, East Boston	62.0	62.6	+0.6
10	Bayswater & Shawsheen, East Boston	55.9	57.5	+1.6
11	Don Orione, East Boston	51.8	52.8	+1.0
12	East Boston Yacht Club, East Boston	62.3	63.0	+0.7
13	East Boston High School, East Boston	60.1	57.8	-2.3
A	Sumner near Lamson, East Boston	54.4	54.0	-0.4
14	Jeffries Point Yacht Club, East Boston	55.5	54.8	-0.7
15	Admiral's Hill, Chelsea	57.5	55.3	-2.2
16	Bradstreet Avenue & Sales, Revere	61.6	61.8	+0.2
17	Carey Circle, Revere	51.3	51.6	+0.3
23	Myrtlebank/Hilltop, Dorchester	44.9	45.0	+0.1
24	Cunningham Park, Milton	44.0	44.1	+0.1
25	Squaw Rock Park, Quincy	41.1	41.4	+0.3
26	Hull High School, Hull	47.9	47.3	-0.6
E	Farragut @ 2nd, South Boston	53.7	53.7	0.0

Table 6.2-13
Comparison of Maximum Sound Level (Lmax) Values from Flight Operations for the No Action and Preferred Alternatives – 29M Low and 37.5M High Fleet Scenarios

Noise Monitor	Location	No Action Alternative		Preferred Alternative	
		29M Low	37.5M High	29M Low	37.5M High
1	Andrews Street, South End	89.5	84.5	89.5	84.5
2	B & Bolton, South Boston	99.2	93.0	99.2	93.0
3	South Boston Yacht Club, South Boston	94.4	91.8	94.4	86.8
4	Bayview & Grandview, Winthrop	107.2	101.4	112.3	106.1
5	Harborview & Faun Bar, Winthrop	99.7	93.3	100.7	94.3
6	Somerset & Johnson, Winthrop	90.4	81.9	90.4	81.9
7	Loring Road near Court Road, Winthrop	104.7	97.1	104.7	97.1
8	Morton & Amelia, Winthrop	102.5	97.3	102.5	97.3
9	Bayswater & Nancia, E. Boston	107.7	103.9	107.7	103.9
10	Bayswater & Shawsheen, East Boston	96.5	90.1	96.5	90.1
11	Don Orione, East Boston	90.3	83.8	90.3	83.8
12	East Boston Yacht Club, East Boston	93.0	85.8	93.0	85.8
13	East Boston High School, East Boston	102.0	97.0	102.0	97.0
A	Sumner near Lamson, East Boston	82.1	81.2	82.2	74.5
14	Jeffries Point Yacht Club, East Boston	85.3	82.3	85.3	77.3
15	Admiral's Hill, Chelsea	101.1	96.4	101.1	96.4
16	Bradstreet Avenue & Sales, Revere	102.5	97.7	102.5	97.7
17	Carey Circle, Revere	89.6	87.1	89.6	87.1
23	Myrtlebank/Hilltop, Dorchester	79.7	79.7	79.7	79.7
24	Cunningham Park, Milton	75.8	75.8	75.8	75.8
25	Squaw Rock Park, Quincy	78.7	73.5	78.7	73.5
26	Hull High School, Hull	85.0	81.0	87.4	83.7
E	Farragut @ 2nd, South Boston	94.5	91.9	94.5	83.9

Table 6.2-14
Calculated Time-Above-Threshold Values for a 24-hour Period of Flight Operations for the No Action and Preferred Alternatives - 29M Low Fleet Scenario (in minutes per day)

dentity		No Action Alternative					Preferred Alternative					Change (Preferred Alternative – No Action Alternative)				
Number	Location	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB
1	Andrews St, South End	0	0	1	8	42	0	0	3	23	80			+2	+15	+38
2	B & Bolton, South Boston	0	1	4	16	68	0	1	12	41	110			+8	+25	+42
3	South Boston Yacht Club, South Boston	0	0	9	70	235	0	0	3	34	158			-6	-36	-77
4	Bayview & Grandview, Winthrop	2	17	51	119	273	1	10	28	74	212	-1	-7	-23	-45	-61
5	Harborview & Faun Bar, Winthrop	0	3	26	91	237	0	1	13	54	171		-2	-13	-37	-66
6	Somerset & Johnson, Winthrop	0	0	10	95	376	0	0	12	102	408			+2	+7	+32
7	Loring Road near Court Road, Winthrop	1	11	51	200	557	0	8	39	146	449	-1	-3	-12	-54	-108
8	Morton & Amelia, Winthrop	0	1	11	63	265	0	1	9	49	202			-2	-14	-63
9	Bayswater & Nancia, East Boston	0	5	28	99	254	0	4	20	72	220		-1	-8	-27	-34
10	Bayswater & Shawsheen, East Boston	0	1	12	66	197	0	1	10	56	196			-2	-10	-1
11	Don Orione, East Boston	0	0	4	39	155	0	0	3	31	142			-1	-8	-13
12	East Boston Yacht Club, East Boston	0	3	33	191	500	0	2	25	149	412		-1	-8	-42	-88
13	East Boston High School, East Boston	0	0	3	19	95	0	1	10	40	141		+1	+7	+21	+46
A	Sumner near Lamson, East Boston	0	0	2	32	222	0	0	2	42	235				+10	+13
14	Jeffries Point Yacht Club, East Boston	0	0	4	50	287	0	0	4	60	284				+10	-3
15	Admiral's Hill, Chelsea	0	0	3	13	60	0	1	7	28	92		+1	+4	+15	+32
16	Bradstreet Avenue & Sales, Revere	0	3	17	45	120	0	2	12	33	93		-1	-5	-12	-27
17	Carey Circle, Revere	0	0	3	24	64	0	0	3	17	45				-7	-19
23	Myrtlebank/Hilltop, Dorchester	0	0	0	9	76	0	0	0	4	36				-5	-40
24	Cunningham Park, Milton	0	0	0	10	59	0	0	0	5	28				-5	-31
25	Squaw Rock Park, Quincy	0	0	0	1	36	0	0	0	1	24					-12
26	Hull High School, Hull	0	0	0	9	55	0	0	0	15	79				+6	+24
E	Farragut @ 2nd, South Boston	0	0	8	71	275	0	0	3	45	204			-5	-26	-71

Table 6.2-15
Calculated Time-Above-Threshold Values for Nighttime Flight Operations (10:00 PM to 7:00 AM) for the No Action and Preferred Alternatives- 29M Low Fleet Scenario (in minutes per day)

Identity		No Action Alternative					Preferred Alternative					Change in Minutes No Action – Preferred))				
Number	Location	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB
1	Andrews St, South End	0	0	0	2	6	0	0	0	1	4				-1	-2
2	B & Bolton, South Boston	0	0	1	3	9	0	0	0	2	6			-1	-1	-3
3	South Boston Yacht Club, South Boston	0	0	1	7	25	0	0	1	7	24					-1
4	Bayview & Grandview, Winthrop	0	1	4	12	35	0	2	4	12	34		+1			-1
5	Harborview & Faun Bar, Winthrop	0	0	3	9	27	0	0	2	9	27			-1		
6	Somerset & Johnson, Winthrop	0	0	2	16	50	0	0	2	15	46				-1	-4
7	Loring Road near Court Road, Winthrop	0	1	6	21	57	0	2	10	29	69		+1	+4	+8	+12
8	Morton & Amelia, Winthrop	0	0	1	8	30	0	0	1	9	31				+1	+1
9	Bayswater & Nancia, East Boston	0	1	3	10	30	0	1	3	11	30				+1	
10	Bayswater & Shawsheen, East Boston	0	0	1	9	31	0	0	2	11	36			+1	+2	+5
11	Don Orione, East Boston	0	0	0	4	22	0	0	1	5	26			+1	+1	+4
12	East Boston Yacht Club, East Boston	0	0	6	25	59	0	1	6	30	69		+1		+5	+10
13	East Boston High School, East Boston	0	0	2	6	19	0	0	1	5	17			-1	-1	-2
A	Sumner near Lamson, East Boston	0	0	1	9	37	0	0	1	8	35				-1	-2
14	Jeffries Point Yacht Club, East Boston	0	0	1	11	41	0	0	1	10	38				-1	-3
15	Admiral's Hill, Chelsea	0	0	1	4	13	0	0	1	3	11				-1	-2
16	Bradstreet Avenue & Sales, Revere	0	1	2	5	14	0	1	2	5	15					+1
17	Carey Circle, Revere	0	0	1	3	7	0	0	1	3	7					
23	Myrtlebank/Hilltop, Dorchester	0	0	0	1	7	0	0	0	1	7					
24	Cunningham Park, Milton	0	0	0	1	6	0	0	0	1	6					
25	Squaw Rock Park, Quincy	0	0	0	0	5	0	0	0	0	5					
26	Hull High School, Hull	0	0	0	2	12	0	0	0	2	12					
E	Farragut @ 2nd, South Boston	0	0	0	7	28	0	0	0	7	27					-1

6.2.6 Ground Taxi Noise Levels

Aircraft ground taxi noise was assessed in the Airside Project Draft EIS / Final EIR at seven noise monitoring stations (NMS) in the immediate vicinity of the airport. The analysis looked at five metrics, and a summary of those analyses is provided in this Supplemental DEIS / FEIR.

- Day-Night Sound Level (DNL)
- Night (10:00 PM to 7:00 AM) Equivalent Sound Level (LeqN)
- Maximum Sound Level (Lmax)
- Night Time-Above 55, 65, 75, 85, and 95 dB (TAN)
- 24-hour Day Time-Above 55, 65, 75, 85, and 95 dB (TA24)

Ground noise was calculated for Alternatives 1, 2, 3 and 4. The ground noise for Alternatives 1 and 1A will be similar for fleets where the effective runway utilization is the same for both Alternatives. The effective runway utilization data for arrivals (Table 6.2-3 in the Airside Project Draft EIS / EIR) and departures (Table 6.2-4 in the Airside Project Draft EIS / EIR) indicates little difference between Alternatives 1 and 1A for the 29M Low and High Fleet scenarios, and the 37.5M Low Fleet scenario. Therefore, the results of the Alternative 1 ground noise analysis for these fleets also apply to the Preferred Alternative.

The noise from ground taxi operations is significantly less than the noise from in-flight operations, which includes the noise from both takeoff ground roll and application of thrust reverser on landing. For example, the in-flight DNL for average propagation in South Boston at Farragut and 2nd (Location E) is 40 to 44 dB greater than that of ground taxi noise, and for maximum propagation it is 23 to 27 dB greater. At the other six locations, the in-flight DNL for average propagation is 17 to 30 dB greater than that of the ground taxi noise, and for maximum propagation is 2 to 13 dB greater.

Implementation of the Preferred Alternative would produce a modest reduction in ground taxi noise for the Bayswater section of East Boston and Winthrop (NMS #7, 10 and 12), located to the northeast of the airport, particularly as operations increase and greater congestion occurs on the existing taxiway. These are the locations most affected by ground taxi noise, and their average reductions in DNL range from 1.9 to 3.3 dB. (See Table 6.2-16) There are smaller reductions at Somerset and Johnson (NMS # 6) in Winthrop (0.8 to 1.0 dB) and at the two positions (Location A and NMS #14) in Jeffries Point (0.1 to 0.3 dB). There is a small increase for average propagation (0.8 dB) and a decrease for maximum propagation (1.6 dB) at Farragut and 2nd (Location E). However, at this location in South Boston, the ground taxi operations would often be inaudible.

Table 6.2-16
Change in DNL Values from Ground Operations, by Noise Monitoring Site
(Preferred Alt. 1A – No Action Alt.4, in dB)

Fleet	Loring/ Court Road Winthrop (NMS #7)	Bayswater and Shawsheen, East Boston (NMS #10)	East Boston Yacht Club, East Boston (NMS #12)	Somerset and Johnson, Winthrop (NMS #6)	Sumner/ Lamson, East Boston (NMS #A)	Jeffries Point Yacht Club, East Boston (NMS #14)	Farragut @ 2nd S. Boston (NMS #E)
Average Propagation Conditions							
29M Low	-0.2	-0.8	-1.0	-0.8	0.4	0.6	1.4
37.5M Low	-4.6	-5.0	-3.2	-0.6	-0.6	-0.7	0.7
37.5M High	-4.7	-1.5	-1.4	-1.5	-0.3	-0.3	0.2
Average Change dB	-3.2	-2.4	-1.9	-1.0	-0.2	-0.1	0.8
Maximum Propagation Conditions							
29M Low	-0.6	-1	-1.2	-0.8	0.2	0.6	-1.1
37.5M Low	-4.7	-5	-3.4	-0.3	-0.8	-1.0	-1.6
37.5M High	-4.6	-1.3	-1.2	-1.3	-0.3	-0.3	-2.1
Average Change dB	-3.3	-2.4	-1.9	-0.8	-0.3	-0.2	-1.6

6.2.6.1 Other Ground Taxi Noise Levels

Ground taxi noise was also calculated for four other noise metrics: Nighttime Equivalent Sound Level (LeqN), Maximum Sound Level (Lmax), Night Time-Above a Noise Threshold (TAN), and 24-hour Day Time-Above a Noise Threshold (TA24). Tables for all locations and all fleet scenarios are contained in Appendix L of the Airside Project Draft EIS/EIR.

The Nighttime Equivalent Sound Level (LeqN) calculated for ground taxi operations are about 7 to 10 dB lower than the DNL values because there are fewer operations per hour in the nighttime period and the 10 dB penalty for nighttime operations in the DNL metric is not applied to LeqN. For all future scenarios, the Preferred Alternative results in an average reduction of 0.5 to 0.6 dB in LeqN when compared to the No Action Alternative. The Maximum A-weighted Sound Levels (Lmax) calculated for the ground taxi operations are identical at 59 dB for average propagation and 75 dB for maximum propagation. This means that for almost all of the cases, the same aircraft type and operation at the same location produced the recorded Lmax value.

Tables 6.2-17 and 6.2-18 present the time-above threshold values in minutes for ground taxi noise at NMS # 12 for nighttime and 24-hour day, respectively. Data are presented for three thresholds, 55, 65, and 75 dB. Note that total time-above 75 dB values less than 0.5 minute are rounded down to 0 minutes. The nighttime values of TA in Table 6.2-17 are much smaller than those in Table 6.2-18 for a 24-hour day, and are roughly in proportion to their respective numbers of operations.

The reductions in 24-hour time-above at the East Boston Yacht Club (NMS#12) for the Preferred Alternative are relatively dramatic. The average decrease in TA24 for maximum

propagation is 43 percent for TA24 55 dB and 55 percent for TA24 65 dB. At Loring Road near Court Road, Winthrop (NMS # 7) the corresponding decreases are 65 and 54 percent for TA24 55 and 65 dB, respectively, and at Bayswater and Shawsheen, East Boston (NMS #10) the decreases for TA24 55 and 65 dB are 53 and 27 percent, respectively. These differences in TA24 for the Preferred Alternative are of the same nature as those found above in reviewing the DNL metric at these locations.

Table 6.2-17
Comparison of Time-Above Nighttime Threshold Values in Minutes Per Day from Ground Operations at NMS #12: East Boston Yacht Club, East Boston

	No Action (Alternative 4)			Preferred Alternative			Comparing the Preferred and No Action Alts.		
Fleet	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB
Average Propagation Conditions									
29M Low	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0
37.5M High	0.0	0.0	1.0	0.0	0.0	3.0	0.0	0.0	+2.0
Maximum Propagation Conditions									
29M Low	0.0	4.0	67.0	0.0	5.0	69.0	0.0	+1.0	+2.0
37.5M High	0.0	11.0	127.0	0.0	10.0	111.0	0.0	13.0	+16.0

Table 6.2-18
Comparison of Time-Above 24-hour Threshold Values in Minutes Per Day from Ground Operations at NMS #12: East Boston Yacht Club, East Boston

	No Action (Alternative 4)			Preferred Alternative			Comparing the Preferred and No Action Alts.		
Fleet	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB
Average Propagation Conditions									
29M Low	0.0	0.0	21.0	0.0	0.0	14.0	0.0	0.0	-7.0
37.5M High	0.0	0.0	8.0	0.0	0.0	10.0	0.0	0.0	+2.0
Maximum Propagation Conditions									
29M Low	0.0	146.0	1112.0	0.0	67.0	727.0	0.0	-79.0	-385.0
37.5M High	0.0	108.0	1168.0	0.0	47.0	569.0	0.0	-61.0	-599.0

6.2.7 37.5M High Regional Jet Fleet

6.2.7.1 Fleet Mix and Operations

A summary of operations under each of the five project alternatives considered is provided in Table 6.2-19 . Daytime and nighttime operations for jets, turboprops and total aircraft

and are compared to 1998 actual operations. Activity is comprised of scheduled and unscheduled operations by major air carriers, commuter airlines, and air cargo operators; it also includes general aviation jet and turboprop aircraft.

Alternatives that incorporate peak period pricing (Alternatives 1, 2, and 3) have fewer operations than the No Action and Preferred Alternative, but the differences in activity levels are small, and have a negligible effect on noise exposure since most cancelled operations are smaller, quieter aircraft. The most significant factor affecting the noise impacts of different alternatives is the amount of delay that occurs when accommodating the scheduled flights:

- As delays increase, more operations slip into nighttime hours, causing greater disturbance and an increase in those measures of noise (DNL, LeqN, and TAN) that are sensitive to late night activity; and
- High delays limit controller flexibility and make it difficult to achieve PRAS goals.

Alternatives incorporating Runway 14/32 (Alternative 1 and the Preferred Alternative 1A) significantly reduce nighttime operations by reducing delays. Thus, the Preferred Alternative results in approximately 37 fewer nighttime operations (a reduction of nearly 13 percent compared to the No Action Alternative); 32 of those are in jet aircraft. Alternative 1 results in some cancellations and reduces the delays even further, causing the number of nighttime operations to decrease by 57 compared to the No Action Alternative; 48 of those are in jet aircraft.

A second factor affecting the noise impacts of the 37.5M High RJ Fleet is the noise of the individual aircraft themselves. Though the mix of aircraft types varies, the primary difference between the 37.5M High RJ Fleet and previous forecasts is the higher number of 30- to 70-seat regional jet aircraft that are entering the fleet and replacing many of the existing and previously forecast turboprop operations. For example, in the 37.5M High Fleet, only about 26 of the 1,665 daily operations were by regional jets while 637 operations were by turboprops; in the 37.5M High RJ scenario, regional jets account for 395 operations of 1,601 daily operations while turboprops account for only 217.

Table 6.2-19
Average Daily Operations for 37.5M High RJ Fleet (All Alternatives)

	Stage 2 Jets	Stage 3 Jets	Turboprops	Totals		
Fleet Forecast	Day/Night	Day/Night	Day/Night	Day	Night	Daily
37.5M High RJ Fleet						
No Action (Alt. 4)	0/0	1,125/259	188/29	1,313	288	1,601
Preferred (Alt.1A)	0/0	1,157/227	193/24	1,350	251	1,601
All Actions (Alt. 1)	0/0	1,143/211	179/21	1,322	231	1,553
No 14/32 (Alts. 2/3)	0/0	1,117/236	175/25	1,292	261	1,553

Note: "Day" defined as 7:00 AM to 10:00 PM and "Night" defined as 10:00 PM to 7:00 AM, consistent with the definitions as used in DNL calculations.

This shift to a higher proportion of regional jet operations does not imply increased noise. A 50-seat Embraer 145 regional jet is actually 5 to 10 decibels quieter, both on takeoff and on landing, than even some of the most recently manufactured Stage 3 jet aircraft, and though it is louder than some turboprops, it is quieter than many other turboprop types currently operating at Logan Airport. Thus, the increased presence of regional jets is more likely to impact noise exposure through runway use and delay impacts rather than through the fleet mix difference itself. The impacts of these fleet changes on the noise environment will be described in more detail later in this section.

6.2.7.2 Flight Tracks and Runway Use

Flight tracks for the new 37.5M High RJ Fleet scenario were assumed to be identical to the tracks modeled under other fleets as shown earlier in Figure 6.2-1 through Figure 6.2-4. The figures indicate arrivals to Runway 32 converge and descend to the runway over Boston Harbor while departures from Runway 14 climb out in the opposite direction over the harbor.

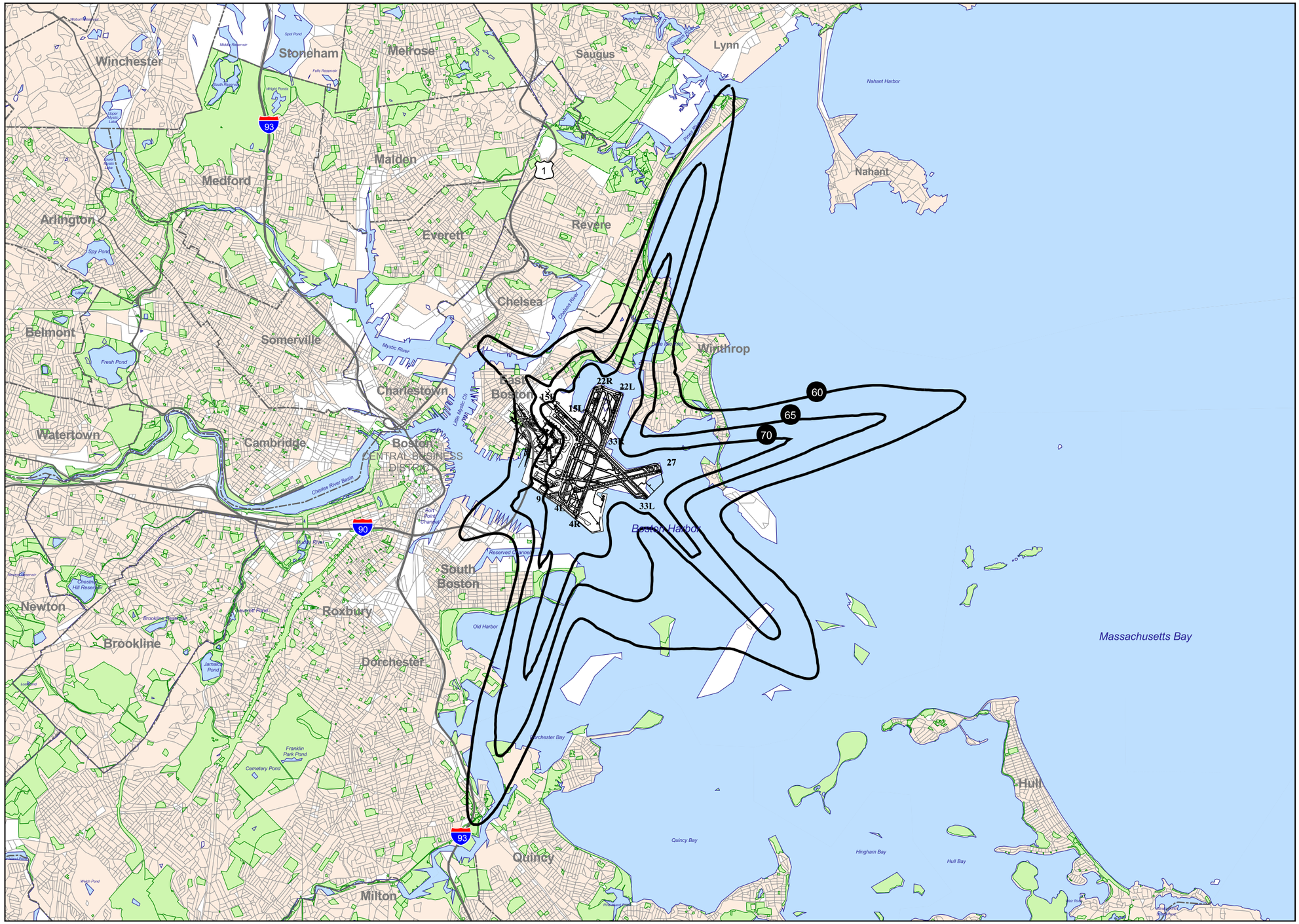
Summaries of runway use for this 37.5M High RJ Fleet are presented in Section 4.7. Each of these tables allows a comparison of the number of operations expected to overfly a given community for each of the study alternatives.

6.2.7.3 INM Modeled In-Flight Noise Levels

Consistent with other fleet forecasts in this Airside Improvements Planning Project, the 37.5M High RJ Fleet further illustrates that with a growing number of operations, the No Action Alternative will result in increased use of Runways 4L/R, 22R, and 27 for arrivals and Runways 22L/R, 4L/R, and 9 for departures. These increases are anticipated despite the fact that current runway usages exceed PRAS goals and indicate a need to shift traffic to other runways. Controllers continue to need these north/south runway combinations because they have the highest capacity of any configurations available and that capacity is needed more frequently as demand increases. Noise exposure off these runway ends can therefore be expected to increase as well under the No Action Alternative.

Similar to the conclusions drawn from other fleet forecasts, with implementation of the Preferred Alternative under the 37.5M High RJ Fleet, air traffic controllers would have use of two or three runways during northwest winds (instead of the current one or two), and have greater flexibility and opportunity to achieve PRAS goals for both long-term annual runway use and short-term dwell and persistence relief. This benefits the communities presently experiencing the most aircraft noise.

Noise contours generated by the INM for all of the 37.5M High RJ Fleet Alternatives (4, 1A, 1, and 2/3) are shown in Figures 6.2-10 through 6.2-14. The exposure attributable to each Alternative is depicted by the 60, 65, and 70 dB DNL contours. The No Action Alternative is presented first to establish a basis for comparison; it is followed by the Preferred Alternative and then a comparison of the key 65 dB DNL contours for the Preferred and No Action Alternatives to show differences in the areas of significant noise impact. The final two figures present contours for the other Alternatives. Alternatives 2 and 3 have identical in-flight noise exposure since they differ only in that Alternative 2 includes the taxiway improvements. They are therefore portrayed by the same set of contours and population results.



Legend

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

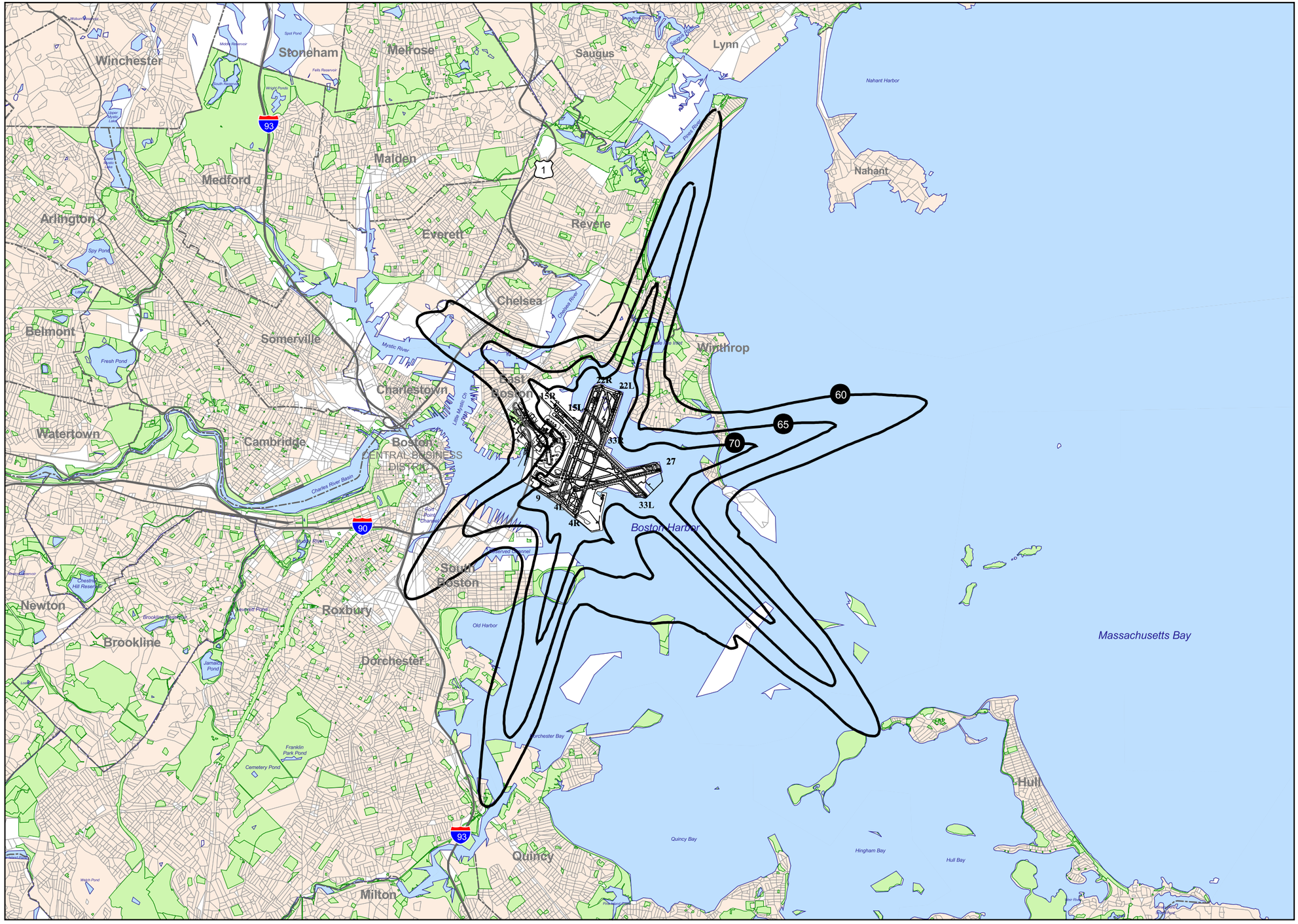
N

0 0.5 1 1.5 Miles

Figure 6.2-10

Day / Night Sound Levels
High RJ Fleet - Alternative 4, No Action
Levels 60, 65 and 70 DNL

Source: Harris Miller Miller & Hanson



Legend

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

N

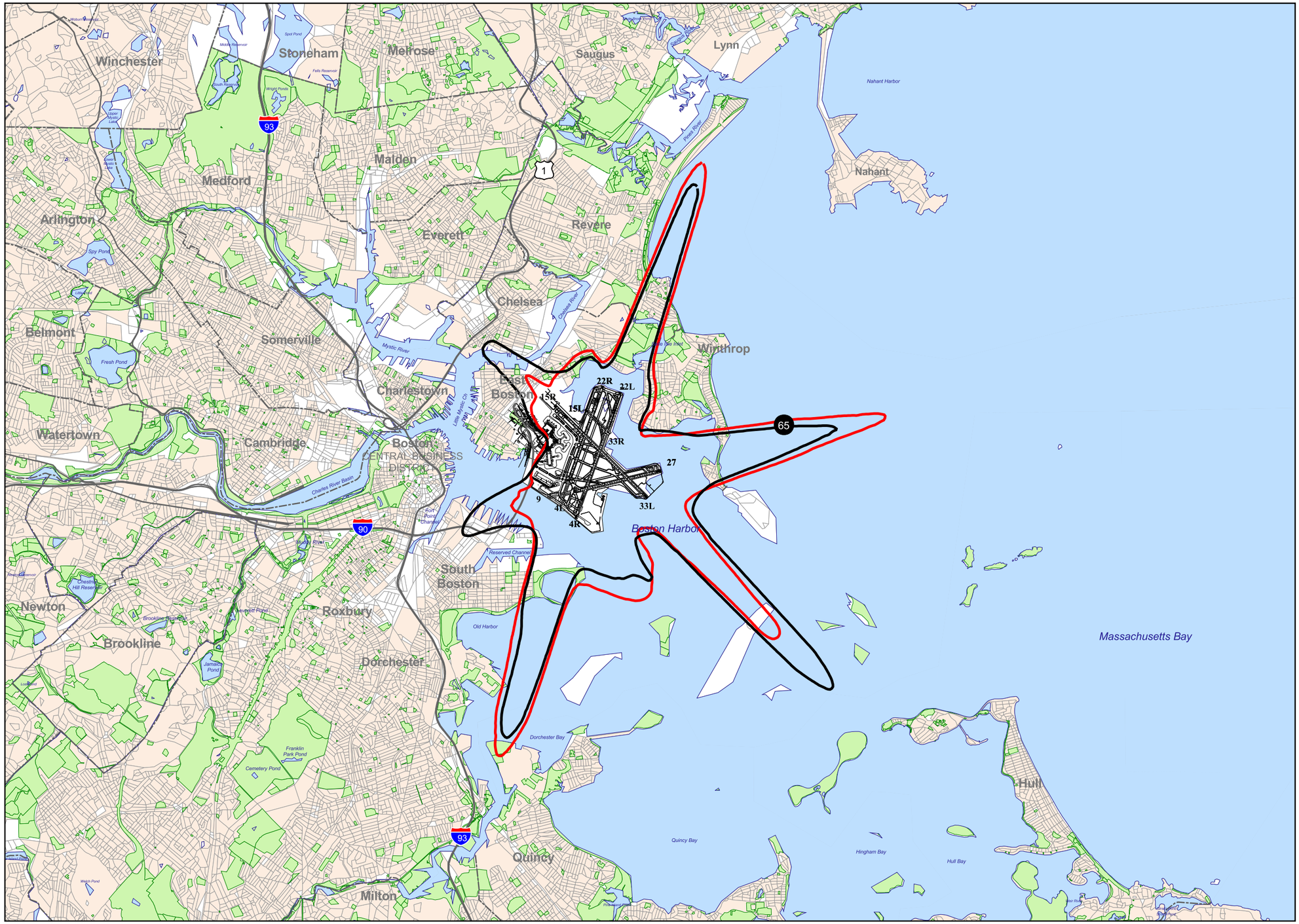
0 0.5 1 1.5 Miles

massport

Figure 6.2-11

High RJ Fleet - Preferred Alternative
Levels 60, 65 and 70 DNL

Source: Harris Miller Miller & Hanson



Legend

65 DNL

- Alternative-1A
- Alternative-4
- Open Space

Census Blocks

- Populated
- Non-Populated

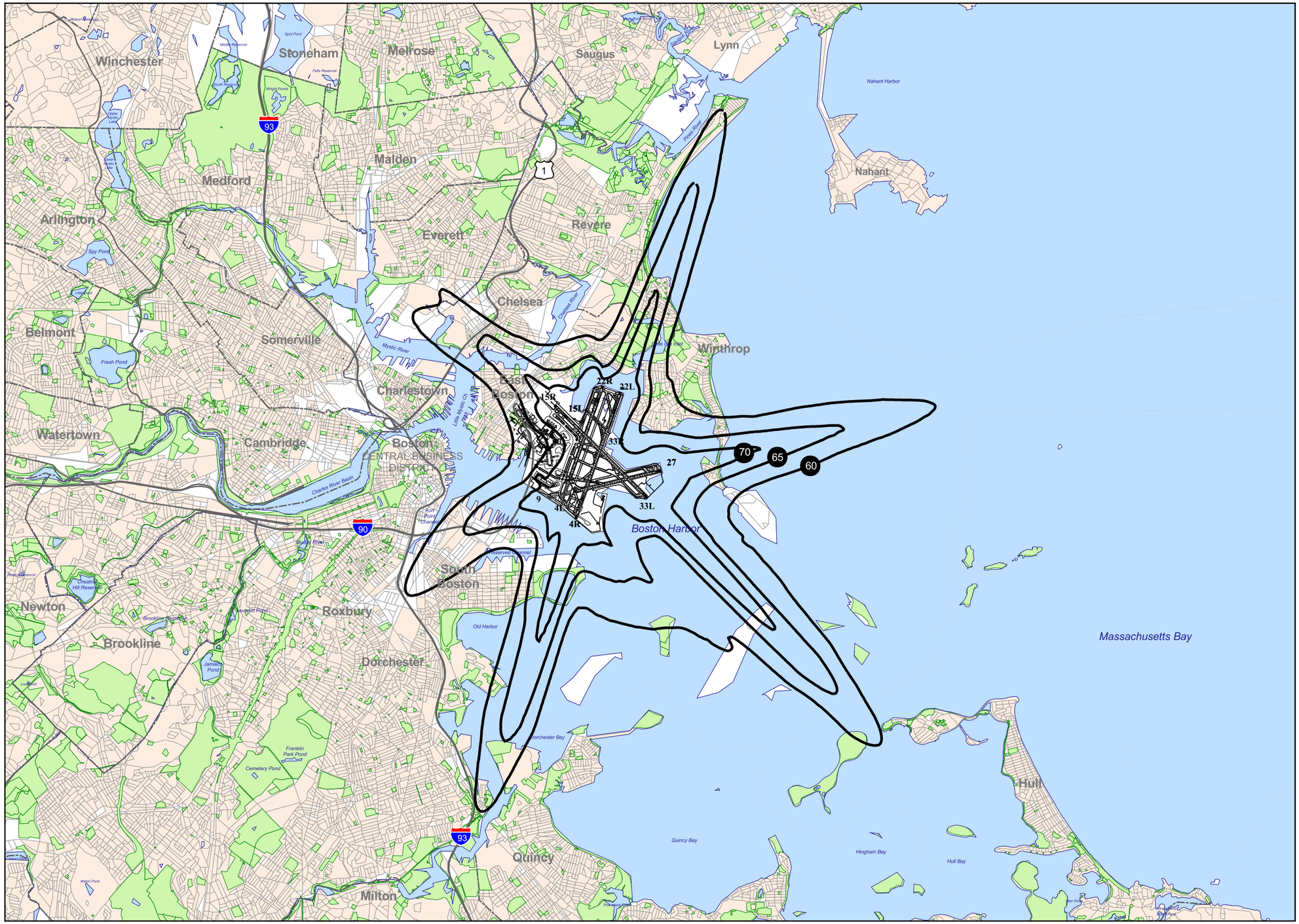
N

0 0.5 1 1.5 Miles

Figure 6.2-12

High RJ Fleet - Preferred Alternative and Alternative 4, 65 DNL

Source: Harris Miller Miller & Hanson



Legend

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

N

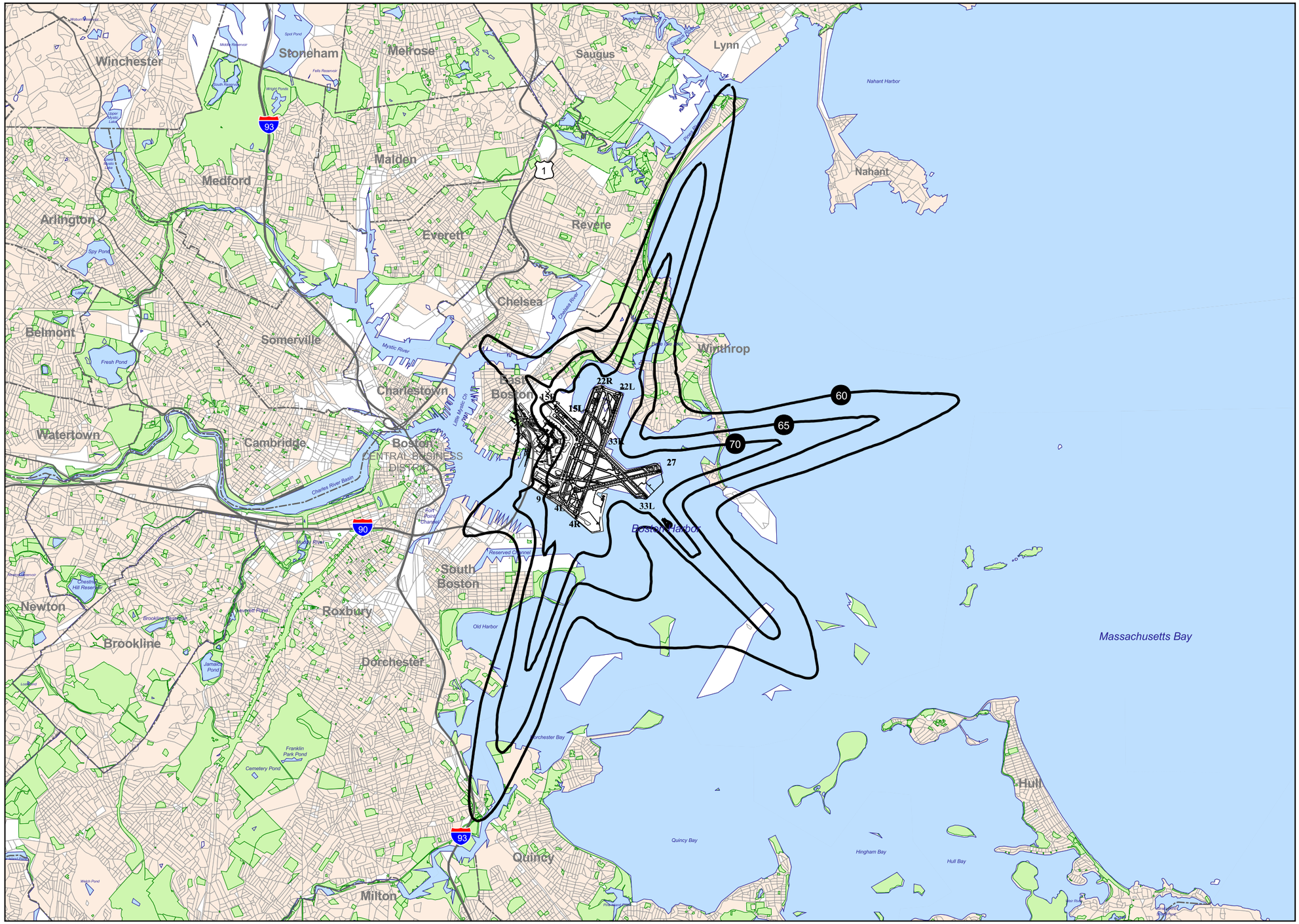
0 0.5 1 1.5 Miles

massport

Figure 6.2-13

High RJ Fleet - Alternative 1
Levels 60, 65 and 70 DNL

Source: Harris Miller Miller & Hanson



Legend

60, 65 and 70 DNL

Open Space

Census Blocks

Populated

Non-Populated

N

0 0.5 1 1.5 Miles

Figure 6.2-14

Day / Night Sound Levels
High RJ Fleet - Alternative 2/3
Levels 60, 65 and 70 DNL

Source: Harris Miller Miller & Hanson

6.2.7.4 Differences in Noise Exposure for Alternatives 4, 1A, 1, and 2/3 Under the 37.5M High RJ Fleet

Figure 6.2-10 shows the DNL contours for the No Action Alternative (Alternative 4) and indicates a continuing dependence on the north/south runway combinations. The 65 dB DNL contour for this scenario extends as further north along the Revere shoreline and south to Squantum than any Alternative. It is also the largest of the Alternatives over most of Winthrop. Conversely, to the west it remains close to the Airport off of Runway 27, never extending beyond the Inner Harbor, and stays close to the end of Runway 33L, extending to about Chelsea Street in East Boston.

The Preferred Alternative with its addition of unidirectional Runway 14/32 in Figure 6.2-11, shifts this balance by reducing coverage of the 65 dB DNL contour in Revere, Winthrop and South Boston near City Point. This shift in runway use results in increased exposure above 65 dB, primarily in commercial areas of South Boston near the World Trade Center, to the northwest in the Eagle Hill area of East Boston, and beyond to approximately Broadway in Chelsea.

A comparison of the No Action and Preferred Alternatives in Figure 6.2-12 indicates a 1 to 2 dB DNL decrease in exposure attributable to the Preferred Alternative in parts of Revere and Winthrop that receive exposure levels in excess of 70 dB DNL. These improvements are achieved through the greater flexibility afforded by the additional runway, permitting air traffic controllers to reduce the activity on the north/south runway combinations and shift operations so that arrivals increase to Runways 33L and 32, largely over Boston Harbor, or so that departures increase on Runways 27 and 33L. This causes increased noise on the order of 4 to 5 dB off of those runway ends, but at levels below those experienced in Winthrop and Revere.

Figure 6.2-13 depicts contours for Alternative 1. This scenario presumes construction of unidirectional Runway 14/32 but also includes the effects of peak period pricing. The differences compared to the Preferred Alternative are relatively small, causing both increases as well as decreases in exposure, generally less than a decibel in magnitude. Small additional benefits from peak period pricing occur in Revere and Winthrop at contour levels above 70 dB DNL, while areas of South Boston off the approach end of 22R also receive small improvements compared to the Preferred Alternative but at lower DNL levels of 65 to 70 dB. Negligible differences between the two scenarios occur in other areas of South Boston affected by departures from Runway 27, but small increase in exposure occurs to the northwest off of Runway 33L causing increased exposure in parts of East Boston and Chelsea.

The contours for Alternatives 2 and 3 are shown in Figure 6.2-14. Except for a small improvement in Winthrop and a small reduction in noise in South Boston near the approach end of Runway 22L, the contours generally differ very little from the No Action Alternative.

6.2.7.6 Population Affected by Noise

Estimates of the number of people residing within 5 dB increments of noise exposure for each of the alternatives examined under the 37.5M High RJ Fleet are summarized in Table 6.2-20. Also included are the 1998 populations for reference. Table 6.2-21, which follows, summarizes a comparison of the Preferred Alternative with No Action and indicates the improvement that occurs at the highest exposure levels as a result of the increased flexibility afforded by Runway 14/32.

Table 6.2-20
Summary of Noise-Exposed Population for All Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative (Alt. 4)	Preferred Alternative (Alt. 1A)	With Peak PeriodPricing (Alt. 1)	Other Improvements (Alts.2/3)
High Regional Jet Fleet					
DNL 75 dB and above	577	222	58	58	135
DNL 70 dB and above	2,679	3,700	2,267	2,020	3,584
DNL 65 dB and above	23,296	11,493	11,857	12,470	11,223
DNL 60 dB and above	93,860	36,857	50,048	48,332	36,024

1 Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

Table 6.2-21
Comparison of Noise-Exposed Population for the No Action and Preferred Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action Alternative (Alt. 4)	Preferred Alternative (Alt. 1A)	Preferred Alt. Compared to No Action	Percent Change from No Action to Preferred Alt
High Regional Jet Fleet					
DNL 75 dB and above	577	222	58	-164	-74%
DNL 70 dB and above	2,679	3,700	2,267	-1,433	-39%
DNL 65 dB and above	23,296	11,493	11,857	364	3%
DNL 60 dB and above	93,860	36,857	50,048	13,191	36%

1 Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

Comparing these figures for the No Action and Preferred Alternatives, the Preferred Alternative again provides important reductions in population exposure to DNL values greater than or equal to 70 and 75 dB with a minimal increase in numbers of people exposed above 65 dB DNL. Only at exposure levels between 60 and 65 dB DNL is there a significant increase in population exposed to noise from the Preferred Alternative.

These reductions are a direct result of the implementation of Runway 14/32, which enables the Air Traffic Control Tower to better achieve PRAS goals which were specifically designed to give relief to the populations experiencing the most aircraft noise.

The results in the previous two tables are broken down by community area in Tables 6.2-22 and 6.2-23 below. Similar tables for the other fleets are in Appendix L of the Airside Project Draft EIS/EIR.

6.2.7.7 Other Indications of Changed Exposure Using the 37.5M High RJ Fleet

As discussed in Section 6.2.5, five other metrics were computed at specific points to identify changes in aircraft noise. The selected points coincide with 21 of Massport's permanent noise monitoring locations along with two additional sites selected for the Airside Project.

The calculations of DNL for the No Action and Preferred Alternatives under the 37.5M High RJ Fleet are presented and compared in Table 6.2-24. Results for the other alternatives under the High RJ Fleet are presented in Appendix E of this document. Similar tables for all other study fleets are contained in Appendix L of the Airside Project Draft EIS/EIR.

Even under the No Action Alternative, the 37.5M High RJ noise is less than that in 1998 at the majority of locations around the airport, largely reflecting the air carriers' replacement of Stage 2 aircraft with quieter Stage 3 aircraft at the end of 1999 in compliance with Federal regulations.

Those sites that are shown to increase above 1998 levels under the No Action Alternative are limited to six locations (9, 16 and 17 to the north in East Boston and Revere, and 3, 23, and 24 to the south in South Boston, Dorchester, and Milton. As shown in Figure 5.2-4 in Chapter 5, all of them are directly aligned with Runways 4L/R and 22L/R and reflect the increased need to use those runways ever more frequently as demand increases. This result is further illustrated graphically by comparing the 1998 DNL noise contours of Figure 5.2-3 with the DNL contours for the 37.5M High RJ No Action Alternative shown in Figure 6.2-10.

Comparing the Preferred and No Action Alternatives in the table above, it is notable that the same six locations just mentioned are expected to experience decreases in DNL of 1.4 to 1.8 dB if the Preferred Alternative is implemented. In addition, significant decreases of 1.5 to 2.4 dB are seen at sites 9 and 12 on Bayswater Street and at the yacht club in East Boston and at sites 4 and 7 in Winthrop, which along with site 16 in Revere, are now or will be exposed to DNL levels above 70 dB – the highest of any locations in the vicinity of the Airport – if no action is taken.

Table 6.2-22
Noise-Exposed Population by Town or Neighborhood Area for All Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action (Alternative 4)	Preferred (Alternative 1A)	With Peak Period Pricing (Alternative 1)	Other Improvements (Alternatives 2/3)
Chelsea					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	0	0
DNL 65 dB and above	0	0	392	1,084	0
DNL 60 dB and above	9,222	1,601	8,117	8,488	1,547
Everett					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	0	0
DNL 65 dB and above	0	0	0	0	0
DNL 60 dB and above	0	0	0	0	0
E. Boston – Eagle Hill					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	1	0
DNL 65 dB and above	2,280	120	3,133	3,160	113
DNL 60 dB and above	19,040	3,956	11,247	11,479	3,393
E. Boston – Orient Hts/ Bayswater St.					
DNL 75 dB and above	58	58	58	58	58
DNL 70 dB and above	239	355	239	239	355
DNL 65 dB and above	1,742	1,135	606	606	1,170
DNL 60 dB and above	5,128	4,213	3,287	3,069	4,213
Other East Boston					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	351	0	0	0	0
DNL 65 dB and above	3,940	986	649	918	986
DNL 60 dB and above	6,228	3,940	4,091	4,144	3,940
Total East Boston[1]					
DNL 75 dB and above	58	58	58	58	58
DNL 70 dB and above	590	355	239	240	355
DNL 65 dB and above	7,962	2,241	4,388	4,684	2,269
DNL 60 dB and above	30,396	12,109	18,625	18,692	11,546
Long Island					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	0	0
DNL 65 dB and above	0	0	0	0	0
DNL 60 dB and above	502	0	0	0	0

Table 6.2-22 (cont.)
Noise-Exposed Population by Town or Neighborhood Area for All Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action (Alternative 4)[2]	Preferred (Alternative 1A)[2]	With Peak Period Pricing (Alternative 1)[2]	Other Improvements (Alternatives 2/3)[2]
Revere					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	2,260	1,389	1,205	2,304
DNL 65 dB and above	3,168	3,854	3,428	3,428	3,854
DNL 60 dB and above	5,300	7,901	6,052	5,808	8,472
South Boston					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	48	0	0	0	0
DNL 65 dB and above	3,553	1,080	765	429	872
DNL 60 dB and above	22,511	3,479	6,950	5,801	3,046
Boston (Other)[1]					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	0	0
DNL 65 dB and above	0	0	0	0	0
DNL 60 dB and above	10,809	674	482	429	625
Winthrop - Point Shirley					
DNL 75 dB and above	519	164	0	0	77
DNL 70 dB and above	1,266	697	417	353	537
DNL 65 dB and above	2,195	1,542	1,305	1,266	1,452
DNL 60 dB and above	4,080	2,527	2,291	2,195	2,401
Winthrop - Court Road					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	731	388	222	222	388
DNL 65 dB and above	3,387	1,661	1,128	1,128	1,661
DNL 60 dB and above	3,387	3,387	3,387	3,387	3,387
Rest of Winthrop					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	44	0	0	0	0
DNL 65 dB and above	3,031	1,115	451	451	1,115
DNL 60 dB and above	7,653	5,179	4,144	3,532	5,000
Total Winthrop					
DNL 75 dB and above	519	164	0	0	77
DNL 70 dB and above	2,041	1,085	639	575	925
DNL 65 dB and above	8,613	4,318	2,884	2,845	4,228
DNL 60 dB and above	15,120	11,093	9,822	9,114	10,788
Total Population Summary					
DNL 75 dB and above	577	222	58	58	135
DNL 70 dB and above	2,679	3,700	2,267	2,020	3,584
DNL 65 dB and above	23,296	11,493	11,857	12,470	11,223
DNL 60 dB and above	93,860	36,857	50,048	48,332	36,024

1 "Boston (Other)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End.

2 Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

Table 6.2-23
Comparison of Noise-Exposed Population by Town or Neighborhood Area for No Action and Preferred Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action (Alternative 4)	Preferred (Alternative 1A)	Preferred Alt. Compared to No Action	Percent Change from No Action to Preferred Alt.
Chelsea					
DNL 75 dB and above	0	0	0	0	0
DNL 70 dB and above	0	0	0	0	0
DNL 65 dB and above	0	0	392	392	N/A
DNL 60 dB and above	9,222	1,601	8,117	6,516	407%
Everett					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	0	0	0	0	0%
E. Boston – Eagle Hill					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	2,280	120	3,133	3,013	2511%
DNL 60 dB and above	19,040	3,956	11,247	7,291	184%
E. Boston – Orient Hts/ Bayswater St.					
DNL 75 dB and above	58	58	58	0	0%
DNL 70 dB and above	239	355	239	-116	-33%
DNL 65 dB and above	1,742	1,135	606	-529	-47%
DNL 60 dB and above	5,128	4,213	3,287	-926	-22%
Other East Boston					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	351	0	0	0	0%
DNL 65 dB and above	3,940	986	649	-337	-34%
DNL 60 dB and above	6,228	3,940	4,091	151	4%
Total East Boston[1]					
DNL 75 dB and above	58	58	58	0	0%
DNL 70 dB and above	590	355	239	-116	-33%
DNL 65 dB and above	7,962	2,241	4,388	2,147	96%
DNL 60 dB and above	30,396	12,109	18,625	6,516	54%
Long Island					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	502	0	0	0	0%

Table 6.2-23 (cont.)
Comparison of Noise-Exposed Population by Town or Neighborhood Area for No Action and Preferred Alternatives – 37.5M High RJ Fleet Scenario

Day-Night Sound Level in dB	1998 Actual	No Action (Alternative 4) [2]	Preferred (Alternative 1A) [2]	Preferred Alt. Compared to No Action [2]	Percent Change from No Action to Preferred Alt. [2]
Revere					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	2,260	1,389	-871	-39%
DNL 65 dB and above	3,168	3,854	3,428	-426	-11%
DNL 60 dB and above	5,300	7,901	6,052	-1,849	-23%
South Boston					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	48	0	0	0	0%
DNL 65 dB and above	3,553	1,080	765	-315	-29%
DNL 60 dB and above	22,511	3,479	6,950	3,471	100%
Boston (Other)[1]					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	0	0	0	0	0%
DNL 65 dB and above	0	0	0	0	0%
DNL 60 dB and above	10,809	674	482	-192	-28%
Winthrop - Point Shirley					
DNL 75 dB and above	519	164	0	-164	-100%
DNL 70 dB and above	1,266	697	417	-280	-40%
DNL 65 dB and above	2,195	1,542	1,305	-237	-15%
DNL 60 dB and above	4,080	2,527	2,291	-236	-9%
Winthrop - Court Road					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	731	388	222	-166	-43%
DNL 65 dB and above	3,387	1,661	1,128	-533	-32%
DNL 60 dB and above	3,387	3,387	3,387	0	0%
Rest of Winthrop					
DNL 75 dB and above	0	0	0	0	0%
DNL 70 dB and above	44	0	0	0	0%
DNL 65 dB and above	3,031	1,115	451	-664	-60%
DNL 60 dB and above	7,653	5,179	4,144	-1,035	-20%
Total Winthrop					
DNL 75 dB and above	519	164	0	-164	-100%
DNL 70 dB and above	2,041	1,085	639	-446	-41%
DNL 65 dB and above	8,613	4,318	2,884	-1,434	-33%
DNL 60 dB and above	15,120	11,093	9,822	-1,271	-11%
Total Population Summary					
DNL 75 dB and above	577	222	58	-164	-74%
DNL 70 dB and above	2,679	3,700	2,267	-1,433	-39%
DNL 65 dB and above	23,296	11,493	11,857	364	3%
DNL 60 dB and above	93,860	36,857	50,048	13,191	36%

1 "Boston (Other)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End.
2 Except for 1998, all estimates are based on runway use chosen to most nearly achieve PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

Table 6.2-24
Comparison of INM-Computed Day-Night Sound Levels at Specific Points for 1998 and for the No Action and Preferred Alternatives – 37.5M High RJ Fleet

Noise Monitor	Location	1998 Existing Fleet	No Action (Alternative 4)	Preferred Alternative (Alternative 1A)	Change in dB No Action to Preferred
1	Andrews Street, South End	58.7	51.5	56.0	4.5
2	B & Bolton, South Boston	66.7	58.1	63.0	4.9
3	South Boston Yacht Club, South Boston	64.5	68.4	66.6	-1.8
4	Bayview & Grandview, Winthrop	79.4	75.9	73.9	-2.0
5	Harborview & Faun Bar, Winthrop	71.4	68.1	66.6	-1.5
6	Somerset & Johnson, Winthrop	68.2	64.7	64.7	0.0
7	Loring Road Near Court Road, Winthrop	76.1	75.9	73.5	-2.4
8	Morton & Amelia, Winthrop	67.5	66.0	64.7	-1.3
9	Bayswater & Nancia, East Boston	72.4	73.0	71.5	-1.5
10	Bayswater & Shawsheen, East Boston	66.3	65.6	64.3	-1.3
11	Don Orione, East Boston	62.2	60.4	59.3	-1.1
12	East Boston Yacht Club, East Boston	74.0	70.2	68.2	-2.0
13	East Boston High School, East Boston	64.2	60.4	64.9	4.5
A	Sumner near Lamson, East Boston	N/A	58.8	59.1	0.3
14	Jeffries Point Yacht Club, East Boston	64.9	60.8	60.9	0.1
15	Admiral's Hill, Chelsea	61.1	58.4	63.0	4.6
16	Bradstreet Avenue & Sales, Revere	69.0	72.8	71.1	-1.7
17	Carey Circle, Revere	58.3	62.4	60.7	-1.7
23	Myrtlebank/Hilltop, Dorchester	52.0	56.5	54.9	-1.6
24	Cunningham Park, Milton	51.9	54.6	53.2	-1.4
25	Squaw Rock Park, Quincy	51.2	49.9	48.4	-1.5
26	Hull High School, Hull	58.1	53.3	55.7	2.4
E	Farragut @ 2nd, South Boston	N/A	68.1	66.3	-1.8
Average change from 70 dB and above Between Alts 4 and 1A (5 Sites)					**-1.9**
Average change from 65 dB and above Between Alts 4 and 1A (10 Sites)					**-1.7**
Average change from all values Between Alts 4 and 1A (23 Sites)					**0.1**

Balanced against these improvements are significant increases in exposure at Site 2 in South Boston off of Runway 27 and Sites 13 and 15 in East Boston and Chelsea off of Runway 33L where noise is expected to increase 4.5 to 4.9 dB, although none of these specific sites is projected to experience DNL values in excess of 65 dB with the Preferred Alternative under this fleet assumption. A smaller increase of 2.4 dB is also expected at Hull High School, but at a DNL value of 55.7 dB, this is well below any criteria for significant impact.

Table 6.2-25 presents INM calculations of nighttime equivalent sound levels (LeqN)at specific points, reflecting the differences in exposure occurring during the hours from 10:00 PM to 7:00 AM. Appendix E presents similar calculations for the other alternatives under the 37.5M High RJ Fleet.

Nighttime equivalent sound levels show generally similar patterns of change between the No Action and Preferred Alternatives. The highest nighttime exposure levels of 65 dB and above occur at Sites 4 and 7 in Winthrop, Site 9 on Bayswater Street in East Boston, and Site 16 in Revere. Each of these locations is expected to experience decreases in nighttime noise of 1.3 to 2.1 dB if the Preferred Alternative is implemented. At three other Sites (3, 5, and 12) in South Boston, Winthrop and East Boston where nighttime exposure is lower but still above 60 dB, decreases in nighttime exposure of 1.7 to 2.3 dB are expected under the Preferred Alternative.

Balanced against these reductions in nighttime noise are increases in LeqN ranging from 3.6 to 4.3 dB at sites 1, 2, 13, 15, and E, though none of these locations is expected to have nighttime noise increase above 57.9 dB with the Preferred Alternative, and two of the sites (1 and E in the South End and on Farragut Street in South Boston) are expected to have increases to less than 50 dB.

Finally, Table 6.2-26 compares INM-computed maximum sound levels for the No Action and Preferred Alternatives at the specific points. For these and all other Alternatives, there are no expected differences between cases because the same aircraft operation is responsible for the highest level and neither the aircraft type nor the location of the operation changes from one Alternative to the next.

The one remaining supplemental noise metric, Time Above Threshold sound levels for both 24-hour and for nighttime hours, is reported in Appendix E for all 37.5M High RJ Alternatives.

In conclusion, the major findings regarding the study Alternatives and their relative impacts on community noise levels are supported by the evaluation of the High RJ Fleet and are generally consistent across all fleets examined in this study. The improved noise levels achieved through the added flexibility in use of runways afforded by the new unidirectional Runway 14/32 will reduce noise exposure in the most highly impacted areas still remaining around Logan Airport. Areas of Winthrop, East Boston (north of the airport), and Revere are all currently exposed or are expected to be exposed to DNL levels above 70 dB, with areas of Winthrop and East Boston experiencing levels above 75 dB even now. These can be reduced on the order of several decibels by the redistribution of traffic onto other runways in accordance with PRAS goals, though the redistribution will cause increased noise between DNL values of 65 and 70 dB in East Boston and Chelsea and cause increased noise from 60 to 65 dB in parts of South Boston.

Table 6.2-25
Comparisons of INM-Computed Nighttime Equivalent Sound Levels at Specific Points for the No Action and Preferred Alternatives – 37.5M High RJ Fleet

Noise Monitor	Location	No Action (Alternative 4)	Preferred Alternative (Alternative 1A)	Change (in dB) Preferred – No Action
1	Andrews Street, South End	44.6	48.2	3.6
2	B & Bolton, South Boston	51.4	55.4	4.0
3	South Boston Yacht Club, South Boston	60.9	58.6	-2.3
4	Bayview & Grandview, Winthrop	68.4	66.5	-1.9
5	Harborview & Faun Bar, Winthrop	60.8	59.1	-1.7
6	Somerset & Johnson, Winthrop	57.7	57.5	-0.2
7	Loring Road Near Court Road, Winthrop	69.1	67.0	-2.1
8	Morton & Amelia, Winthrop	59.1	58.0	-1.1
9	Bayswater & Nancia, East Boston	66.2	64.9	-1.3
10	Bayswater & Shawsheen, East Boston	58.6	57.5	-1.1
11	Don Orione, East Boston	53.4	52.4	-1.0
12	East Boston Yacht Club, East Boston	63.3	61.6	-1.7
13	East Boston High School, East Boston	54.0	57.9	3.9
A	Sumner near Lamson, East Boston	51.9	52.0	0.1
14	Jeffries Point Yacht Club, East Boston	53.8	53.6	-0.2
15	Admiral's Hill, Chelsea	52.1	56.2	4.1
16	Bradstreet Avenue & Sales, Revere	66.1	64.8	-1.3
17	Carey Circle, Revere	55.7	54.3	-1.4
23	Myrtlebank/Hilltop, Dorchester	49.1	47.2	-1.9
24	Cunningham Park, Milton	47.3	45.6	-1.7
25	Squaw Rock Park, Quincy	42.7	41.2	-1.5
26	Hull High School, Hull	46.7	48.5	1.8
E	Farragut @ 2nd, South Boston	43.6	47.9	4.3

Table 6.2-26
Comparison of Maximum Sound Levels (Lmax) for the
No Action and Preferred Alternatives – 37.5M High RJ Fleet

oise onitor	Location	No Action (Alternative 4)	Preferred Alternative (Alternative 1A)
1	Andrews Street, South End	84.5	84.5
2	B & Bolton, South Boston	93.0	93.0
3	South Boston Yacht Club, South Boston	91.8	91.8
4	Bayview & Grandview, Winthrop	101.4	101.4
5	Harborview & Faun Bar, Winthrop	93.3	93.3
6	Somerset & Johnson, Winthrop	81.9	81.9
7	Loring Road near Court Road, Winthrop	97.1	97.1
8	Morton & Amelia, Winthrop	97.3	97.3
9	Bayswater & Nancia, E. Boston	103.9	103.9
10	Bayswater & Shawsheen, East Boston	90.1	90.1
11	Don Orione, East Boston	83.8	83.8
12	East Boston Yacht Club, East Boston	85.8	85.8
13	East Boston High School, East Boston	97.0	97.0
A	Sumner near Lamson, East Boston	81.2	81.2
14	Jeffries Point Yacht Club, East Boston	82.3	82.3
15	Admiral's Hill, Chelsea	96.4	96.4
16	Bradstreet Avenue & Sales, Revere	97.7	97.7
17	Carey Circle, Revere	87.1	87.1
23	Myrtlebank/Hilltop, Dorchester	79.7	79.7
24	Cunningham Park, Milton	75.8	75.8
25	Squaw Rock Park, Quincy	73.5	73.5
26	Hull High School, Hull	81.0	81.0
E	Farragut @ 2nd, South Boston	91.9	91.9

6.3 Land Use and Social Impacts

Under the Federal Aviation Administration's (FAA) National Environmental Policy Act (NEPA) directives, land use compatibility is typically associated with the extent of the airport's noise impacts. The noise analysis described in Section 6.2 has determined that the Preferred Alternative actually reduces the number of people in the most highly exposed areas around the Airport (DNL 75 and above as well as DNL 70 and above) compared to the No Action Alternative, and it causes only a minimal increase in the numbers (2 to 4 percent) of people exposed to DNL values above 65 dB. In addition, with better achievement of PRAS goals, the analysis indicates that the Preferred Alternative reduces the numbers of people in all high exposure increments compared to 1998 actual conditions. Sound insulation will be installed to mitigate for noise impacts (an increased number of people within the 65 dB DNL noise contour) resulting from the Preferred Alternative.

All proposed Airside Project Alternatives involve operational and/or construction improvements to reduce delay at Boston-Logan Airport. The noise analysis indicates that the Preferred Alternative will allow Logan Airport to more closely meet the established PRAS goals. The runway and taxiway components for the Preferred Alternative would be constructed on the existing airfield. The only relocation required for construction of Runway 14/32 is for the tenants of Building 60 in the South Cargo Area of the airport. The tenant of Building 61, the U.S. Postal Service, plans to vacate the building independently of the Airside Project. (See Section 6.3.4.1 for more detail.) The project is restricted to activities and purposes compatible with normal airport operations. As described in more detail below, it is compatible with existing land use plans and will not hamper redevelopment efforts in surrounding communities.

Based on the land use compatibility criteria outlined in FAA NEPA regulations, the Airside Project Alternatives with mitigation will have no impact on land uses adjacent to or in the immediate vicinity of the airport.

6.3.1 Consistency with Local Land Use Plans

This section discusses land use compatibility with respect to zoning of adjacent areas in East Boston, and presents a discussion of the South Boston waterfront area in response to the May 7, 1999 EOEA Certificate and applicable federal requirements.

6.3.1.1 East Boston

As a state entity, Massport is not subject to local zoning regulations in the performance of its essential governmental functions. All the Airside Project alternatives are nonetheless consistent with the proposed East Boston Neighborhood District Zoning Article (Article 53), which includes establishment of the Logan International Airport Subdistrict (LIA). The airport site is located within the LIA which has a stated purpose "to accommodate those uses necessary to the operation of an international airport while ensuring that land uses and development associated with operations of the airport are confined to the airport boundary and that such uses do not impose adverse impacts in other areas of the East Boston Neighborhood Plan, developed with the extensive

participation of the East Boston Planning and Zoning Advisory Committee, civic associations, business groups, and residents."

6.3.1.2 South Boston

The section of South Boston along the Fort Point Channel and Inner Harbor is known as the South Boston Waterfront District, and has historically been used for industrial use. However, new developments such as the Federal Courthouse, Seaport Hotel and future Boston Convention Center suggest a future mix of land uses in the district. The City of Boston has developed *The Seaport Public Realm Plan*[4] (the Plan) for the South Boston Waterfront District that contains land use and design guidelines on future development of this area. The proposed distribution of land uses emphasizes the creation of mixed use neighborhoods and public open space within the Fort Point Channel and Piers Districts, with the Reserved Channel District to the east of D Street remaining industrial. The Plan has taken into account FAA's requirements for safe runway operation in the recommendation of allowable building height in the Seaport District.

Under the Preferred Alternative, the arrival and departure paths for aircraft using Runway 14/32 will be over water in Boston Harbor. (See Figures 6.2-1 and 6.2-2 in Section 6.2) Runway 14/32 is being designed, and would be used, for unidirectional use only. All arrivals would be over Boston Harbor to the 32 approach end and all departures would be from the 14 end, heading out over the harbor. Therefore there will be no conflict with future development along the South Boston waterfront as a result of the construction of unidirectional Runway 14/32, or any of the other physical improvements under the Preferred Alternative.

6.3.2 Historic Resources Context

6.3.2.1 Section 4(f) Resources (Historic)

An assessment of impacts to cultural resources was conducted for the Preferred Alternative. There are no parklands, historic properties or sites, or other Section 4(f) resources on the airfield in the area of the proposed runway and taxiway improvements. Therefore, there are no significant adverse impacts Section 4(f) resources from the implementation of the Preferred Alternative. In addition, the Preferred Alternative will not substantially impair the historic integrity of any historic site or district. The Massachusetts Historical Commission (MHC) has concurred that the Preferred Alternative will have no adverse effect on significant historic properties (MHC letter to FAA, December 21, 1999, Appendix H). Therefore, the FAA has concluded that Section 4(f) is not applicable. See Section 6.3.3 for an additional discussion of parklands.

4 Boston Redevelopment Authority, *The Seaport Public Realm Plan*, dated February 1999.

6.3.2.2 Section 106 Historic Resources

An assessment of impacts to cultural resources was conducted for the Preferred Alternative. There are no historic properties on the airfield in the area of the proposed runway and taxiway improvements. Therefore, there are no direct impacts to historic properties from the implementation of the Preferred Alternative.

The analysis of potential indirect impacts associated with the Preferred Alternative was performed by comparing the 65 dB DNL contour for the No Action Alternative and the Preferred Alternative for the 29M Low Fleet scenario. Historic properties were identified in those areas where the 65 dB DNL contour for the Preferred Alternative extended beyond the 65 dB DNL contour for the No Action Alternative.

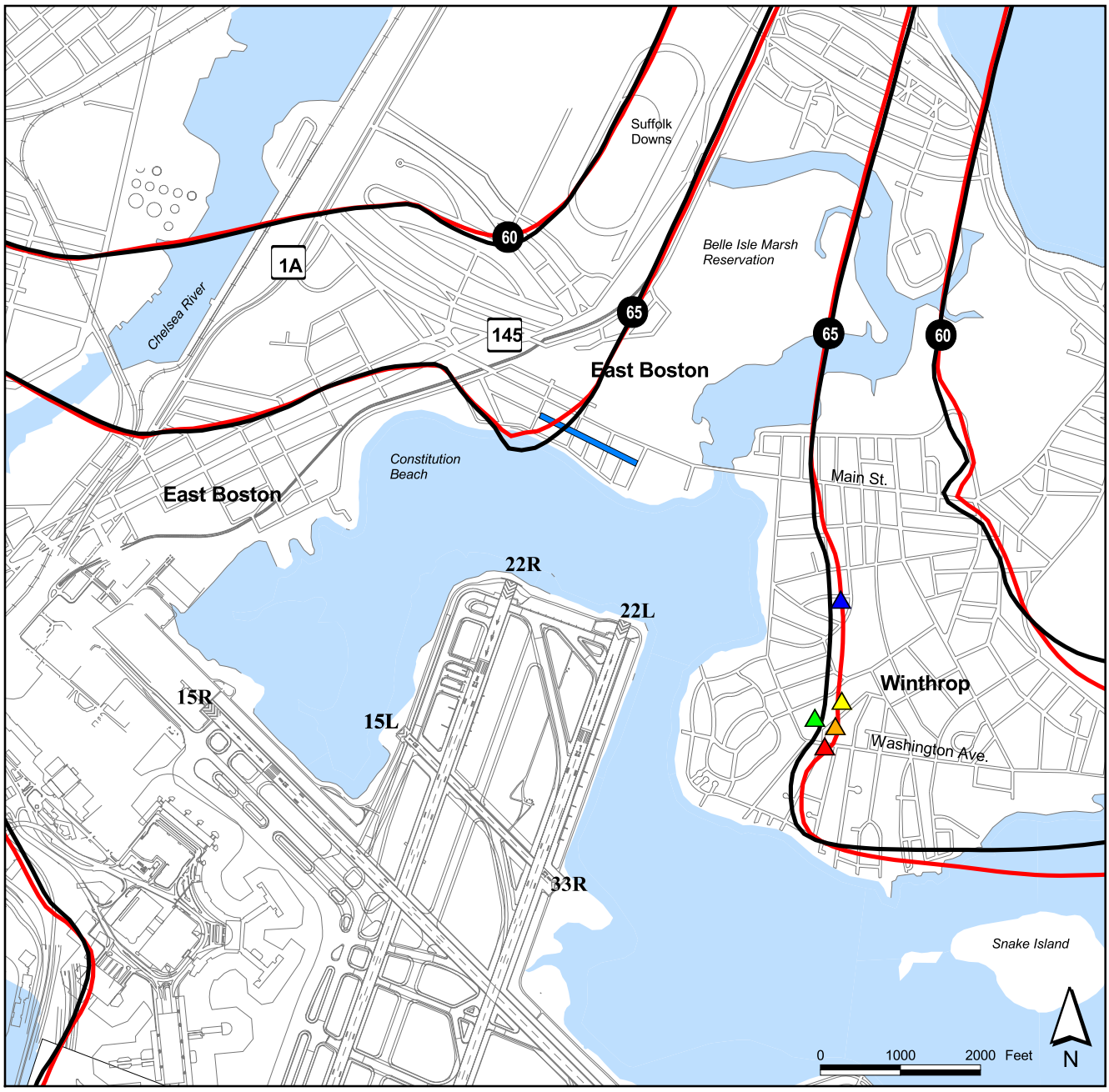
The FAA evaluated airport noise and land use compatibility in accordance with land use guidelines expressed in Federal Aviation Regulation (FAR) Part 150, Airport Noise Compatibility Planning (14 CFR 150). FAR Part 150 does not include guidelines specific to historic sites; however, the identified historic properties are comprised of commercial, manufacturing, and residential land uses, for which guidance is provided. In addition, general guidance within FAR Part 150 indicates that noise levels typically do not affect the relevant characteristics of urban historic districts (for example, their architectural features and recognition of their place in history). Moreover, when dealing with an existing airport (such as Logan Airport) within an urban setting (such as metropolitan Boston), any change in operating conditions aimed at more equitably distributing noise impacts (here, in accordance with the PRAS goals) may result in some increase in noise at specific historic sites while at the same time decreasing noise at other historic sites. As noted above, such impacts will not change the relevant characteristics (e.g., architectural features, historical significance) of such sites.

6.3.2.3 Indirect Impacts on Historic Properties

A description of historic properties identified within the net increased noise contour associated with the Preferred Alternative and a summary of potential impacts and mitigation are provided below (see Figures 6.3-1 to 6.3-3).

Saint Andrew Road, Boston/East Boston

St. Andrew Road is a three-block area (#54-154 St. Andrew Road) between St. Edward Road and Annavoy Street (see Figure 6.3-1), which is recognized for its high level of historic and architectural intactness and unity of scale. The neighborhood exhibits a street plan and sense of proportion, which are geographically and developmentally distinct when compared to the rest of East Boston. The growth of this neighborhood began in 1911, when the East Boston Company began to develop and sell off the lots, and continued to the mid-1930s. St. Andrew Road, surveyed in 1990, was recommended for inclusion in a proposed Bayswater National Register District.



Legend

No Action Alternative 29M Low (60 and 65 DNL)

Preferred Alternative 29M Low (60 and 65 DNL)

Cultural Resource Area

St. Andrews Road

Cultural Resources

240 Somerset Avenue

45 Enfield Road

75 & 77 Somerset Avenue

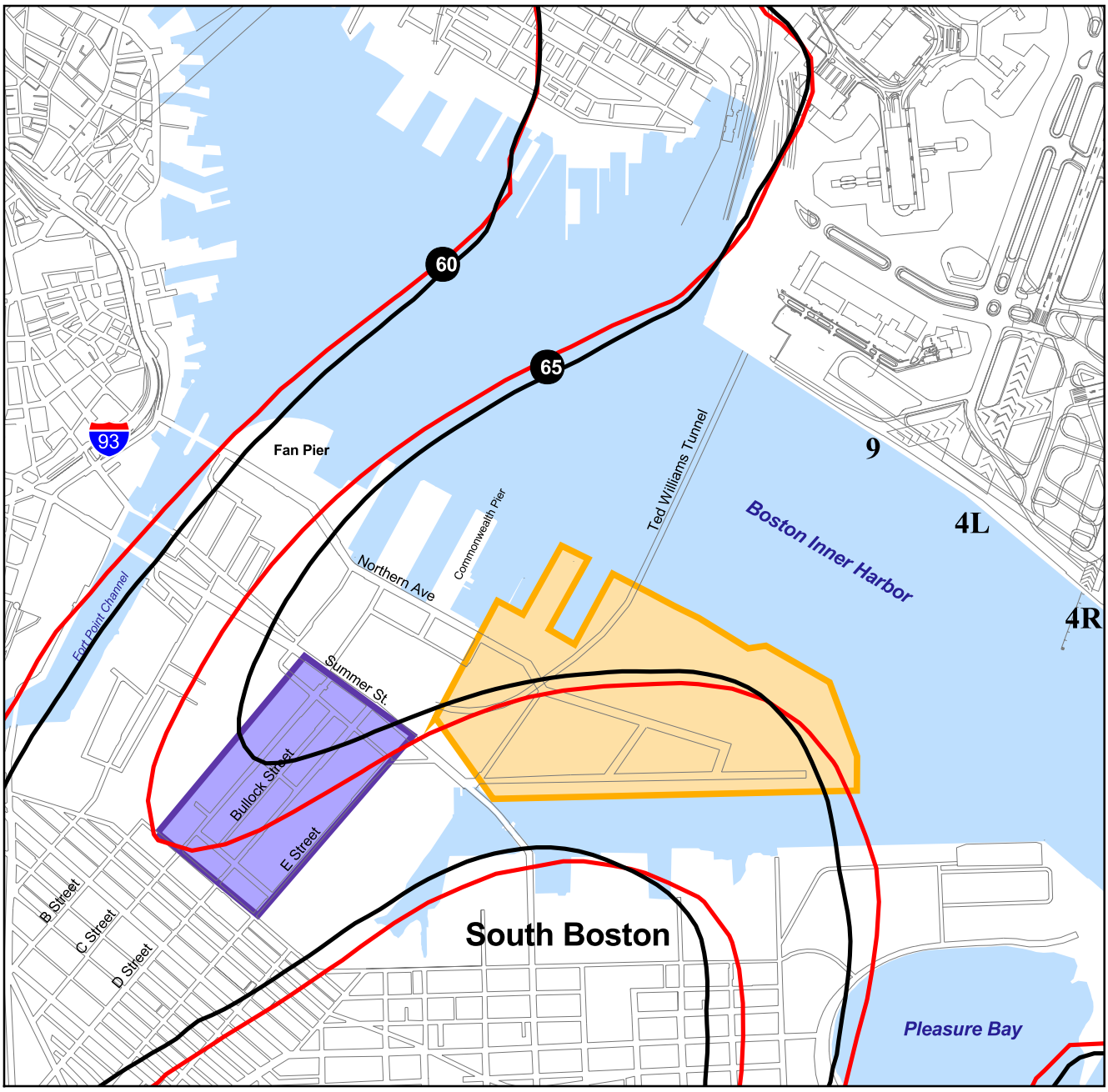
88 Somerset Avenue

94 Somerset Avenue

Source: Harris Miller Miller & Hanson

Figure 6.3-1

Cultural Resources - East Boston, Winthrop



Legend

No Action Alternative 29M Low (60 and 65 DNL)

Preferred Alternative 29M Low (60 and 65 DNL)

Cultural Resources - South Boston

Boston Army Supply Base

C Street Area

N

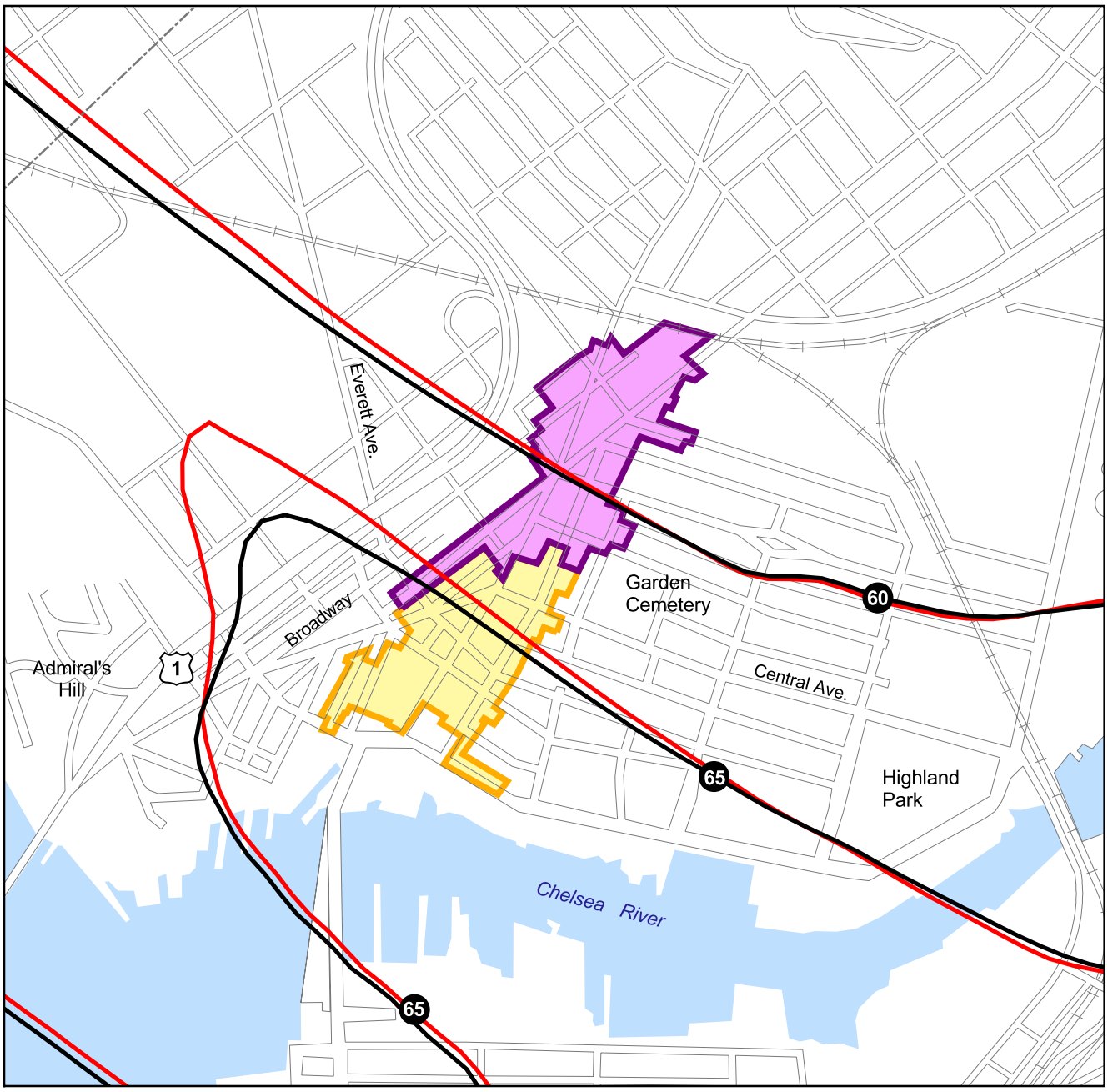
0 900 1800 Feet

Source: Harris Miller Miller & Hanson

massport

Figure 6.3-2

Cultural Resources - South Boston



Legend

No Action Alternative 29M Low (60 and 65 DNL)

Preferred Alternative 29M Low (60 and 65 DNL)

Cultural Resources - Chelsea

Bellingham Square Historic District

Downtown Chelsea Residential District

N

0 500 1000 Feet

Source: Harris Miller Miller & Hanson

Figure 6.3-3

Cultural Resources - Chelsea

The majority of this residential district is currently within the 65 dB DNL contour associated with current Logan Airport operating conditions. A small portion of St. Andrew Road located between St. Edward Road and Shawsheen Road would be affected by the net increase in the 65 dB DNL contour associated with the Preferred Alternative.

Boston Army Supply, Boston/South Boston

The Boston Army Supply Base area is roughly 43 acres and encompasses 29 individual buildings, and one major structure, Drydock #3 (see Figure 6.3-2). The former Army base is built on land created as part of a gradual filling process in South Boston, which began in 1836 and continued to the mid-twentieth century. Construction of the base began in 1918 as part of a massive federal building campaign at East Coast ports to handle supplies for World War I. The facility underwent three subsequent building phases, including one associated with World War II. The base is significant as a surviving, planned, military-industrial complex which was a key factor in the early-twentieth-century attempts to revitalize the Port of Boston, and notable for the immense scale of its early reinforced-concrete structures. The complex was surveyed in 1997 and recommended for inclusion in the National Register of Historic Places. This site is now being redeveloped as the Boston Marine Industrial Park.

The net increase in the 65 dB DNL contour associated with the Preferred Alternative would affect a narrow strip of the Boston Army Supply Base area, comprising approximately six commercial and industrial buildings.

C Street Area, Boston/South Boston

The C Street Area in South Boston is a roughly rectangular district, characterized by well-preserved reinforced concrete and masonry buildings, averaging in height from three to nine stories (see Figure 6.3-2). The area contains a cluster of early-twentieth-century industrial warehouses of varying embellishment associated with the height of Boston's wool trade. The area was surveyed in 1997 and four individual buildings were noted to meet National Register eligibility criteria, specifically 401, 415, and 425 Summer Street and 80 Fargo Street. This area is now largely being redeveloped as the Boston Convention and Exhibition Center.

The C Street Area would be affected by the net increase in the 65 dB DNL contour associated with the Preferred Alternative; however, the four commercial buildings meeting National Register criteria eligibility within the area do not fall within the increased noise contour.

Bellingham Square Historic District, Chelsea

The public, commercial, and residential buildings of the Bellingham Square Historic District are typical of an early twentieth-century commercial and civic urban center. Developed within a short time period following the Great Fire of 1908, the area, shown on Figure 6.3-3, reflects a strong degree of architectural homogeneity, possessing integrity of design through similar scale, massing, and setting. The district is also historically significant for its use of city planning concepts, which controlled construction following the 1908 fire. The district was listed in the National Register of Historic Places in 1985.

A small section of this district to the east of Congress Avenue would be affected by the net increase in the 65 dB DNL contour associated with the Preferred Alternative.

Downtown Chelsea Residential Historic District, Chelsea

The Downtown Chelsea Residential Historic District, listed on the National Register in 1988, is a visually cohesive group of buildings located in a primarily residential section of the City's downtown area, as shown on Figure 6.3-3. The residential district historically complemented commercial development in Chelsea Square to the west, industrial activity along the riverfront to the south, and the City's institutional focus at Bellingham Square to the northeast. Many of the district's residences were built on speculation, initially to meet the needs of a rapidly expanding population, and later to meet the housing needs of a City devastated by the Great Fire of 1908.
A narrow strip of this district in the area of Congress Avenue would be affected by the net increase in the 65 dB DNL contour associated with the Preferred Alternative.

Winthrop: 45 Enfield Road, 240 Pleasant Street, 73 & 77 Somerset Avenue, 88 Somerset Avenue, and 94 Somerset Avenue

Five properties in Winthrop that are included in the Inventory of Historic and Archaeological Assets of the Commonwealth fall within the 65 dB DNL noise contour, as shown on Figure 6.3-1. Two of the properties have been recommended for inclusion in the National Register: 240 Pleasant Street, built in the late 1860s, is architecturally significant as the most stylish and substantial towered villa in town; and 94 Somerset Avenue is historically significant as the most intact of all the houses associated with Winthrop's talented Whorf family of painters, actors, producers, and commercial artists.

A small area within Winthrop, encompassing these five residential properties included in the Inventory of Historic and Archaeological Assets of the Commonwealth, would be affected by the net increase in the 65 dB DNL contour associated with the Preferred Alternative.

Summary of Impacts and Mitigation for Historic Properties

FAR Part 150 provides that all land uses are considered to be compatible with noise levels less than 65 dB DNL and that commercial and manufacturing land uses are compatible land uses within the 65 dB to 70 dB DNL (FAR Part 150, Appendix A, Table 1). Commercial and industrial portions of historic properties affected by the Preferred Alternative remain below the 70 DNL noise compatibility guideline. Therefore, the existing commercial and industrial uses within those historic areas are compatible land uses.

FAR Part 150 further provides that residential land uses are not compatible within the 65 dB DNL, and if already in areas of 65 dB DNL or higher, that increases of 1.5 dB DNL or less are not significant. Moreover, FAA does allow for noise impacts to be mitigated through sound insulation of affected residential structures.

The FAA and Massport propose to mitigate noise impacts by sound insulating all affected residences, historic and non-historic, that fall within the largest 65 dB DNL contour for the Preferred Alternative. The structures to be included within the noise mitigation program would be subject to a detailed block-by-block analysis during project implementation. All sound insulation of historic structures would be undertaken in compliance with applicable federal and state guidelines to ensure protection of the resources. Preservation measures to maintain the existing form, integrity, and materials of the historic properties would be accomplished in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) (Secretary's Standards). The FAA and Massport would consult with the MHC as it has done previously with sound insulation of historic structures impacted by other Logan Airport projects (i.e., South Boston).

The FAA has determined that the sound insulation mitigation proposed under the Preferred Alternative has the potential to cause effects on historic properties (36 CFR 800.3), but such effect would not be adverse on historic properties if sound insulation is undertaken in accordance with the Secretary's Standards. As such, the FAA has determined that a sound insulation program implemented under the Preferred Alternative would have no adverse effect (36 CFR 800.5 (b)) on significant historic properties. The MHC has concurred with the no adverse effect finding (see Appendix H for a copy of the MHC letter to FAA, December 21, 1999).

In addition, since the noise effects of the Preferred Alternative will be mitigated, the normal activity of the Section 4(f) resources will not be affected by the proposed action. The proposed improvements at Logan Airport will neither incorporate land from the Section 4(f) resource nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge or historic site. Therefore, as the Preferred Alternative does not substantially impair a historic site or district, the FAA has determined that Section 4(f) is not applicable.

FAA has also determined that there are no feasible or prudent Alternatives to the Preferred Alternative that would achieve the delay reduction, safety, transportation, noise distribution and other objectives of the Preferred Alternative. Therefore, even if the noise levels associated with the Preferred Alternative were determined to interfere with the normal activity associated with the two identified historic districts (which they do not), the FAA concludes that the sound insulation proposed for those structures includes all possible planning to minimize harm resulting from that increase in noise.

6.3.3 Other Section 4(f) Resources

In response to the May 7, 1999 EOEA Certificate, an assessment of impacts to parklands was conducted for the Preferred Alternative. There are no parklands, historic properties or sites, or other Section 4(f) resources on the airfield in the area of the proposed runway and taxiway improvements. Therefore, there are no direct impacts to Section 4(f) resources from the implementation of the Preferred Alternative. In addition, the Preferred Alternative will not use any portion of a park, recreation area, or other Section 4(f) resources.

The analysis of potential noise indirect impacts associated with the Preferred Alternative was performed by comparing the 65 dB DNL contour for the No Action Alternative and the Preferred Alternative for the 29M Low Fleet scenario. No parklands were identified in those areas where the 65 dB DNL contour for the Preferred Alternative extended beyond the 65 dB DNL contour for the No Action Alternative. As depicted in Figure 6.3-4, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contours associated with the Preferred Alternative. Therefore, the Preferred Alternative will have no impact on these parklands.

The noise contour map also depicts that the Boston Harbor Islands, while within the existing No Action Alternative's 65 dB DNL noise contours, will have no noise increase with the Preferred Alternative. In addition, the Boston Harbor Islands National Recreation Area is located under existing FAA approved flight tracks, many designed by FAA and Massport to minimize noise over residential areas associated with Logan Airport operations. For example, the use of Runway 15R for late night (midnight to 6:00 AM) takeoffs and Runway 33L for late night landings keeps aircraft flight tracks over Boston Harbor, making them the most desirable runways for noise abatement. According to the legislation that established the Boston Harbor Islands Recreational Area:

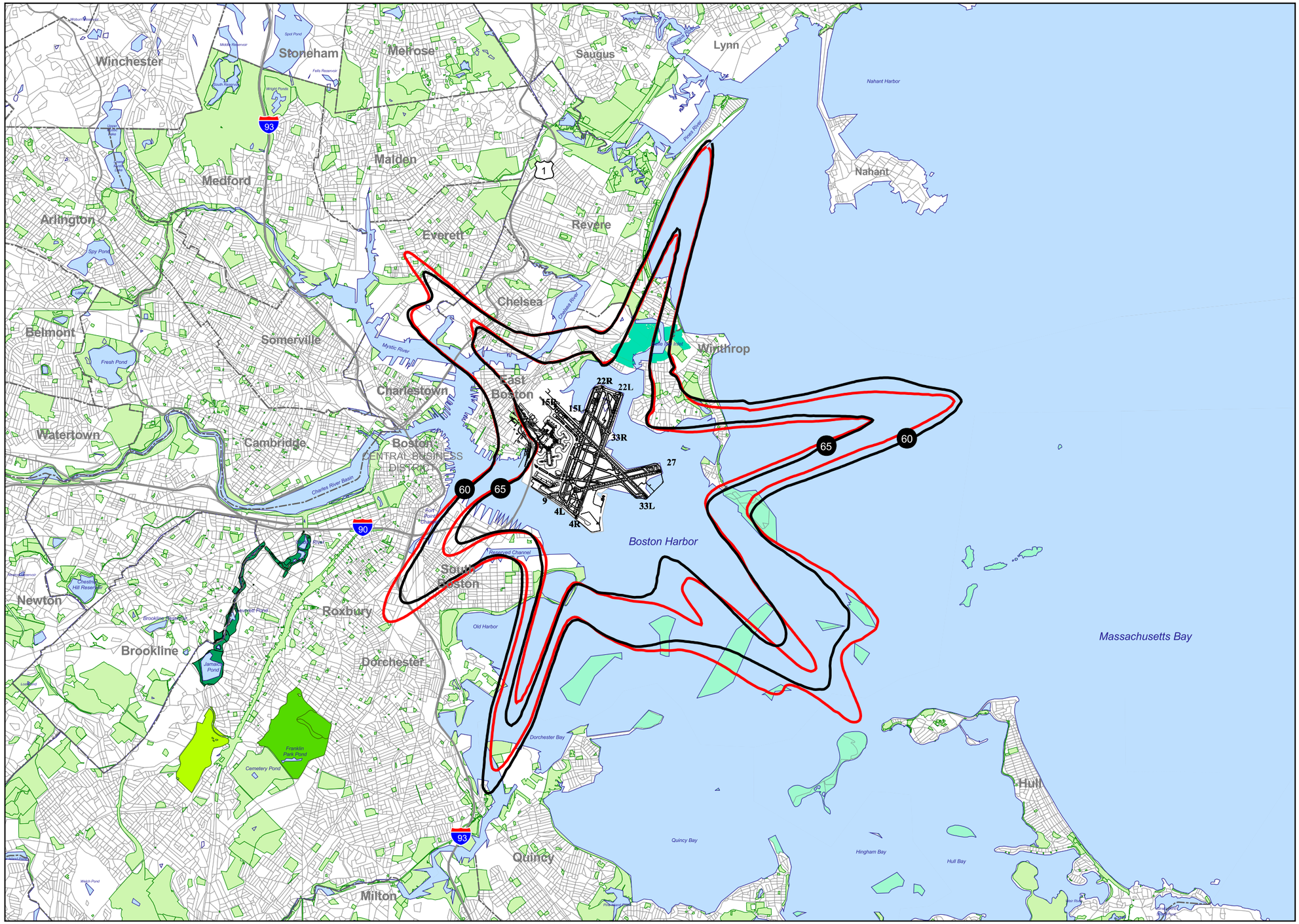
"the present and future maintenance, operation, improvement, and use of Boston-Logan International Airport and associated flight patterns from time to time in effect shall not be deemed to constitute the use of publicly owned land or a public park, recreation area, or other resource within meaning of section 303(c) of title 49, United States Code, and shall not be deemed to have a significant effect on natural, scenic, and recreation assets with the meaning of section 47101(h)(2) of title 49, United States Code."[5]

Therefore, Boston Harbor's National Recreation Area is considered to be a compatible land use.

The dispersion analysis conducted for the purposes of the air quality assessment (see Section 6.4 of this Chapter) indicates no violation of the National Ambient Air Quality Standards (NAAQS) at any of the 12 modeled receptors. Each of the receptors, or locations for which air pollutant concentrations are modeled, is closer to Logan Airport than Arnold Arboretum, Harbor Islands, or the series of parks in the Emerald Necklace.

The receptors at Union Park, C and Broadway, and Castle Island lie closest to these parks, and concentrations at these locations are lowest under the Preferred Alternative and highest under the No Action Alternative but always lower than the NAAQS. Because the receptors nearest the airport do not have modeled concentrations above the NAAQS, it can be concluded that the more distant park locations will also have concentrations that meet the standards and will not experience adverse air quality impacts.

5 Sec. 1029. Boston Harbor Island Recreation Area. Excerpted from P.L. 104-333, 110 Stat. 4093 the "Omnibus Public Lands Management Act of 1996."



Legend

No Action Alternative 29M Low
(60 and 65 DNL)

Preferred Alternative 29M Low
(60 and65 DNL)

Parklands
- Arnold Arboretum
- Belle Isle Marsh Reservation
- Boston Harbor Islands
- Franklin Park
- Olmsted Park / Emerald Necklace
- Open Space
- Census Block Boundaries

N

0 0.5 1 1.5 Miles

massport

Figure 6.3-4

Parklands and 29M Low - No Action and Preferred Alternatives

Source: Harris Miller Miller & Hanson

6.3.4 Social Impacts

This section discusses the social impacts of the Preferred Alternative on the surrounding communities in accordance with FAA environmental review criteria. The Environmental Justice Analysis is presented in Section 6.8. Implementation of any of the Airside Project alternatives would occur on the airport, and therefore there will be no division or disruption of established communities or orderly planned development as a result. The Alternatives do not require the relocation of any residence or alteration of surface transportation patterns. Construction of unidirectional Runway 14/32 under the Preferred Alternative requires the demolition of two buildings (60 and 61) in the South Cargo area of the airport. Relocation assistance will be provided to affected businesses as required under applicable law, and no appreciable change in employment is expected to result. The following section provides a more detailed discussion of impacts to the South Cargo Area.

6.3.4.1 South Cargo Area

FAA regulations define areas adjacent to runways that must be maintained free of obstructions. These areas are collectively known as protection zones. There are two distinct sources that dictate the development of design guidelines for unidirectional Runway 14/32. The first is the FAA Advisory Circular 150/5300-13, entitled Airport Design, and the second is Federal Aviation Regulation (FAR) Part 77 entitled Objects Affecting Navigable Airspace. The Runway 14/32 centerline profile is required by federal regulation to be the highest point within various defined safety and object free areas and FAR Part 77 surfaces. (See Section 3.2.2.1 for a more detailed discussion of FAA design surfaces.)

The design criteria for the Runway Object Free Area (ROFA), by nature of its large width, becomes the controlling factor for impacts to Logan Airport 's South Cargo and General Aviation Areas. The ROFA for Runway 14/32 (based on a C-III design aircraft category) is 800 feet wide, centered on the runway centerline and extending 1,000 feet beyond each of the runway ends. Within 400 feet on either side of the runway, the areas must be free of objects that protrude above the adjacent runway safety area edge elevation. Aircraft parking is also prohibited within these areas. A portion of Harborside Drive will need to be relocated outside the ROFA at the Runway 14 end for all layout options. There are no other areas in conflict with the ROFA elsewhere along the alignment of the proposed unidirectional Runway 14/32, since the remaining section of the runway would be built on the existing airfield.

The impact of providing a clear ROFA for Runway 14/32 includes the demolition of Buildings 60 and 61 in the South Cargo Area and the elimination of six cargo aircraft parking positions (SC1 through SC6) and approximately nine aircraft parking positions within the General Aviation (GA) Area. The aircraft parking spaces can be dispersed to existing areas on the airfield approved for aircraft parking. These could include designated parking areas at such locations as the North Cargo Area.

The South Cargo Area includes cargo uses and office related-functions. Construction of Runway 14/32 would require Massport to acquire Building 60 and relocate the tenants. This building contains approximately 74,000 square feet and is owned by MLR Management, which has a ground lease from Massport for the site. MLR leases space to Air France, Air General and Nippon Express.

Building 61 is owned by Massport and directly leased to the U.S. Postal Service on a short-term basis as a temporary facility. The U.S. Postal Service has indicated an interest in relocating from its existing space independent of the construction of Runway 14/32. Therefore, demolition of this building would not require a relocation of the tenants.

Relocation assistance for eligible tenants will be provided in accordance with applicable provisions of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act" of the 1970, as amended and Part 24 of 49 CFR, as well as MGL Chapter 79A and implementing regulations. Relocation assistance measures include relocation advisory services and payments for moving and relocation costs. Relocation resources would be available to all business relocatees without discrimination.

The majority of the tenants of Building 60 are involved in the business of consolidating and forwarding freight. This use is not dependent on cargo positions SC1-SC6 located on the adjacent apron. A review of warehouse/distribution facilities in the area indicates that there is some opportunity in the City of Chelsea Airport Overlay District for relocation of these tenants.[6] In addition, new cargo facilities such as the International Cargo Port in South Boston offer opportunities for relocation. The relocation of the tenants of Building 60 is not considered to be a significant social impact.

6 Personal communication, Jay Ash, then Executive Director of the Office of Planning and Development, City of Chelsea, January 16, 1999.

6.4 Air Quality/Odors

This section presents the results of the air quality assessment of the No Action Alternative and Preferred Alternative on future-year air quality conditions. Section 5.4 (Affected Environment - Air Quality / Odors) describes existing air quality conditions in the vicinity of Logan Airport and contains the 1993 Historic Modeled Condition and 1998 Actual Condition results.

6.4.1 Assessment Approach and Methodology

This analysis is based primarily on two air quality impact assessment methods: (1) emissions inventories; and (2) dispersion modeling. Essentially, the emissions inventory results are used to quantify the types and amounts of air emissions associated with Logan Airport, in the vicinity of the airport. The dispersion modeling results enable the evaluation of air quality impacts for individual neighborhoods. This approach is consistent with both FAA guidelines and MEPA requirements.

To the fullest extent possible, the methodology (including models, data sources, assumptions, etc.) used to conduct this assessment is consistent with the methods developed previously for the GEIR / ESPR and Annual Updates / EDRs. Any changes or departures in this analysis from the GEIR / ESPR protocol are discussed in this section, and are largely attributable to the availability of updated information or to other differences attributable to the Airside Project.

The essential elements and results of the emissions inventories and dispersion modeling are discussed separately below. For comparative purposes, results from both the Airside Project and the *1997 Annual Update* air quality analyses are presented. Additional information, data, and other supporting materials used and / or developed in connection with the assessment are contained in Appendix M of the Airside Project Draft EIS / EIR for the 29M Low, 29M High, 37.5M Low, 37.5M High and 45M High future Fleet scenarios. Additional information, data, and supporting materials for the 37.5M High RJ Fleet scenario are contained in Appendix F of this Supplemental DEIS / FEIR.

Consistent with the scope of the Airside Project Draft EIS / EIR, the Airside Project air quality analysis was conducted for the 29M Low Fleet and 37.5M High Fleet scenarios. The 1993 Historic Modeled Condition and the 1998 Actual Condition results are contained in Section 5.4 of this Supplemental DEIS / FEIR.

Because the FAA's Emissions Dispersion Modeling System (EDMS) has become the required model for air quality assessments of aircraft sources since the Airside Project air quality analysis was conducted, a comparison of the EDMS to the Logan Dispersion Modeling System (LDMS) is also presented in this section. For this demonstration, the emissions inventories and dispersion analyses for both models are compared using the Preferred Alternative under the 29M Low Fleet scenario.

6.4.1.1 Emissions Inventories

The emissions inventories represent compilations of air emissions generated by individual Logan Airport sources for each Airside Project Alternative, enplanement level and operational forecast. The emissions inventories also include aircraft ground service equipment, as well as on- and off-site motor vehicle traffic. The results are expressed in units of kilograms / day (kg / day) for each pollutant and emission source. In this way, comparisons between scenarios with the GEIR / ESPR and with SIP goals can be easily made.

The types of air pollutant emissions included in the inventory are CO, NOx, PM_{10}, and volatile organic compounds (VOCs). CO, NOx, and PM_{10} are EPA criteria air pollutants. Because O_3 emissions cannot be calculated directly, total VOCs are used as a surrogate, or "indicator," of O_3-forming pollutants. Similarly, VOCs from low power aircraft operational modes (i.e., taxi-in, taxi-out, and idle / delay) are used as indicators of odor.

For this assessment, as with other airports, the air pollutants SO_2 and lead were not included in the emissions inventories because airports (including Logan) are not identified as significant sources of these emissions.

NOx emissions occur principally in the form of NO when emitted from the fuel combustion process and then are partially oxidized to NO_2 over time and distance. Therefore, in accordance with DEP guidelines, a 25 percent NO-to-NO_2 conversion factor was used in this analysis.

In general, aircraft emissions are primarily a function of aircraft type, engine type, number of operations, and operational times-in-mode. Essentially, aircraft operations have the following six components: approach, landing, taxi-in, taxi-out, take-off, and climb-out. Following conventional air quality analysis methods, airborne emissions are modeled up to 3,000 feet. Aircraft emissions above this altitude do not have any discernable ground level effects near the airport. Ground-based delay periods are also included in the aircraft emissions analysis.

For the Airside Project analysis, the aircraft fleet mix, number of operations, runway use, terminal assignments, and airborne times-in-mode were developed by individual aircraft type. Similarly, ground-based times-in-mode (including taxi-in, taxi-out, taxiway queues, and end-of-runway delay periods) were developed using the Airport Machine model. Aircraft engine types and emission rates were obtained from the FAA. By comparison, the ground-based aircraft times-in-mode for the *1997 Annual Update* air quality analysis were obtained from the *Logan Airport 1993 Annual Update.*

For aircraft ground service equipment and vehicles, Logan-specific data concerning equipment type, service times, loading factors, emission rates and fuel type were obtained from Massport.[5]

Both on- and off-site motor vehicle traffic data were obtained from the *1994/1995 GEIR*. This includes traffic volumes, travel speeds, idle periods, and fleet mix for the on-airport, East Boston, and Regional Study Areas. For the GEIR, East Boston and regional traffic are segregated; however, the Annual Updates only report on airport study area traffic. The EPA MOBILE5b motor vehicle emission rates were used based on DEP recommended input factors.

Emission rates for the Logan Airport central heating/cooling plant were derived from Massport permitting documents[6] for this facility. Similarly, emission rates for the existing and new fuel storage and distribution systems were obtained from Massport documents.[7]

The various sources of data and information used to develop the emissions inventories are listed in Table 6.4-1.

For the Airside Project, both the emissions inventories and dispersion modeling were conducted using the Logan Dispersion Modeling System (LDMS). For the *1997 Annual Update*, only the emissions inventory of the LDMS is used (i.e., dispersion modeling was not conducted in the GEIR). This computer model was developed by Massport and has been reviewed and approved for use at Logan Airport by DEP and EPA Region I. This model is described below.

6.4.1.2 Dispersion Modeling

The LDMS has two components: (1) a module that calculates total emissions for all aircraft operations, GSE, motor vehicles, fuel storage and transfer facilities, and other miscellaneous sources; and (2) the U.S. EPA Industrial Source Complex (ISC) dispersion model that predicts ambient pollutant concentrations.

5 "Logan Airport Emission Factors." February 1992, prepared by KM Chng Environmental, Inc. for Massport.
6 Table 4 – Emission Rates and Stack Parameters for the Logan Cooling/Heating Plant for the Period after Retirement of the Existing Waukeshaw Generators - Tech Environmental, Inc., September 30, 1996.
7 *Final Environmental Impact Report*. "Jet Fuel Storage Facility: Boston-Logan Airport ." April 16, 1996, prepared by Earth Tech, Inc. for Massport.

Table 6.4-1
Air Emissions Inventories Data Sources

Aircraft		Ground Service Equipment		Motor Vehicles		Miscellaneous	
Source	**Parameter**	**Source**	**Parameter**	**Source**	**Parameter**	**Source**	**Parameter**
Airside EIS/EIR	Fleet Mix Operations, by hour and aircraft type Runway Use Terminal Assignments In-flight Times-in-Mode(1) Runway End of Taxiway Queue Delay(1) Ground-based Times-in-Mode	Massport	Equipment Type Service Times Fuel Type Load Factors Conversion Rates Emission Rates	GEIR/ESPR	On-Airport ■ Traffic ■ Parking Curbside ■ Fleet mix East Boston ■ Airport Traffic ■ Non-airport traffic Region ■ Airport Traffic ■ Non-airport traffic	Massport	Heating Plant Factors Fuel Storage Facility Factors Fuel Distribution System Factors
FAA	Engine Types, by aircraft Engine Emission Rates			DEP	MOBILE5b Input Factors Off-airport fleet mix PART5 Emission Factors	EPA	Stationary Source Emission Factors
				EPA	MOBILE5b Emission Factors PART5 Emission Factors		

1 These data used for the *1997 Annual Update* were obtained from the *1992 Final GEIR* (July 1993).

The LDMS is composed of approximately 150 area, volume, and point sources representing the following air emission source groups at Logan:

- Aircraft Operations on:
  - Gate Aprons
  - Taxiways
  - Heads of Runways
  - Runways
  - Airborne to 3,000 feet

- Ground Service Vehicles and Equipment

- Ground Transportation on:
  - Logan Airport Loop Roads (including terminal curb-side idling and parking garage movements)
  - Route 1A (from the tunnels to Neptune Road)
  - Ted Williams Tunnel (TWT) Toll Booths (vehicle idling)
  - I-90 (from the TWT to Route 1A)
  - TWT Vent Building

- Logan Airport Central Heating/Cooling Plant
- Fuel Storage/Transfer Facilities

The locations of these individual sources (including proposed Runway 14/32, the Centerfield Taxiway and other improvements comprising the Preferred Alternative), as well as the 12 community receptors (described below), were obtained from scaled drawings of Logan Airport and its environs.

For the dispersion modeling, the emission rates from each source were varied by hour of the day, based on existing and forecasted activity levels at Logan Airport over a 24-hour period. In addition, one full year of hourly meteorological data, recorded at Logan Airport in 1993, was used to model the simultaneous occurrence of site-specific wind conditions and emission rates.

Ambient levels of CO, NO_2, and PM_{10} were predicted over time periods consistent with the NAAQS and other appropriate guidelines. As discussed above, because there are no standards for ambient VOC levels, surrogate benchmarks were used. As an O_3 indicator, total VOC emissions from all Logan Airport sources were modeled over 24 hours. For odor, low power aircraft emissions of VOCs were modeled over one-hour intervals. In this way, comparisons between scenarios, Alternatives, and regulatory criteria can be easily made. These time periods and criteria are summarized in Table 6.4-2 for all four pollutants.

Table 6.4-2
Dispersion Modeling Averaging Times and Background Levels

Pollutant	Averaging Time	Standards (μg/m3)	Background Concentration (μg/m3)
CO	1-Hour	40,000	4,446
	8-Hour	10,000	2,502-2,262
HC (or VOCs)	1-Hour (odor indicators)	N/A	N/A
	24-Hour (ozone indicators)	N/A	N/A
NO_2	1-Hour	320	163-173
	Annual	100	53-58
PM_{10}	24-Hour	150	45-48
	Annual	50	23

N/A not applicable

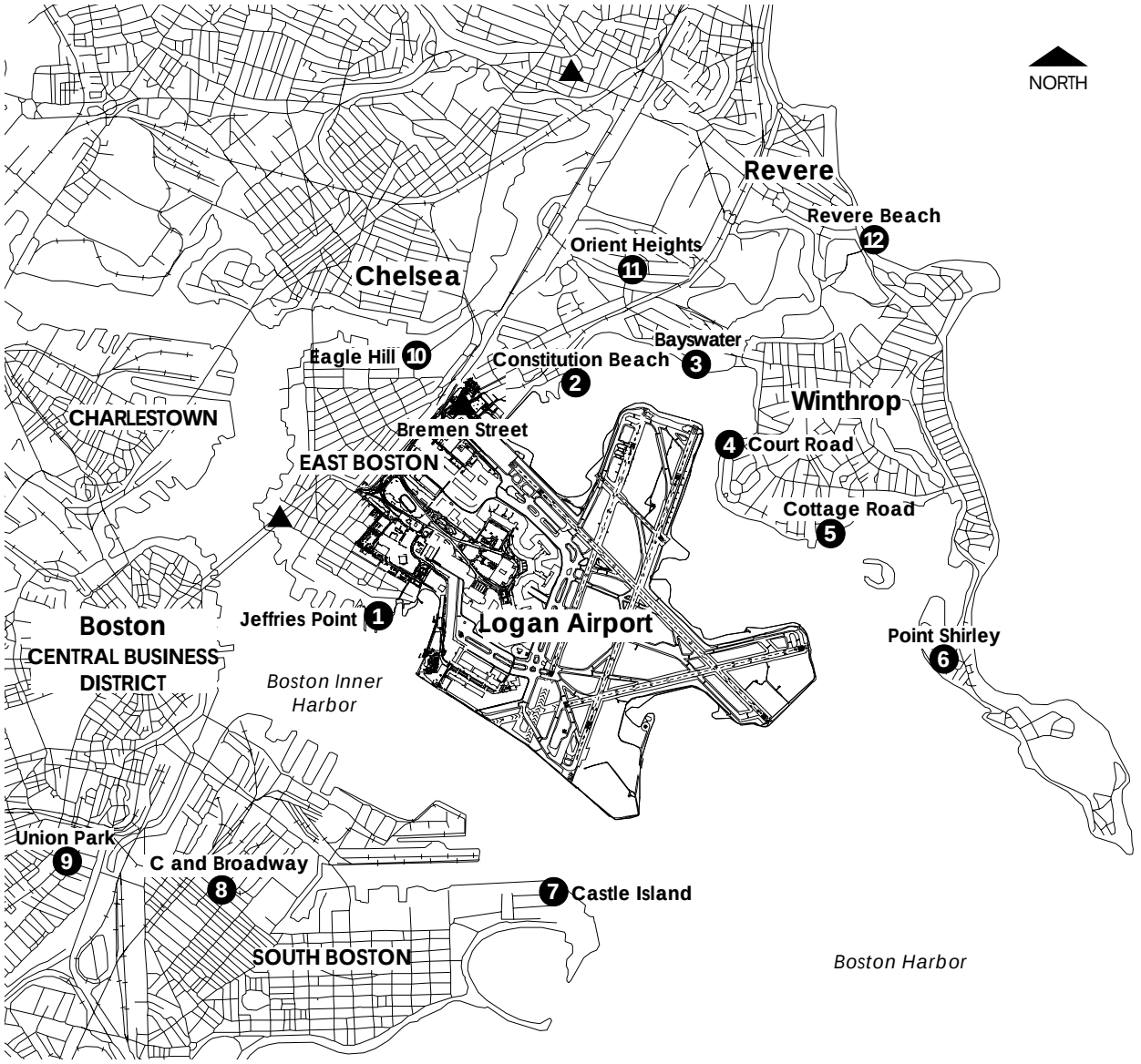
In order to account for (1) natural sources (e.g., forest fires, pollen, marine salts, fugitive dust, etc.), and (2) non-airport sources of air emissions located both within and outside the study area, background concentrations of air pollutants were added to the dispersion model results.

Consistent with DEP guidelines, these background levels were derived from monitoring data collected at the Bremen Street station in East Boston. Located adjacent to the northwest boundary of the airport, ambient levels of CO, NO_2, and PM_{10} are recorded at this site (see Table 5.4-3 in Section 5.4.1.2). Because of this proximity, these measured levels likely include emissions from Logan. Therefore, as a highly conservative approach, the upper bounds of these pollutant concentrations were used as the background levels in the dispersion modeling analysis. This results in the "double counting" of Logan-related emissions. Table 6.4-2 also contains these background levels.

To evaluate the air quality impacts of the No Action Alternative and the Preferred Alternative on individual neighborhoods surrounding the airport, 12 receptors were modeled. These receptors represent neighborhood-specific concentrations of air pollutants resulting from the combined effects of airport operations, background levels, and local meteorology. These receptors, illustrated in Figure 6.4-1 and individually described in Table 6.4-3, were specifically selected for this analysis by DEP. As stated previously, the GEIR and its Annual Updates do not include dispersion modeling.

Table 6.4-3
Receptor Location for Dispersion Modeling

Receptor No.	Community	Location
1	East Boston	Jeffries Point Park tennis court, east end of Sumner Street
2	East Boston	Constitution Beach Bath House, east end of Coleridge Street
3	East Boston	Intersection of Annavoy and Bayswater Streets
4	Winthrop	Intersection of Court and Loring Roads
5	Winthrop	Cottage Park Yacht Club, south end of Orlando Avenue
6	Winthrop	Point Shirley intersection of Grandview and Bayview Avenues
7	Castle Island	Intersection of Farragut Road and First Street
8	South Boston	Intersection of Broadway and C Street
9	Southeast End	Union Park Street between Tremont Street and Shawmut Avenue
10	Eagle Hill	Intersection of Condor and Glendon Streets
11	Orient Heights	Intersection of Tower Drum Lane and Gladstone Street
12	Revere Beach	Public beach on Broad Sound



LEGEND

- ● Modeling Receptors
- ▲ Monitor Location

Figure 6.4-1

Air Quality Modeling Receptor Locations

7466-FIG-6.4-1.p65

6.4.2 Airside Project Emissions Inventories and Dispersion Modeling Results

The air quality impacts of the No Action Alternative and the Preferred Alternative are presented and discussed below. According to federal guidance for air quality impact assessments, it is more important to compare future-year emissions with and without the Preferred Alternative than it is to compare current and future-year emissions. Therefore, the presentation of the results of the air quality analysis is focused on comparing the Preferred Alternative to the No Action Alternative.

The air quality analysis results for the No Action Alternative and Preferred Alternative under the 29M Low Fleet and 37.5M High Fleet scenarios are described in Section 6.4.2.1 and 6.4.2.2. The results for all other Alternatives and for previously analyzed future fleets were presented in detail in the Airside Project Draft EIS/EIR. Summary results for these alternatives and future fleet scenarios are also contained in Appendix F of this Supplemental DEIS/FEIR. Section 6.4.4 presents the emissions inventory and dispersion results for the 37.5M High RJ Fleet. The results for the 1993 Historic Modeled Condition and 1998 Actual Condition were presented in Section 5.4.3.2.

To facilitate further comparison, these results are compiled from tables contained in Appendix M of the Airside Project Draft EIS/EIR and represent the total contributions for all Logan Airport sources previously identified as aircraft, GSE, motor vehicles, and other miscellaneous sources. Each set of results is presented by pollutant type.

For comparative purposes, the emissions inventory results from the Logan Airport 1997 *Annual Update*[8] are also provided. These results are based on 29 million (29M) and 37.5 million (37M) annual passengers, respectively.

The air quality assessments employed in both the Airside Project EIS/EIR and GEIR/ESPR Annual Updates consider aircraft emissions in the LTO cycle from a flight altitude of 3,000 feet to landing, taxiing, idling and take-off to 3,000 feet.

The Preferred Alternative airborne delay reductions will also result in reductions of emissions of aircraft in holding patterns, which impact the region, but do not appear in the air quality assessment. The pollutants reduced (largely NOx) will contribute to ozone reduction in the region. In addition, delay reduction results in considerable fuel savings.

6.4.2.1 Emissions Inventory Results

CO Emissions

Based on the results of the emissions inventory, the three primary sources of CO at Logan Airport are ground support equipment, aircraft, and motor vehicles representing

▼

8 The *Logan Airport 1997 Annual Update* was the last Annual Update that included future forecasts (1999/2010).

approximately 50, 35, and 10 percent of the total, respectively, for all future year scenarios and the PreferredAlternative.

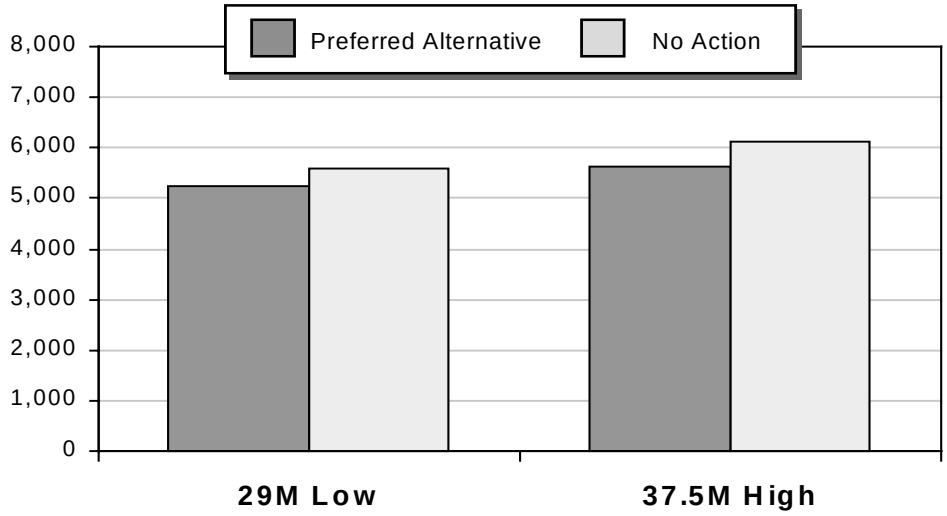
In general, CO emissions from ground support equipment will decrease in the future, as the older equipment is replaced and cleaner-burning fuels are phased in. CO emissions from aircraft will also decline in future years as Stage 2 aircraft are replaced with cleaner-burning Stage 3 aircraft. However, these decreases will be partially offset by the forecasted increase in aircraft operations at Logan Airport over time. Motor vehicle emissions will continue to decline as a result of the federal motor vehicle emissions control program.

As shown in Table 6.4-4 and Figure 6.4-2, the Preferred Alternative is expected to generate a lower amount of total CO emissions than the No Action Alternative. This pattern, the same for all forecasted enplanement and operational levels, is largely attributable to improved airside operating efficiencies associated with the Preferred Alternative.

Table 6.4-4
CO Emissions Inventory - All Sources

Alternative	29M Low Fleet Scenario		37.5M High Fleet Scenario	
	kg/day	tons/year	kg/day	tons/year
Preferred Alternative - All Actions	13,022	5,239	13,976	5,623
No Action Alternative	13,905	5,594	15,236	6,129
1997 Annual Update	14,470	5,821	16,686	6,713

Figure 6.4-2
CO Emissions Inventory – All Sources (ton/year)



When compared to the CO emissions inventory results for future year conditions, contained in the *1997 Annual Update*, the Airside analysis results produce lower values. These differences are due to the refined assessment of airfield operating conditions developed in support of this Supplemental DEIS/FEIR.

NOx Emissions

Aircraft represent the primary source of NOx emissions at Logan Airport generating approximately 75 percent of the total. Ground service equipment, the central heating/cooling plant, and motor vehicles represent roughly 10, 5, and 3 percent of the total, respectively.

NOx emissions from aircraft are expected to increase slightly in future years. This is an unavoidable consequence of phasing in quieter, more fuel-efficient engines. Manufacturers are working to develop engines that will emit less NOx, but this new technology has not been factored into this analysis. NOx emissions from GSE and motor vehicles are also predicted to increase slightly, corresponding to the forecasted increase in operations at Logan, regardless of airside improvements. NOx emissions associated with the central heating/cooling plant are predicted to increase similarly.[9]

As shown in Table 6.4-5 and Figure 6.4-3, the Preferred Alternative is predicted to generate a lower amount of total NOx emissions than the No Action Alternative. Over time, if the airside improvements are not made, emissions are expected to increase at Logan Airport because of the increase in operations and the phasing in of Stage 3 aircraft, which produce more NOx than louder, less fuel efficient Stage 2 aircraft. However, by reducing aircraft delay, implementation of the Preferred Alternative would reduce the rate of NOx increase associated with Stage 3 aircraft.

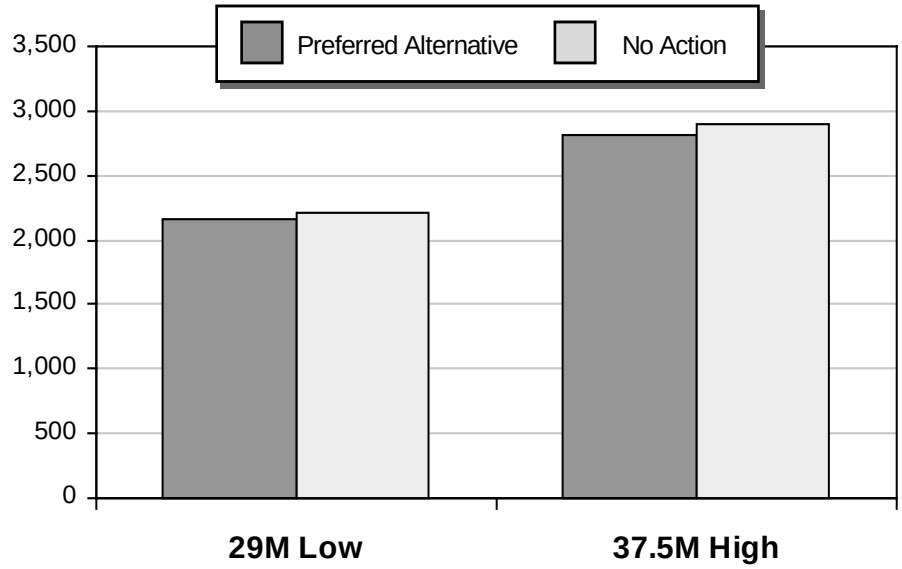
When compared to the 29M Low Fleet scenario and the 37.5M High Fleet scenario NOx emissions inventory results contained in the *1997 Annual Update*, the Airside analysis results are lower. These differences are due to the refined assessment of airfield operating conditions developed in support of this Supplemental DEIS/FEIR.

Table 6.4-5
NOx Emissions Inventory - All Sources

Alternative	29M Low Fleet Scenario		37.5M High Fleet Scenario	
	kg/day	tons/year	kg/day	tons/year
Preferred Alternative – All Actions	5,362	2,157	6,997	2,815
No Action Alternative	5,491	2,209	7,183	2,890
1997 Annual Update	6,670	2,683	8,343	3,356

9 Table 4 – Emission Rates and Stack Parameters for the Logan Cooling/Heating Plant for the Period after Retirement of the Existing Waukeshaw Generators - Tech Environmental, Inc., September 30, 1996.

Figure 6.4-3
NOx Emissions Inventory – All Sources (ton/year)



Total VOC Emissions

As a precursor to O_3 formation, VOCs are considered an O_3 indicator in this analysis. In the future, the three primary sources of total VOCs at Logan Airport will be aircraft, fuel storage / transfer facilities, and ground service equipment, representing approximately 40, 30, and 20 percent of the total, respectively.

As discussed above in connection with CO emissions, the VOC content of aircraft exhaust will decline in future years as newer, more efficient, engines are phased in. Similarly, VOC emissions from GSE are expected to decrease as the older equipment is replaced and cleaner-burning fuels are introduced. Evaporative VOCs associated with fuel storage and transfer facilities are a function of the fuel throughput volumes, and are generally well controlled within their containment vessels.

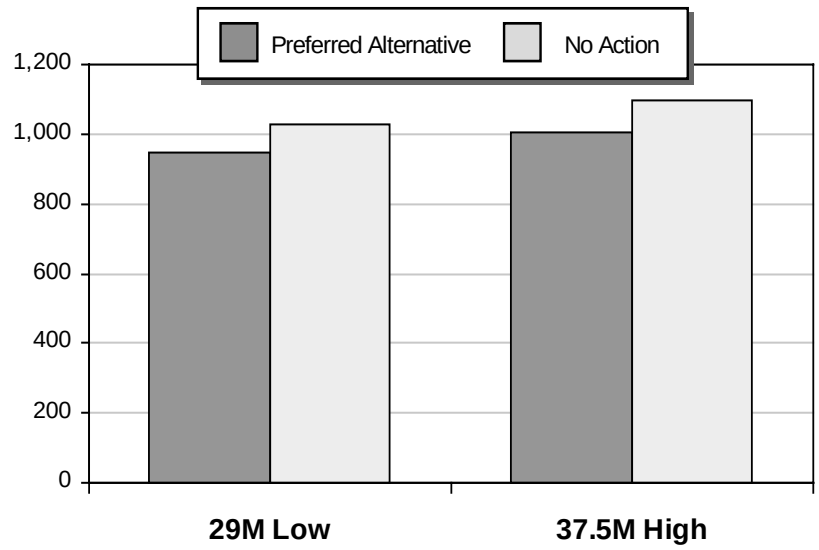
As shown in Table 6.4-6 and Figure 6.4-4, total VOC emissions from all sources at Logan Airport are predicted to increase slightly over time in association with the forecasted increase in operations. However, the Preferred Alternative is expected to generate a lower amount, when compared to the No Action Alternative. This outcome is largely attributable to improved airfield efficiency and shorter delay periods associated with the Preferred Alternative. When compared to the 1999 and 2010 VOC emissions inventory results for the 29M Low and 37.5M High scenarios contained in the *1997 Annual Update*, the Airside analysis values are lower. These differences are due to the refined assessment of airfield operating conditions developed in support of this Supplemental Draft EIS / Final EIS.

Table 6.4-6
Total VOC Emissions Inventory - All Sources (1)

Alternative	29M Low Fleet Scenario		37.5M High Fleet Scenario	
	kg/day	tons/year	kg/day	tons/year
Preferred Alternative - All Actions	2,350	945	2,497	1,005
No Action Alternative	2,553	1,027	2,721	1,095
1997 Annual Update	3,269	1,315	3,207	1,290

(1) Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources. (See Appendix M of the Airside Project Draft EIS/EIR for individual sources.)

Figure 6.4-4
Total VOC Emissions Inventory – All Sources (tons/year)



Odor-causing Emissions

As discussed previously, VOC emissions associated with aircraft low power operations (i.e., taxi-in, taxi-out, and idle / delay) are considered to be potentially odor causing. Therefore, the same trends in total VOCs described above for aircraft emissions are applicable to these odor-causing VOCs. That is, the VOC content of aircraft exhaust will decline in future years as newer, more efficient aircraft engines are phased in.

As shown in Table 6.4-7 and Figure 6.4-5, the amounts of odor-causing VOC emissions at Logan Airport are not expected to change significantly into the future. However, there is a noticeable reduction in these emissions when comparing the Preferred Alternative to the No Action Alternative. The Preferred Alternative produces lower odor-causing VOC emissions than the No Action Alternative.

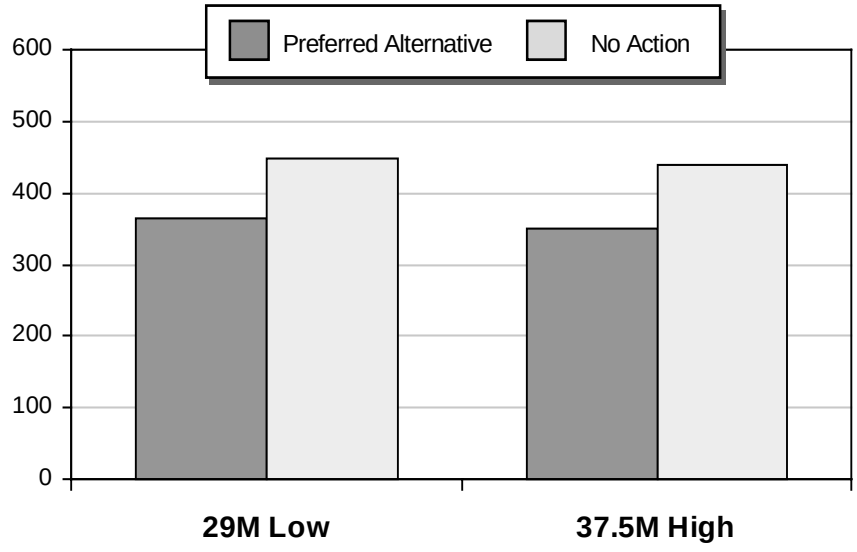
The predicted reduction in odor-causing VOCs is attributable to improved airfield operating conditions and reduced aircraft delay periods associated with the individual Alternatives. Moreover, under the Preferred Alternative, some additional flexibility is gained on how airfield operations are managed, which may lead to further reductions in odor-causing VOC emissions.

Table 6.4-7
Odor-causing VOC Emissions Inventory - All Sources (1, 2)

Alternative	29M Low Fleet Scenario		37.5M High Fleet Scenario	
	kg/day	tons/year	kg/day	tons/year
Preferred Alternative - All Actions	909	366	870	350
No Action Alternative	1,112	447	1,094	440

(1) Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Appendix M of the Airside Project Draft EIS/EIR for individual sources.)
(2) Odor-causing VOCs were not included in the *1997 Annual Update*.

Figure 6.4-5
Odor-causing VOC Emissions Inventory – All Sources (ton/year)



PM_{10} Emissions

Aircraft are considered to be the predominant source of particulate emissions, representing roughly 90 percent of the Logan Airport total. Ground service equipment and motor vehicles comprise most of the remaining 10 percent. Notably, particulate matter emission factors for aircraft are not well known. The few studies that exist are generally for military aircraft. Fractionation profiles, which would allow calculation of emissions inventories for PM_{10} and $PM_{2.5}$,do not exist for aircraft emissions of particulate matter. The LDMS uses the few emission factors that do exist and classifies all particulate matter as PM_{10}.

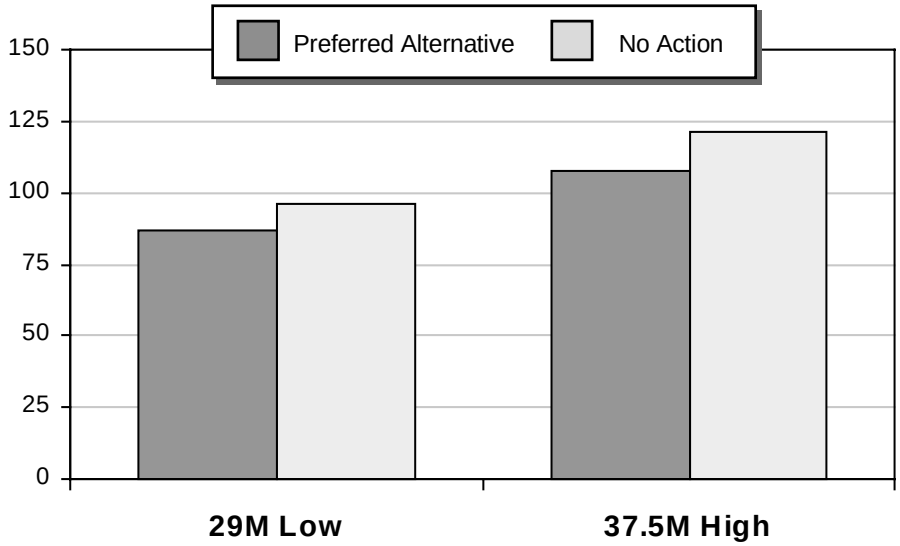
As shown in Table 6.4-8 and Figure 6.4-6, emissions of particulate matter are expected to increase in future years in connection with the forecasted increase in aircraft operations at Logan. However, the amounts associated with the Preferred Alternative are lower than those associated with the No Action Alternative. It is also noteworthy that this analysis does not take into full account the reduction in particulate emissions expected with the newer, more efficient aircraft engines. PM emissions are not included in the *1997 Annual Update* emissions inventories.

Table 6.4-8
PM_{10} Emissions Inventory - All Sources [1,2,3]

Alternative	29M Low Fleet Scenario		37.5M High Fleet Scenario	
	kg/day	tons/year	kg/day	Tons/year
Preferred Alternative - All Actions	217	87	268	108
No Action Alternative	238	96	301	121

1. Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Tables EI1-4, EI2-4, EI3-4, and EI4-4 in Appendix M of the Airside Project Draft EIS/EIR for individual sources).
2. PM emissions are not included in the *1997 Annual Update*.
3. Assumes all PM emissions are PM_{10}.

Figure 6.4-6
PM_{10} Emissions Inventory – All Sources (ton/year)



Off-Site Motor Vehicle Emissions

For the purposes of this assessment, off-site motor vehicle emissions are attributable to passenger, employee, and cargo transport vehicles traveling to and from Logan Airport on the local and regional roadway network. As discussed previously, the basis, data, and methods used to develop this analysis were obtained from the *1994/1995 GEIR*.

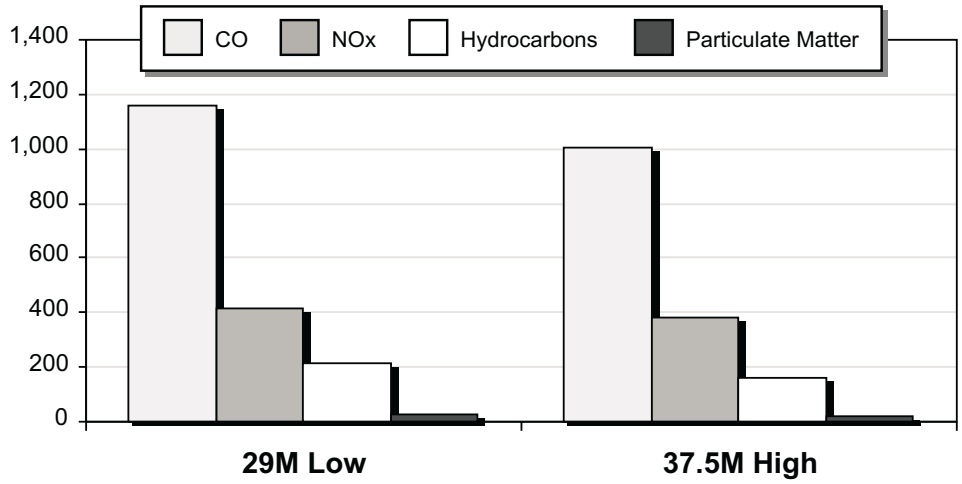
The results of the off-site motor vehicle emissions inventory are summarized in Table 6.4-9 and illustrated in Figure 6.4-7. As shown, emissions of CO, NOx, VOCs, and particulate matter (PM) are expected to decline over the long term. This reduction is largely attributable to the federal motor vehicle emissions control program that mandates the development of more fuel efficient, cleaner-burning motor vehicles nationwide. Part of the reduction is also associated with DEP programs designed to reduce motor vehicle emissions statewide.

Table 6.4-9
Off-Site Motor Vehicle Emissions (1)

Pollutant	Near Term 29M Low Fleet Scenario		Long Term 37.5M High Fleet Scenario	
	kg/day	tons/year	Kg/day	tons/year
CO	2,883	1,160	2,506	1,008
NO_2	1,027	413	948	381
VOCs	526	212	401	161
PM	60	24	41	17

(1) Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Figure 6.4-7
Off-Site Motor Vehicle Emissions Inventory (tons/year)



6.4.2.2 Dispersion Modeling Results

As previously discussed, ambient (outdoor) levels of air pollutants were predicted at 12 community sites (called receptors) using the LDMS. In this way, the impacts of the No Action Alternative and the Preferred Alternative can be individually assessed in each neighborhood and the results can be compared directly to state and federal air quality standards or guidelines.

The dispersion modeling results for the No Action Alternative and the Preferred Alternative under the 29M Low and 37.5M High Fleet scenarios are discussed below. For ease in assimilating these findings, only the highest levels predicted at all 12 receptors are reported. The assumption is that pollutant levels at the 11 other receptors will be less by comparison. Exceptions to this reporting technique are the reported ozone and odor indicator levels, which are given as spatially averaged values.

The 1993 Modeled Historic Condition dispersion model results were presented in Section 5.4.3.2. Dispersion modeling is not included in the *1997 Annual Update* air quality analyses.

29M Low Fleet Scenario Dispersion Model Results

As shown in Table 6.4-10, the highest predicted levels of CO, NO_2, and PM_{10} are expected to be well within the air quality standards and guidelines for these pollutants. A comparison of the No Action Alternative and the Preferred Alternative indicates that the Preferred Alternative results in lower concentrations of CO (1- and 8-hour), NO_2 (1-hour), and the ozone / odor indicators. For NO_2 (annual) and PM_{10} (24-hour and annual), there is no difference between the No Action Alternative and the Preferred Alternative results. Because of the relative similarity of these results overall, there should be no discernable differences in ambient air quality conditions at any of the receptors under either Alternative.

Table 6.4-10
29M Low Fleet Scenario Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration(µg/m³)		Air Quality Standard
	Preferred Alternative	No Action Alternative	(µg/m³)
CO, 1-hour, highest 2nd high	5,676	6,002	40,000
CO, 8-hour, highest 2nd high	2,734	2,808	10,000
NO_2, 1-hour, highest 2nd high	255	263	320
NO_2, annual, highest	55	55	100
PM_{10}, 24-hour, highest 2nd high	48	48	150
PM_{10}, annual, highest	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	16	18	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially-averaged highs	90	96	N/A

N/A Not applicable as it is used as an indicator of potential ozone formation and is not comparable to any standard.

37.5M High Fleet Scenario Dispersion Model Results

As shown in Table 6.4-11, under this scenario the highest predicted levels of CO, NO_2, and PM_{10} are again well within the air quality standards and guidelines. When comparing the results between the No Action Alternative and the Preferred Alternative, there are still no significant differences for any of the pollutants.

Based on the results of the emissions inventories and the dispersion modeling, the following findings on the effects of the Airside Project are evident: (1) there are no predicted violations of any state and federal standards or guidelines under any future scenarios or Alternatives; and (2) the overall impacts associated with the Preferred Alternative are beneficial or the same when compared to the No Action Alternative.

Results of Air Quality Impact Analyses

To comply with the Clean Air Act Amendments of 1990 (CAAA) and the NEPA, FAA has made the following findings for project-related air quality impacts.

Because the proposed action is located in an ozone non-attainment area, the FAA must determine if the proposed action is consistent with the state implementation plan (SIP). General Conformity requirements mandated by Section 176(c) of the CAAA require the FAA to do so. To make this determination, FAA must compare the emissions resulting from the Preferred Alternative against those emissions that would have occurred under the No Action scenario.

Table 6.4-11
37.5M High Fleet Scenario Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)		Air Quality Standard
	Preferred Alternative	No Action Alternative	(µg/m³)
CO, 1-hour, highest 2nd high	5,743	5,798	40,000
CO, 8-hour, highest 2nd high	2,792	2,844	10,000
NO_2, 1-hour, highest 2nd high	282	275	320
NO_2, annual highest	56	56	100
PM_{10}, 24-hour, highest 2nd high	48	49	150
PM_{10}, annual highest	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	18	20	N/A
Odor indicator, Aircraft idle mode VOC, 1-hour, spatially-averaged highs	115	119	N/A

N/A Not applicable as it is used as an indicator of potential ozone formation and is not comparable to any standard.

Based on the analyses of NOx and VOCs (Tables 6.4-5 and 6.4-6, respectively), FAA has determined that the proposed project's net annual emissions (Preferred Alternative emission levels minus No Action Alternative emissions) will be less than the applicable NOx and VOC emission levels in 40 CFR 93.153(b) for all future conditions analyzed. In addition, FAA analysis of these levels shows that the Preferred Alternative would not be "regionally significant" because it would not cause 10 percent of the total emissions inventories for NOx or VOC in the Boston ozone nonattainment area. Accordingly, FAA has determined that the Project is presumed to conform to the SIP in accordance with Section 176 (c) of the CAAA.

For NEPA purposes, FAA must also assess the air quality impacts of Project Alternatives under consideration. FAA completed dispersion modeling for the Preferred Alternative and for the No Action Alternative. Analysis of Table 6.4-11 clearly shows that the proposed project would not exceed any NAAQS. Accordingly, FAA has determined that the Preferred Alternative would not cause significant air quality impacts.

6.4.3 Comparison of the Logan Dispersion Modeling System and Emissions and Dispersion Modeling System

As stated previously, since the completion of the scope of work for the Airside Project Draft EIS/EIR, the FAA's EDMS has become the required model for aviation sources Airside Project Draft EIS/EIR. In order to provide assurance that the LDMS provides results similar to EDMS, a comparison of the two models was conducted for the Preferred Alternative under the 29M Low Fleet scenario. This analysis indicates that the choice of model would not affect the outcome of the air quality assessment.

Both EDMS and LDMS have two components: an emissions inventory calculation and a dispersion model. The emissions inventory methodology for both models is very similar, with emission factors being multiplied by the number of aircraft operations, engines, and operating duration for each mode. The emission factors in LDMS were obtained from the FAA Engine Emission Database (FAEED), which is also the source of many emission factors in EDMS. Notably, EDMS does not contain emission factors for aircraft-generated PM_{10}, and LDMS does not have emission factors for oxides of sulfur. Because of their parallels, the emission factors in the two models are comparable. The principal difference in the emissions inventory portion of the two models is the treatment of times-in-mode. LDMS allows the user to input Logan-specific times-in-mode for all modes of operation, based on the output of Logan-specific airport operational models. EDMS, however, allows the user to input only taxi/idle time and automatically calculates times-in-mode for approach, takeoff, and climbout based on the mixing height. The emissions inventories calculated by the two models are compared in Table 6.4-12.

Table 6.4-12
Preferred Alternative 29M Low Fleet Scenario
Emissions Inventory Comparison

Pollutant	EDMS		LDMS	
	kg/day	Tons/year	kg/day	tons/year
CO	15,143	6,092	13,022	5,239
VOCs (1)	1,963	790	2,350	945
NOx	7,198	2,896	5,362	2,157
SO_x	538	216	N/A	N/A
PM_{10} (2)	90	36	217	87

N/A - not applicable
(1) Hydrocarbon emissions calculated in EDMS are being used to represent VOCs in this comparison.
(2) PM_{10} emission factors for aircraft are not included in EDMS. Therefore, the PM-10 total for EDMS includes GSE, motor vehicles and stationary sources, but not aircraft.

As shown in the table, EDMS projects higher total emissions of CO and NOx, while estimating lower emissions of VOCs and PM_{10} emissions than LDMS. These differences would be carried across all Alternatives and scenarios if they were modeled using EDMS. Importantly, the relationship of the Alternatives to each other is not expected to be greatly affected by the choice of model. In other words, the Preferred Alternative will be associated with the lowest amount of emissions among the Alternatives, and the No Action Alternative will be associated with the highest emissions, regardless of the model used.

The second element of the two models is dispersion evaluation. LDMS uses the model ISCST3 (Industrial Source Complex Short-Term), a Gaussian plume dispersion algorithm. ISCST3 is an EPA-preferred model for a variety of reasons. It has the ability to treat point, area, line, and volume sources; deposition; downwash; and plume rise. The dispersion component in EDMS uses EPA's PAL2 (Point Area and Line) and CALINE3 (California Line Source), which are also Gaussian plume models. Both LDMS and EDMS have the ability to incorporate actual meteorological data. There are inherent differences among the algorithms in the two models, but the use of Gaussian plumes in both models leads to similarities in results. The results of the EDMS dispersion analysis of the Preferred Alternative under the 29M Low Fleet scenario are shown in Figures 6.4-8 through 6.4-10 and compared to the LDMS results. Complete dispersion modeling results are in Appendix F.

Figure 6.4-8
CO Dispersion Comparison (Second Highest Level)

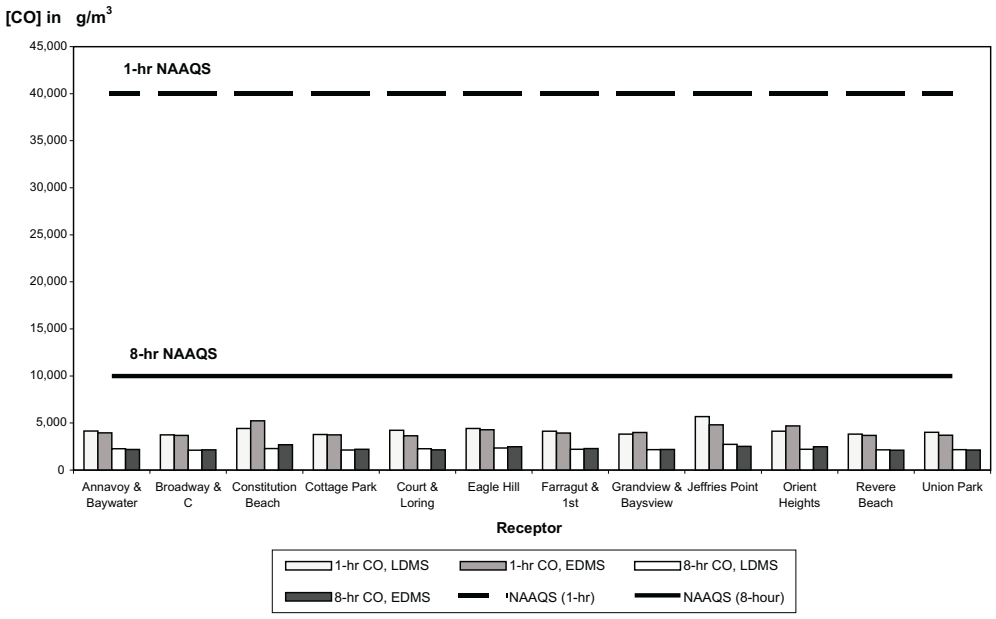


Figure 6.4-9
NO_2 Dispersion Comparison (Highest Annual Mean and Second Highest 1-Hour Level

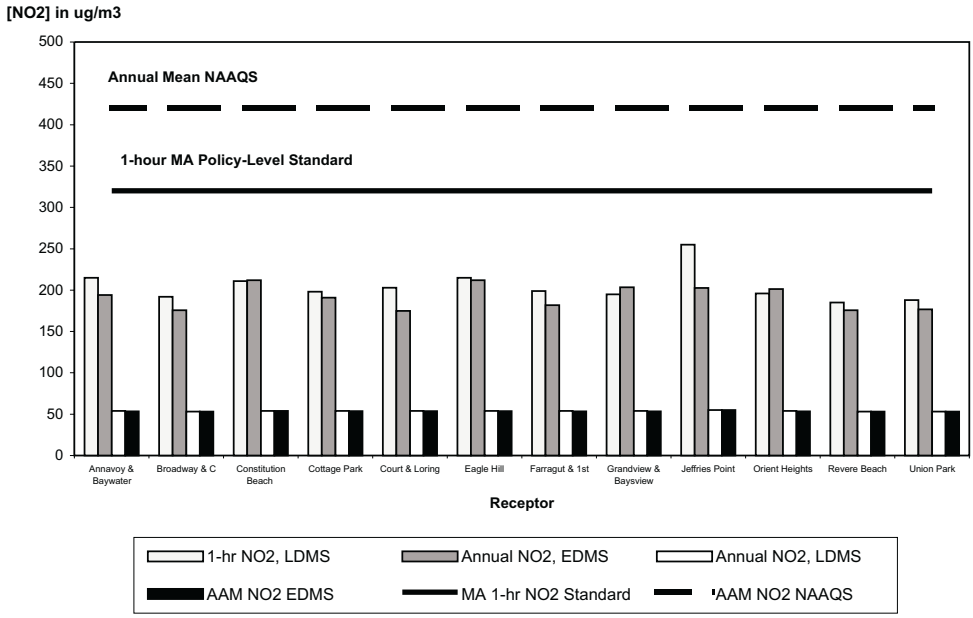
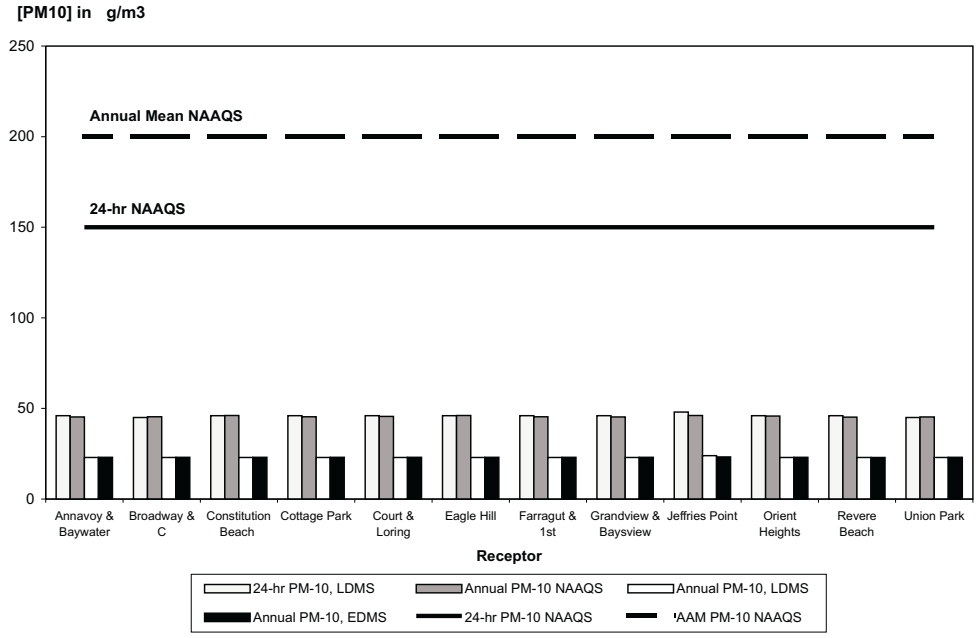


Figure 6.4-10
PM_{10} Dispersion Comparison
Highest Annual Mean and Second Highest 24-Hour Level



As shown in the figures, the two models have similar results. The predicted concentrations are, on average, two percent higher with LDMS. The higher results generated by LDMS mean that this model is, in general, conservative. The only exception to the conservative nature of LDMS is with CO concentrations for an eight-hour averaging time, which are two percent higher, on average, with EDMS. Nonetheless, all concentrations are well within the NAAQS for all modeled pollutants with either model. The variation between modeled concentrations at each receptor can likely be attributed to differences in the nuances of the modeling algorithms as well as inevitable variance in the manner of user input (e.g., time-in-mode, as mentioned previously).

Although EDMS and the LDMS have somewhat different components, their methodologies and, more importantly, their results are similar. The comparison of the two conducted for this analysis indicates that if all emissions inventories were prepared with EDMS, all action alternatives including the Preferred Alternative would still result in air quality benefits, when compared to the No Action Alternative. Furthermore, the dispersion modeling shows that results of the two models are comparable, and that there are no modeled violations of the NAAQS.

6.4.4 Air Quality Results for the 37.5M High RJ Fleet

The air quality analysis has been updated since the Airside Project Draft EIS/EIR to reflect an additional long-term planning forecast of aircraft operations and fleet mix at Logan. To estimate the scope of impacts associated with these revisions, the LDMS was applied to the Preferred Alternative and the No Action Alternative. The methodology for this analysis is consistent with that used for the Airside Project Draft EIS/EIR modeling efforts, with changes made only to the aircraft, auxiliary power units, and GSE. The emissions inventory and dispersion modeling results are presented in this section.

6.4.4.1 Emissions Inventory Results

The additional 37.5M High RJ Fleet forecast for Logan Airport produced the need to amend the emissions associated with aircraft, auxiliary power units, and GSE. The other emissions sources, however, have been analyzed previously and are not re-calculated here. Previous estimates for these sources (e.g., motor vehicles and stationary sources) are not expected to change for the 37.5M High RJ Fleet forecast.

CO Emissions

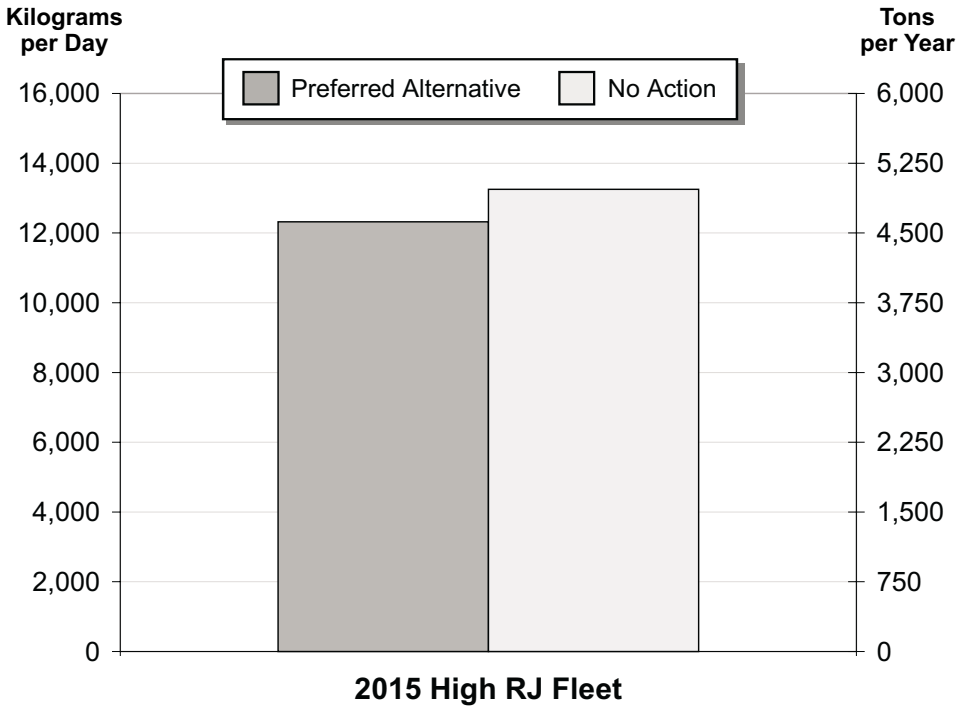
CO emissions will decrease in the future as a result of several factors: cleaner-burning Stage 3 aircraft, tighter motor-vehicle emissions controls, and alternative fuels in GSE. However, these decreases will be partially offset by the forecasted increase in aircraft operations at Logan Airport over time. As shown in Table 6.4-13 and Figure 6.4-11, the Preferred Alternative is expected to generate a lower amount of total CO emissions, when compared to the No Action Alternative, at all forecasted enplanement and operational levels. This emissions reduction is largely attributable to improved airfield operating efficiencies associated with the Preferred Alternative.

Table 6.4-13
CO Emissions Inventory - All Sources (1)

Alternative	37.5M High RJ Fleet Scenario	
	kg/day	tons/year
Preferred Alternative - All Actions	12,322	4,958
No Action Alternative	13,253	5,332

Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources.
(See Appendix M of the Airside Project Draft EIS/EIR and Appendix F of this Supplemental DEIS/FEIR for individual sources.)

Figure 6.4-11
CO Emissions Inventory – All Sources



NOx Emissions

Aircraft are projected to continue to represent the primary source of NOx emissions at Logan, generating approximately 78 percent of the total under either the Preferred Alternative or the No Action Alternative. GSE, the central heating/cooling plant and motor vehicles represent roughly 11, 8, and 3 percent of the total, respectively. NOx emissions from all sources other than motor vehicles are expected to increase in future years.

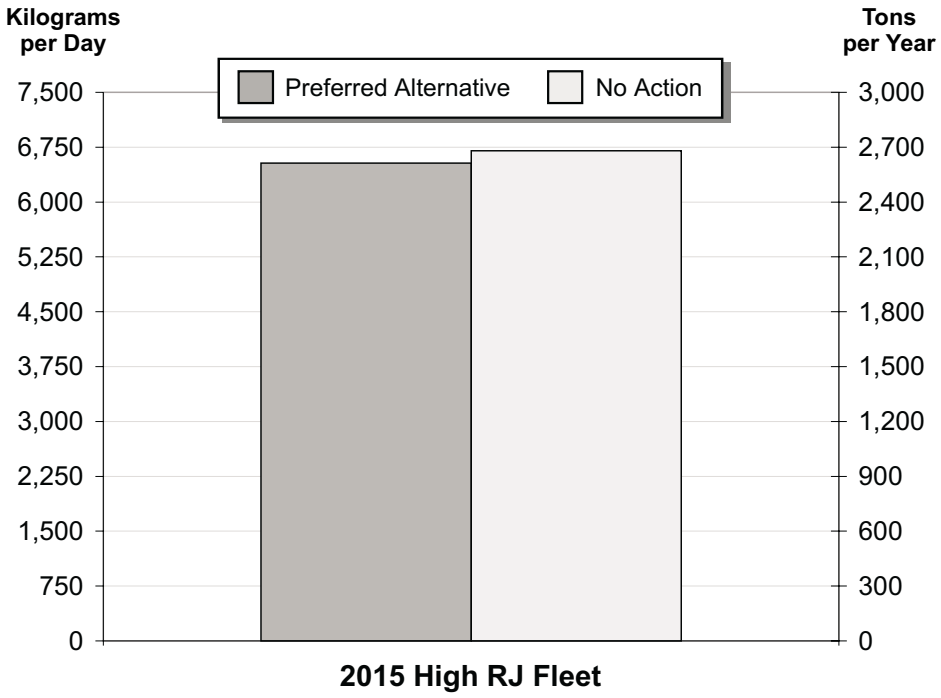
As shown in Table 6.4-14 and Figure 6.4-12, the Preferred Alternative is predicted to emit a smaller amount of NOx than the No Action Alternative. The improvements in the Preferred Alternative would help offset the rate of NOx increase associated with Stage 3 aircraft and the growth in aircraft operations by improving airfield efficiency and shortening delay periods.

Table 6.4-14
NOx Emissions Inventory - All Sources (1)

Alternative	37.5M High RJ Fleet Scenario	
	kg/day	tons/year
Preferred Alternative – All Actions	6,531	2,628
No Action Alternative	6,703	2,697

Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources.
(See Appendix M of the Airside Project Draft EIS/EIR and Appendix F of this Supplemental DEIR/FEIR for individual sources.)

Figure 6.4-12
NOx Emissions Inventory – All Sources



Total VOC Emissions

As with previous analyses in support of the Draft EIS / Final EIR, VOCs are considered an O3 indicator in this analysis. The three primary sources of total VOCs at Logan Airport are projected to be fuel storage and handling, GSE, and aircraft.

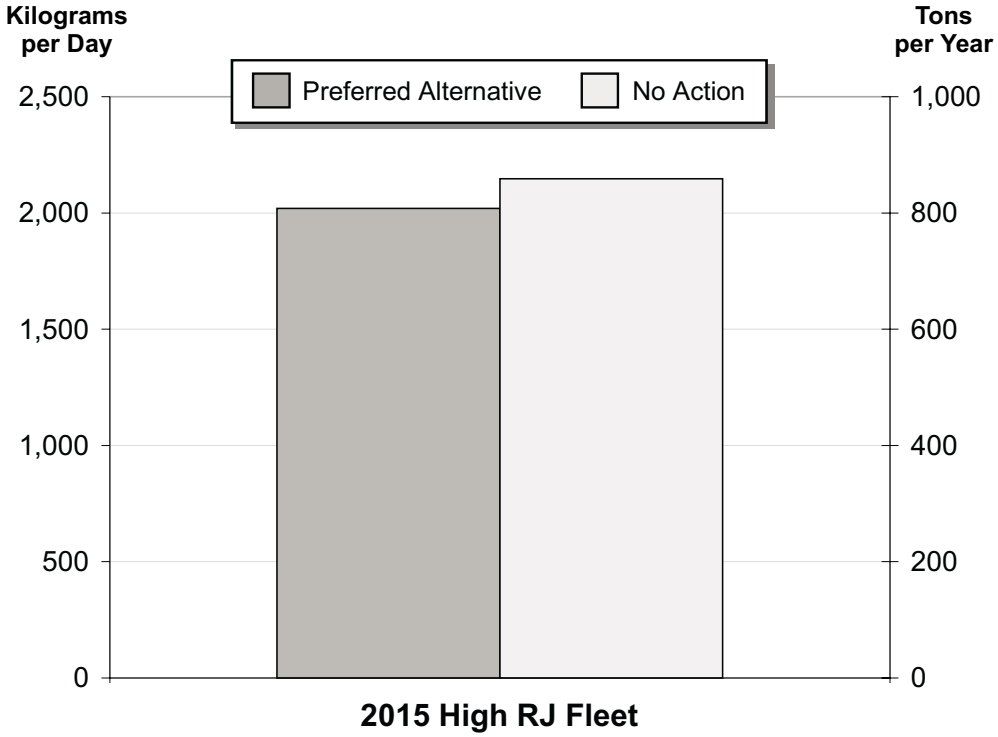
As shown in Table 6.4-15 and Figure 6.4-13, total VOC emissions are predicted to decrease over time, primarily as a result of the lower-VOC profiles associated with the High RJ Fleet. The Preferred Alternative is expected to generate a lower amount of VOCs than the No Action Alternative. This outcome is largely attributable to improved airfield efficiency and shorter delay periods associated with the Preferred Alternative.

Table 6.4-15
Total VOC Emissions Inventory - All Sources (1)

Alternative	37.5M High RJ Fleet Scenario	
	kg/day	tons/year
Preferred Alternative – All Actions	2,019	812
No Action Alternative	2,147	864

Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources.
(See Appendix M of the Airside Project Draft EIS/EIR and Appendix F of this Supplemental DEIR/FEIR for individual sources.)

Figure 6.4-13
Total VOC Emissions Inventory – All Sources



Odor-causing Emissions

The portion of VOC emissions associated with aircraft low power operations are considered to be indicative of odors, and this emissions category follows the same patterns as those described above for total emissions of VOCs. In other words, odor-related VOCs are expected to decrease over time and be lower with the Preferred Alternative than with the No Action Alternative, as shown in Table 6.4-16 and Figure 6.4-14.

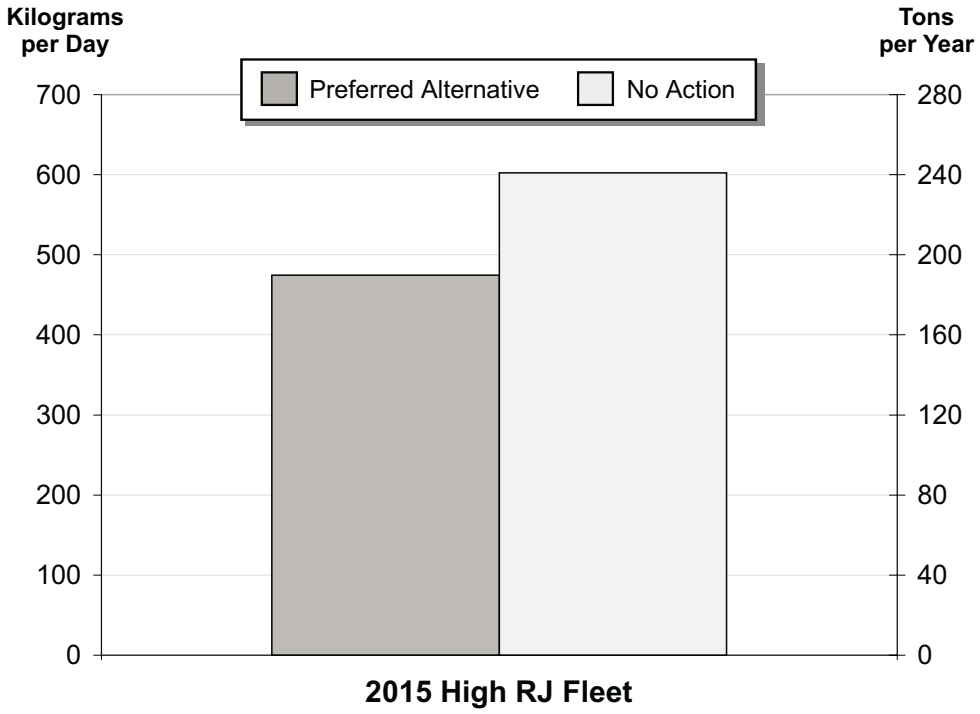
This predicted reduction in odor-causing VOCs is attributable to the aircraft fleet and to improved airfield operating conditions and reduced aircraft delay periods associated with the individual Alternatives.

Table 6.4-16
Odor-causing VOC Emissions Inventory - All Sources[1]

Alternative	37.5M High RJ Fleet Scenario	
	kg/day	tons/year
Preferred Alternative - All Actions	475	191
No Action Alternative	602	242

Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources.

Figure 6.4-14
Odor-causing Emissions Inventory – All Sources



PM_{10} Emissions

This analysis is based on the LDMS, which uses the few available data for PM_{10} emitted from aircraft. Aircraft are projected to remain the predominant source of particulate emissions, with GSE, miscellaneous sources, and motor vehicles accounting for roughly 5 percent each.

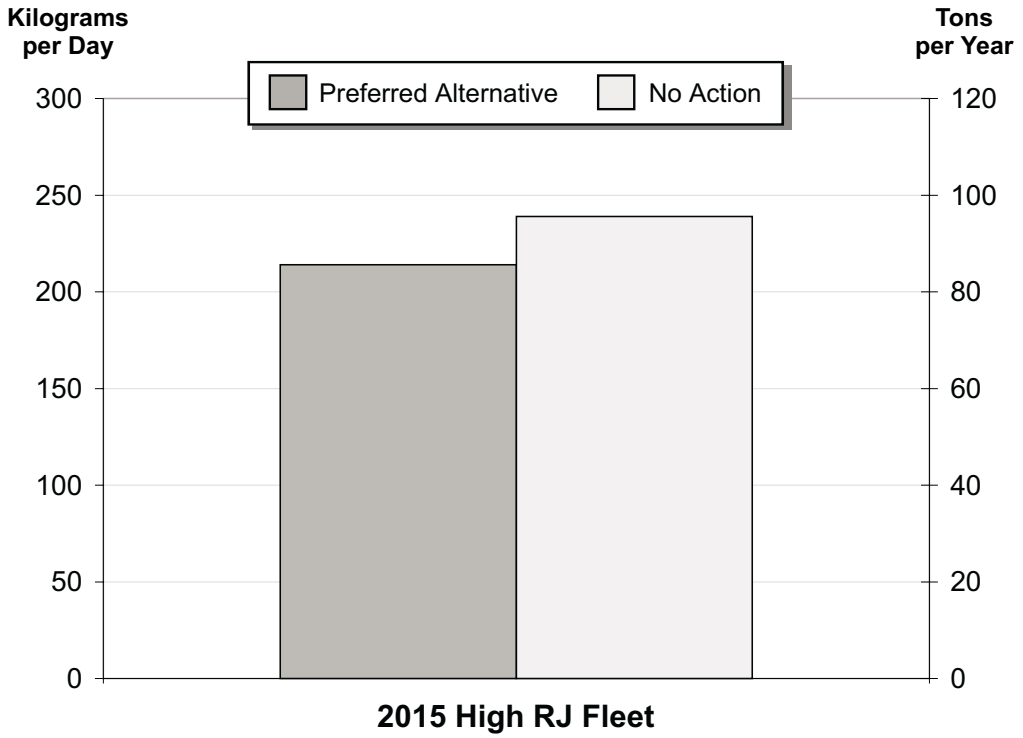
As shown in Table 6.4-17 and Figure 6.4-15, emissions of particulate matter are expected to decrease in future years, a result of decreases from all sources other than miscellaneous sources. In addition, the amounts associated with the Preferred Alternative are lower than those associated with the No Action Alternative.

Table 6.4-17
PM_{10} Emissions Inventory - All Sources [1,2,]

Alternative	37.5M High RJ Fleet Scenario	
	kg/day	tons/year
Preferred Alternative	214	86
No Action Alternative	239	96

(1) Includes aircraft sources, GSE, on-site motor vehicles, and other miscellaneous sources. (See Appendix M of the Airside Project Draft EIS/EIR and Appendix F in this Supplemental DEIS/FEIR for individual sources.)
(2) Assumes all PM emissions are PM_{10}.

Figure 6.4-15
PM_{10} Emissions Inventory – All Sources (ton/year)



6.4.4.2 Dispersion Modeling Results

As with previous analyses, ambient levels of air pollutants were predicted at 12 receptors using the LDMS to asses the impacts of the project alternatives in each neighborhood and to compare the results air quality standards and guidelines. These receptors are shown in Figure 5.4-1.

The dispersion modeling results are discussed below, with the highest levels of CO, NOx, and PM_{10} predicted at any one receptor. The assumption is that pollutant levels at the 11 other receptors will be lower than this highest reported value. The reported ozone and odor indicator levels, which are regional in nature, are given as spatially averaged values.

As shown in Table 6.4-18, the highest predicted levels of CO, NO_2, and PM_{10} are expected to be well within their respective air quality standards and guidelines. Between the Preferred Alternative and the No Action Alternative, the lowest pollutant concentrations generally occur under the Preferred Alternative.[10,11] Because of the relative similarity of these results overall, there should be no discernable differences in ambient air quality conditions at any of the receptors under either Alternative.

▼

10 The maximum concentrations of PM10 are less than 1 µg/m3 lower under the Preferred Alternative than under the No Action Alternative.
11 The 1-hour NO2 level is the only exception to this statement in that the highest level under the Preferred Alternative is slightly higher than the highest level under the No Action Alternative.

Table 6.4-18
37.5M High RJ Fleet Scenario Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)		Air Quality Standard (µg/m³)
	Preferred Alternative	No Action Alternative	
CO, 1-hour, highest 2nd high	6,104	6,125	40,000
CO, 8-hour, highest 2nd high	2,884	2,928	10,000
NO_2, 1-hour, highest 2nd high	290	279	320
NO_2, annual, highest	55	56	100
PM_{10}, 24-hour, highest 2nd high	48	48	150
PM_{10}, annual, highest	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially averaged highs	16	17	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially averaged highs	108	111	N/A

N/A Not applicable as it is used as an indicator of potential ozone or odor formation and is not comparable to any standard.

The emissions inventory and dispersion modeling for the 37.5M High RJ Fleet show that there are no predicted violations of any state and federal standards or guidelines under any future scenarios or Alternatives, and that the overall impacts associated with the Preferred Alternative are either beneficial or imperceptible, when compared to the No Action Alternative.

6.5 Biotic Communities

Biotic community impacts include impacts to terrestrial vegetation, wetlands, wildlife, and rare species.

6.5.1 Terrestrial Vegetation

Construction of the runway and taxiway improvement components of the Preferred Alternative will require the conversion of areas of existing upland vegetation to paved surfaces. As described in Section 5.5.1, these vegetated areas generally consist of mowed grasses. In addition, both reconfiguration of the Southwest Corner Taxiway System and construction of Runway 14/32 would convert areas of existing pavement to vegetation. As shown in Table 6.5-1 below, construction of the Preferred Alternative results in the net conversion of 37.6 acres of vegetation to paved area.

Conversion of the vegetated infield areas will reduce the pervious surface area of the airfield and reduce available habitat for resident and transient species. For most of the species occurring on the airfield, the loss of available habitat will not constitute a significant adverse impact. However, portions of the airfield to be converted from grassed upland to paved surface are used by the upland sandpiper (*Bartramia longicauda*) for breeding and nesting. Impacts to this state-listed endangered species are described in Section 6.5.5.

Table 6.5-1
Summary of Airfield Vegetation Impacts

Improvement Concept	Conversion of Vegetation to Paved Area	Conversion of Paved Area to Vegetation	Net Change of Vegetation
Runway 14/32	16.1 acres	13.4 acres	-2.7 acres
Centerfield Taxiway:			
■ North Section	16.8 acres	-	- 30.1 acres
■ South Section	13.3 acres	-	
Extend Taxiway Delta	7.5 acres	-	- 7.5 acres
Taxiway November Realignment	5.3 acres	6.9 acres	+1.6 acres
Southwest Corner Taxiway System Reconfiguration	5.0 acres	6.1 acres	+ 1.1 acres
Total Change of Vegetation			**-37.6 acres**

Source: HNTB, 1999

6.5.2 Wetlands

As described in Section 5.5, the perimeter of the airfield is located within the 100-foot buffer zone of a coastal bank as regulated under the Massachusetts Wetlands Protection Act and associated regulations (310 CMR 10.00 et. seq.). Portions of the buffer zone will be re-graded and vegetated for use as a runway safety area or object free areas for the unidirectional Runway 14/32 (all layout options). The overall linear distance of the buffer, adjacent to which the unidirectional Runway 14/32 will be constructed, is approximately 7,200 feet. The Runway itself will be 5,000 linear feet long, with a 1,000-foot runway safety area at each end. Construction work, however, will not occur within the full area of the buffer zone over this entire length. These activities will be largely confined to areas landward of the existing perimeter road, which is generally located in the middle of the 100-foot buffer zone. Once re-graded, the disturbed areas will be stabilized with grasses common to the airfield. Portions of the buffer zone that are presently paved will be converted to grass. Construction of the runway and associated drainage system modifications are the only element of the improvements that may be subject to review under the MA Wetlands Protection Act.

Work within the buffer zone required to construct the runway will not alter the coastal bank or its function in terms of either storm damage prevention or flood control.

6.5.3 Coastal Zone

Logan Airport is surrounded on three sides by Boston Harbor. This location is within an area designated by the Commonwealth as the Coastal Zone.

6.5.3.1 Coastal Zone Management Program

The Preferred Alternative will have no direct or indirect impact on resource areas, public access, water-dependent businesses, recreation, or other maritime interests in the coastal zone. The Preferred Alternative is consistent with the 27 policies (regulatory and non-regulatory) of Massachusetts Coastal Zone Management (CZM) program, as documented in the following sections.

6.5.3.2 Consistency with Coastal Zone Management Policies

In accordance with state and federal regulations, construction projects within the Coastal Zone must be consistent with the policies and principles established for these areas by the Massachusetts Office of Coastal Zone Management (MCZM).

Accordingly, a review of the Preferred Alternative within the context of the Massachusetts Coastal Zone Management Program Federal Consistency Review Procedures (301 CMR 21.00) was conducted for this Supplemental DEIS/FEIR. A summary of the Preferred Alternative's consistency with each of the four MCZM policies and principles that are relevant to this project is provided below. It is anticipated that a description of the project's consistency will be submitted to MCZM for Coastal Zone Consistency Determination and review during this Supplemental DEIS/FEIR review period.

Water Quality Policy 1

Ensure that point-source discharges in or affecting the coastal zone are consistent with federally approved state effluent limitations and water quality standards.

Consistency: Airfield stormwater is presently directed by overland flow to the existing airfield drainage system for discharge via a series of outfalls to Boston Harbor. Airfield discharges to the Harbor currently meet Class SB water quality standards. The existing drainage system will be extended to receive runoff from new impervious areas associated with taxiway and runway construction. No new outfalls are anticipated, nor is any change in the characteristics of the runoff expected. Accordingly, the Preferred Alternative will be consistent with federally approved state effluent limitations and water quality standards. Drainage from portions of the airfield totaling approximately 55 acres will be redirected from the West Outfall to existing outfalls along Boston Harbor. A low-flow stormwater quality treatment device may be installed, if feasible, to handle drainage from paved sections of this 55-acre airfield area.

Habitat Policy 1

Protect coastal resource areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eelgrass beds, and fresh water wetlands for their important role as natural habitats.

Consistency: The Preferred Alternative will not directly affect any coastal resource areas. Shellfish beds and salt marsh found around the airfield perimeter will be unaffected.

Although the pollutant loading may increase slightly due to the increase in impervious surfaces and runoff, the quality of runoff from the airfield is expected to remain the same. There is no indication that airfield runoff has any adverse impact on these resource areas. This is evidenced by the fact that shellfishing areas around Logan Airport's perimeter have been reopened for commercial harvesting over the past decade.

Public Access Policy 1

Ensure that developments proposed near existing public recreation sites minimize their adverse effects.

Consistency: There are several public recreation areas close to the airport including Constitution Beach in East Boston and several of the Boston Harbor Islands. The Preferred Alternative will not change the use of the airport and no new impacts to public recreation sites are expected as a result of the Preferred Alternative.

Growth Management Principle 2

Ensure that state and federally funded transportation and wastewater projects primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers.

Consistency: The Preferred Alternative may be funded through a combination of federal and state money. Logan Airport is an existing developed area and improvement of the facility will meet the needs of urban and community development centers.

6.5.3.3 Coastal Barriers

The Airside Project must show compliance with the Coastal Barriers Resources Act of 1982, which generally prohibits development on undeveloped coastal barriers along the Atlantic and Gulf Coasts, as identified by the U.S. Fish and Wildlife Service (USFWS). The project site is not within the boundaries of a Federally defined coastal barrier. Therefore, the Preferred Alternative will have no impact on coastal barriers as defined by the Coastal Barriers Resources Act of 1982.

6.5.4 Wildlife Habitat

As described above, the grasses and other herbaceous species occurring in the infield areas serve as habitat for a variety of birds and mammals. Conversion of these areas to paved surface will reduce available habitat areas. Upon the completion of construction and re-vegetation of disturbed areas under the Preferred Alternative, approximately 440 acres of vegetation will remain on the airfield. Consequently, proposed airside construction activities are not anticipated to result in modifications to the wildlife species composition of the Logan Airport airfield. Several of the infield areas currently serve as habitat for the upland sandpiper (*Bartramia longicauda*). Impacts to this state-listed endangered species are presented in Section 6.5.5, below.

6.5.5 Endangered and Threatened Species of Flora and Fauna

No Federal-listed endangered or threatened species are known to occur on the Logan Airport airfield. Accordingly, no impacts to federal-listed endangered or threatened species are anticipated with construction of the Preferred Alternative.

6.5.5.1 Impacts to State-Listed Species

The upland sandpiper, a state-listed endangered species, has been observed on the airfield in areas between runways and taxiways where improvements are proposed. Studies conducted in 1996 for this project identified one confirmed and three suspected nesting locations for the upland sandpiper, all in the infield areas between Runways 4L / 22R and 4R / 22L. The confirmed location was positioned in the infield area between Runways 4L / 22R, 4R / 22L and Taxiways Charlie and Foxtrot. All suspected nesting locations were identified to the north of Runway 33L / 15R:

- Between the Runway and Taxiway Yankee;
- Between Runway 15L / 33R and Taxiway Romeo; and
- Between Taxiway Romeo and Taxiway N-3.

Based on observations by the Massport Wildlife Control unit in 1999, it is predicted that the upland sandpiper would continue to use some of these infield areas as nesting habitat during the nesting season.

Construction of Centerfield Taxiway will generally bisect three of these areas (see Figure 3.1-1), avoiding disturbance of the area between Taxiway Romeo and N-3. Mitigation measures associated with these impacts are presented in Section 6.5.5.2

Specifically, impacts to confirmed and suspected upland sandpiper habitat, based upon field observations conducted in 1996, will be a maximum of approximately 37 acres. This represents the total area of existing mowed grassland that will be converted to paved area as a result of the construction of Centerfield Taxiway and the Taxiway Delta extension. Other areas of pavement will be added in areas that are not presently grassland and are not known to support upland sandpiper habitat. No grassland areas that are known to support upland sandpiper will be affected by construction of proposed unidirectional Runway 14 / 32. In addition to the direct loss of habitat, construction of the Centerfield Taxiway also will reduce the size of contiguous grasslands on either side of the Centerfield Taxiway. However, the remaining grassland areas will still be available as upland sandpiper habitat once construction is completed and the areas are revegetated.

6.5.5.2 Upland Sandpiper Mitigation Plan

Construction of the Centerfield Taxiway is proposed in mowed grassland areas of the airfield, which have been documented to support breeding and nesting habitat for the upland sandpiper (*Bartramia longicauda*), a state-listed endangered species. In addition, extension of Taxiway Delta also will be constructed in a mowed grassland area of the

airfield. Although no breeding or nesting habitat areas have been documented recently in areas to be affected by the Taxiway Delta extension, studies in 1990 conducted for the Central Artery/Tunnel project identified this location as potential habitat at that time.

Collectively, construction of the Centerfield Taxiway and the Taxiway Delta extension will result in the conversion of approximately 37 acres of existing grassland to paved surface. This conversion will eliminate this 37 acres as potential habitat for the upland sandpiper.

According to the MA Natural Heritage and Endangered Species Program (NHESP), proposed airside construction activities and the resultant loss of endangered species habitat constitute a "taking" as defined under the Massachusetts Endangered Species Act (MGL c.l3lA, MESA). In accordance with 321 CMR 10.04(3)(b), prior to a "taking, " a Conservation and Management Permit must be issued. Issuance of a Conservation and Management Permit is contingent upon demonstrating that: (1) "an insignificant portion of the local population will be impacted or no viable Alternative for the proposed project or activity exists; " and (2) "a conservation plan, submitted to and approved by the Director [Division of Fisheries and Wildlife], will be carried out that provides a long-term net benefit to the conservation of the local population of the impacted species." Coordination on the MESA process is handled by NHESP.

The following sections describe the project's compliance with elements of MESA and discuss mitigation measures proposed with the intent of providing a "long-term net benefit to the conservation of the local population of the impacted species." As described below, Massport has worked closely with NHESP in the development of the Conservation and Management Plan component of the mitigation program.

Impacts on the Local Population

There will be no direct project impacts to any upland sandpipers. This will be ensured through implementation of a two-part mitigation program. The first part of this program involves the enhancement of grassland habitat elsewhere on the airfield early in the construction season, prior to the spring arrival of the upland sandpiper population, to encourage the occupation of these areas, rather than construction areas. In addition, Massport will implement a rigorous pre-construction reconnaissance of the affected areas to ensure that no upland sandpipers remain in the area. Details of these mitigation elements are provided below as part of the proposed Conservation and Management Plan.

While the successful implementation of these two elements of the program will avoid direct impacts to individual birds, existing habitat areas will be disturbed and permanently lost as habitat. According to NHESP, this is considered to be an impact on the local population.

Alternatives for the Proposed Project

Construction of the taxiway improvements are directed at: (1) alleviating specific existing airfield layout deficiencies which result in taxiway congestion and delay; (2) improving overall airfield operating efficiency; and (3) enhancing safety.

In the context of MESA, Alternatives are considered to be project options that would avoid impact to the affected species. Because of the existing arrangement of runways and taxiways at Logan Airport and FAA siting requirements, opportunities to reconfigure or relocate taxiway improvements and still meet the project purpose and need do not exist. For example, there is no other location on the airfield to construct a north/south taxiway to serve Runways 4L/22R and 4R/22L. Its position between the runways is driven by FAA design criteria based upon the type of aircraft operations on the runways. Based on these design parameters, the taxiway must be offset a minimum of 400 feet from the centerline of either of the adjacent parallel runways. In addition, consideration was given to intersections with existing runways and avoidance of existing navigational equipment. As such, there is little opportunity to move the position of the Centerfield Taxiway in any manner that would significantly minimize impacts to upland sandpiper habitat.

Proposed Conservation and Management Plan

Insofar as impacts to upland sandpiper habitat have been identified and no viable Alternative for the proposed project exists, a Conservation and Management Plan has been developed to provide a long-term net benefit to the conservation of the local population of the upland sandpiper. It is important to understand that a primary consideration in development of the Plan is the continuation or enhancement of aviation safety. In this manner, the Plan strives to encourage the use of alternate areas on the airfield without encouraging new aviation hazards. Based on discussions and coordination with NHESP, the Plan is composed of three elements. These three elements involve:

- Alteration of existing airfield grassland mowing procedures to encourage upland sandpipers to use non-construction areas;
- Implementation of a pre-construction and an on-going pre-mowing upland sandpiper reconnaissance program; and
- Off-site mitigation.

Details of each of these plan elements follow.

Alteration of Existing Airfield Grassland Mowing Procedures

Previous studies and anecdotal observations indicate that upland sandpipers prefer areas of taller vegetation for nesting, commonly locating their nests within tufts of grass beneath the overhanging blades (Buss and Hawkins, 1939; Johnsgard, 1981; DeGraf and Rudis, 1986). While nests located in mowed fields have been reported, these sites were not regarded by any author as preferred habitat. Buss and Hawkins (1939) did report a

preference for loafing grounds with low tussocks and sparse vegetation no taller than the bird's back (approximately 9 inches). These reports are consistent with the observations made at Logan Airport in 1990 and 1996.

As described above, in maintaining the airfield, Massport's primary goal is aviation safety. With regard to avian species, this translates to an objective of discouraging flocking (e.g., starlings) and certain larger birds (e.g., gulls), which are a documented aviation hazard. The current infield management practice at Logan Airport consists of periodic mowing of all grassed areas in a rotation, such that continuous mowing is sufficient to maintain safe conditions throughout the growing season.

Safe conditions comprise vegetation heights and densities low enough to retard insect and rodent populations, and discourage feeding by bird species that present a threat to aviation safety. Since 1991, the FAA has recorded four documented upland sandpiper aircraft strikes. One of these events (Philadelphia, 11/30/92) was reported to have disrupted operation of one aircraft engine. More recently, an upland sandpiper aircraft strike involving a Delta 737 was documented at Logan Airport on August 13, 1997.

Over the past 3 to 4 years, the mowing rotation has begun with the cutting of perimeter areas, followed by mowing of the infield areas, with the area between Runways 4L/22R and 4R/22L mowed last. This sequence is followed specifically to avoid or minimize impacts to the upland sandpiper. When the areas between Runways 4L/22R and 4R/22L are mowed, maintenance personnel mark nest sites as they become aware of them and postpone mowing in their immediate vicinity until the end of the nesting season. In 1996, one confirmed and two suspected nesting areas were identified in this area. No other nesting areas on the airfield were found.

Following this mowing sequence, suitable nesting conditions remained between Runways 4L/22R and 4R/22L throughout much of the upland sandpipers' nesting period. Other areas of the airfield that were mowed earlier appear to have been not favored by the upland sandpiper.

Based on these findings and an understanding of the species' habits, it appears that the height of grasses at the initiation of nesting, rather than any specific location, is more critical for the selection of nest sites by the upland sandpiper. This suggests that with an alteration of the mowing sequence, other grassland areas of the airfield outside of high activity areas could serve as preferred nesting and breeding habitat.

Proposed Grassland Management Procedures

Both short-term and long-term mitigation measures are proposed relative to use of the airfield by upland sandpiper. Short-term measures will be implemented during construction of the Centerfield Taxiway and Taxiway Delta, while long-term measures will be integrated into Massport's continuing airfield maintenance program.

To encourage the use of alternate nesting areas for the upland sandpiper during periods of construction, the following management measures are proposed. Beginning in the spring prior to the start of construction (scheduled for 2002), the mowing schedule will be adjusted such that mowing begins in the area of the proposed Centerfield Taxiway, while designated alternate infield areas (between Taxiways Charlie and Foxtrot, and Charlie and Runway End 33L) remain unmowed until the end of the mowing rotation. Except as noted below, the area between Runway End 27 and Runway End 33L will not be placed in the mowing rotation until after the fledging of upland sandpiper chicks. This area has previously, but does not presently, support upland sandpiper nesting. In this area, prior to fledging, mowing will be limited to a perimeter strip directly adjacent to the runways and taxiways. These alternative nesting areas will provide greater protection to birds by reducing the likelihood of mortality, and may enhance reproductive success by providing a greater separation between nesting areas and active runways.

Post-construction, infield areas adjacent to the Centerfield Taxiway will once again be shifted to the end of the mowing rotation, consistent with existing practices. As always, however, the mowing sequence will depend upon wind and weather conditions, which dictate active runway usage. Two of the alternate infield areas will be mowed following mowing operations adjacent to Centerfield Taxiway. As part of the long-term management program, the infield area between Runway Ends 27 and 33L will only be mowed following upland sandpiper fledging. As is the current procedure, Massport preserves the right to amend the mowing protocol to meet operational requirements or if the proposed mowing schedule is found to compromise aviation safety. The NHESP would be notified prior to implementation of any long-term modifications of the mowing program.

Construction Period and Ongoing Grassland Reconnaissance

Prior to and during construction, a systematic reconnaissance will be conducted by Massport in all infield areas to be mowed throughout the nesting season to identify the locations of active nests. This search will focus on infield areas for which there is a historic record of upland sandpiper nesting. If active nests are encountered within other areas, these locations will be added to the areas to be checked. Once identified, nest areas will be marked in the field, and mowing in the vicinity postponed until after the fledging period. Through this process of active reconnaissance prior to mowing, there will be an additional level of protection for the local population over that which exists presently. Annually thereafter, bird reconnaissance will be conducted prior to mowing to provide a continued level of protection to breeding and nesting upland sandpipers.

Offsite Mitigation

While relocation of the existing population of upland sandpiper to other areas of the airfield is viable, enhancement of bird habitat at Logan Airport is not feasible due to the significant potential of increased aviation safety hazards and hazards to the birds. Such relocation does not constitute a “net benefit to the local population”, and accordingly the NHESP directed Massport to consider off-site mitigation to supplement the on-site mitigation. NHESP has identified Eastern Massachusetts as the range of the upland sandpiper local population.

Massport has worked closely with the NHESP on a program to provide a net benefit to the local population of upland sandpiper. This program would fund the restoration of a parcel of previously high quality grassland habitat at Camp Edwards on the Massachusetts Military Reservation on Cape Cod. This area is on a portion of Camp Edwards known as the cantonment area.

The cantonment area, a former military parade ground, supported a substantial population of upland sandpiper as recently as the mid-1990's. Since that time, there has been a gradual succession of this site from grassland to that of scrub vegetation such as bayberry and larger woody vegetation, predominantly pitch pine and eastern red cedar. As a result, a substantial portion of the area has evolved into unsuitable upland sandpiper habitat, and that population had declined to only a few nesting pairs in 1999. Restoration of this area to grassland is fully consistent with the Massachusetts National Guard's (MNG) August 1999 *Draft Master Plan/Area-wide Environmental Impact Report*.

To restore this area to grassland, in particular Little Blue Stem grass (*Schizachyrium scoparium*), Massport would fund a program to remove all existing shrub and woody vegetation down to a height that can be maintained by MNG using their existing mowing equipment. Wood chips and accumulated debris from the vegetation clearing operation will be removed to an offsite location. Clearing would be scheduled between September 1st and April 30th to avoid impacts to breeding birds.

To ensure the success of this program, Massport would make a one-time payment to fund any necessary vegetation removal by MNG during the season following the initial removal to maintain the site as Upland Sandpiper habitat. If necessary, selected areas that had a dense overstory and limited groundcover would be reseeded using native seed stock. A Memorandum of Understanding (MOU) between Massport and MNG to ensure implementation of the program is anticipated.

It is also anticipated that the MNG will commit to a grassland management plan previously developed for the cantonment area by NHESP (*Rare Grassland Birds and Management Recommendations for Camp Edwards / Otis Air National Guard*, NHESP, 1995) once Massport has funded restoration of the area.

In general, the NHESP grassland management plan presents the following recommendations to maintain or enhance habitat for rare grassland birds in the cantonment area at Camp Edwards:

- Restrict mowing between May and July to protect nesting and breeding birds
- Periodically mow areas to provide a diversity of grass height (3-12") and prevent encroachment of woody vegetation
- Restrict use of the area during the breeding season

In the event that such a restorations program at Camp Edwards is not possible, an appropriate alternative program, agreeable to the NHESP, will be developed and implemented.

6.6 Water Resources

The anticipated construction and operation impacts of the Preferred Alternative with regard to water resources are described in the following sections. Construction of the airside taxiway and/or runway improvements comprising the Preferred Alternative will change the total area of impervious surface on the airfield. Although there will be a net increase airfield-wide in impervious surface with all build Alternatives, there will be a net gain in pervious/grassed areas in several of the airfield subdrainage areas due to the removal of pavement in some areas. The addition of impervious area will result in a slight increase in the peak volume of runoff to Boston Harbor. Through the use of grassed swales and infiltration and low-flow stormwater quality treatment devices, increases in peak discharges will be minimized. Since fueling and maintenance do not occur on areas of the airfield where construction is proposed, a change in the quality of the runoff is not anticipated.

6.6.1 Volumetric Impacts to Water Resources

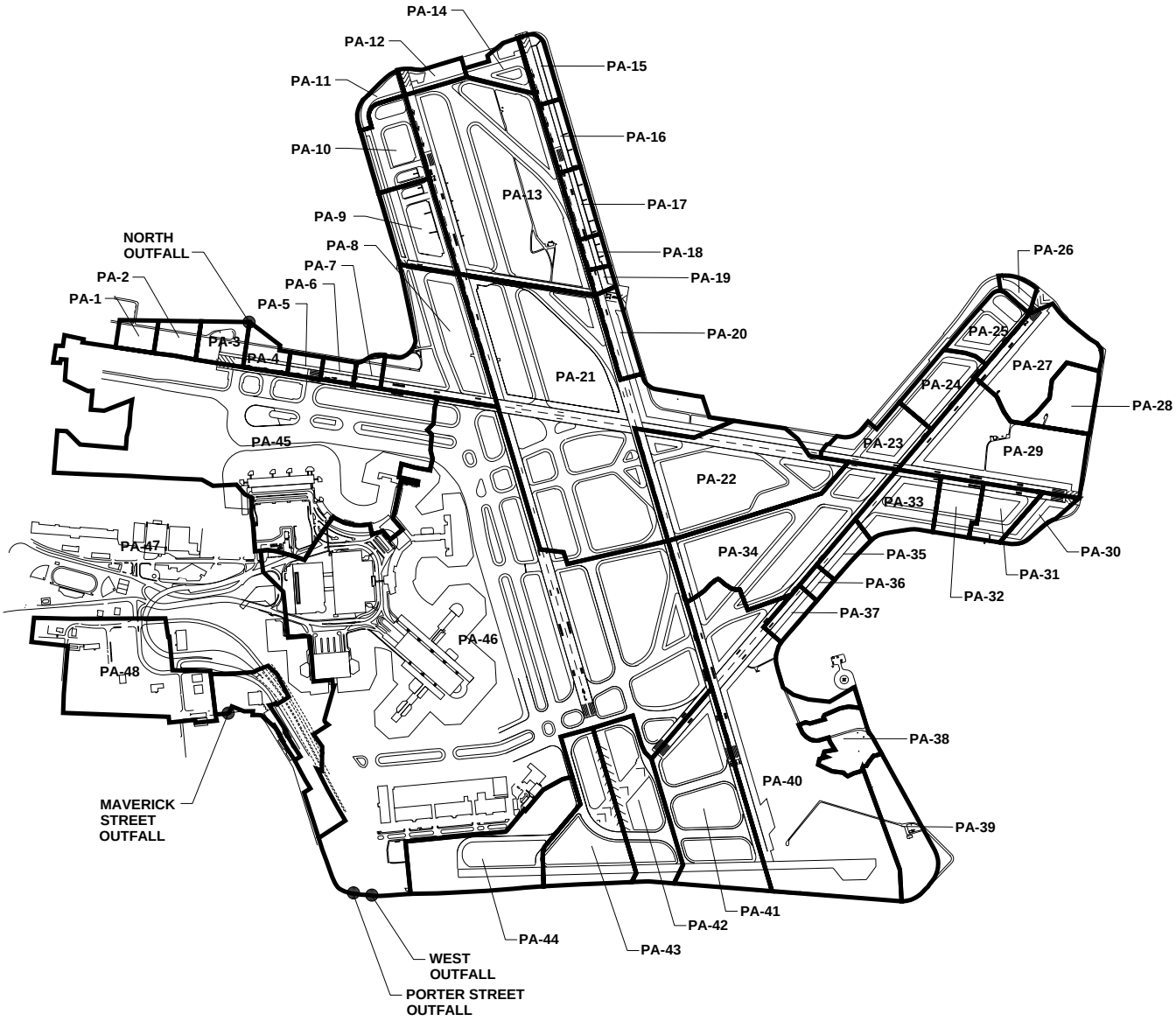
Construction of the runway and taxiway improvements under the Preferred Alternative will result in an increase of impervious surfaces, totaling approximately 37 acres or approximately 3.8 percent. The anticipated quantitative changes in runoff for the Preferred Alternative are summarized in Table 6.6-1.

Due to the dampening effect the incoming tide produces on the flow of stormwater through the airfield drainage system, the additional impervious surfaces will result in approximately a 3.8 percent increase in the peak rate of runoff. Water which is not evapo-transpired from presently vegetated areas will infiltrate the ground, and eventually discharge to Boston Harbor. There will be little to no measurable net change in airfield hydrology.

Table 6.6-1
Changes In Runoff Volume for the Preferred Alternative

Construction Element	Area of Pavement (acres)	Runoff (cubic feet)
Existing Airfield	990	150,072,912
Unidirectional Runway	+2.7	409,290
Centerfield Taxiway:		
North of 15R/33L	+16.8	2,551,240
South of 15R/33L	+13.3	2,022,195
Taxiway November Realignment	-1.6	-250,122
Taxiway Delta Extension	+7.5	1,138,432
Southwest Corner Optimization	-1.1	-169,779
Net Change	+37.6	+5,701,255
Percentage Change	+3.8%	+3.8%

Source: HNTB, 1999.



LEGEND

● Major Outfall

massport

Figure 6.6-1

Proposed Drainage Areas

7466-FIG-6.2-1.p65

The new runoff will be conveyed through existing and new sections of drainage pipe to the existing drainage system outfalls. No new outfalls will be required to support the Preferred Alternative improvements. However, several areas of airfield drainage will be redistributed to other existing outfalls. A conceptual layout of the reconfigured stormwater drainage areas is provided in Figure 6.6-1.

6.6.2 Impacts to Water Quality During Construction

The potential exists for temporary increases of suspended solids due to unavoidable siltation while presently paved and/or vegetated soils are removed and replaced by new vegetation and pavement. Extensive siltation controls will be installed and maintained during all portions of construction to minimize adverse water quality impacts. Construction will be phased to minimize the areal extent of bare soil at any one time. Construction phasing and mitigation measures are described in Section 6.9.

6.6.3 Impacts to Water Quality During Airport Operations

Changes to water quality during airport operation once the Preferred Alternative is in place will be minimal. Any incremental changes in impact would result from runoff from new taxiway and runway pavement and the normal airfield activities associated with aircraft departures and arrivals, as well as wintertime deicing.

As illustrated in Figure 6.6-1, there will be some reconfiguration of the airfield drainage patterns. The reconfiguration will redirect some drainage in the southwest corner of the airfield away from the West Outfall into existing airfield perimeter outfalls A-41, A-42 and A-43. Presently, the West Outfall handles stormwater flows from the terminal, apron and fueling areas of the airport in addition to portions of the airfield. The West Outfall is equipped with an oil/water separator for treatment of the flows from the terminal, apron and fueling areas.

Stormwater to be redirected away from the West Outfall Runoff to the perimeter outfalls consists of flows from the airfield, including runways, taxiways and grassed infield areas. These portions of the airfield do not generate significant concentrations of contaminants. However, rather than discharging stormwater from these watersheds directly to the Harbor, Massport will install a low-flow water quality treatment structure to collect runoff from the first stormwater flush of these paved areas. The treatment device will be an off-line structure that would treat the first flush while allowing larger storms to by-pass the structure. The pollution prevention device would remove any sediment and floatables from the first flush and store them for subsequent removal and disposal.

Because the drainage system for the West Outfall includes the majority of the terminal area plus some taxiways and runways, this redirection of runoff will reduce the hydraulic load on the existing pollution control facility for the West Outfall. This will enhance its performance by reducing the volume of diluting taxiway and runway runoff that are minor sources of pollutants. All stormwater from fueling and maintenance areas will continue to

pass through the existing West Outfall pollution control facility. As stated previously, no fueling occurs in areas of the airfield where construction is proposed.

Therefore, although the pollutant loading to the harbor may be increased slightly as the result of deicing Runway 14/32, the general quality of runoff from the airfield is expected to be similar to present runoff, as previously discussed in Section 5.6 and shown in Table 5.5-1 of the Airside Project Draft EIS/EIR. Operation of the low flow stormwater quality treatment device is expected to minimize potential adverse water quality impacts to the maximum extent practicable. The data indicate that the existing airfield runoff meets the DEP's Class SB water quality standards. Because aircraft operations are expected to be more efficient, resulting in shorter taxiing times, the contribution of aircraft pollutants is expected to be reduced as well.

6.6.4 Consistency with DEP Stormwater Management Policies

Construction of the runway and/or the taxiway improvement components of the Preferred Alternative will require work within the 100-foot buffer zone as defined under the Massachusetts Wetlands Protection Act (see Section 6.5.2). Work within the buffer zone or associated resource areas is now subject to the DEP's Stormwater Management Policy and associated performance standards. A series of nine performance standards have been established. All new runway/taxiway construction within areas subject to the Stormwater Management Policy will be required to meet or exceed all applicable policies. Each of the policies are summarized below, together with a discussion of the project's compliance with each of the nine policies.

Policy 1

No new stormwater conveyances (e.g., Outfalls) may discharge untreated stormwater directly to or to cause erosion in wetlands or waters of the Commonwealth.

Consistency. The Preferred Alternative does not include any new or resized outfalls. Runoff from new paved areas will be handled through modifications to the existing airfield drainage system that result in better utilization of outfalls that are currently under capacity. A low flow stormwater quality treatment device may be installed to treat first-flush drainage from portions of the airfield drainage being redirected away from the West Outfall.

Policy 2

Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

Consistency. Not applicable. The Preferred Alternative will continue to discharge to tidal waters. As stated in the DEP's Explanation of Standards, on Page 1-5 of the Stormwater Policy Handbook, discharges to waters subject to tidal action are not required to maintain pre-development peak discharge rates.

Policy 3

Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types.

Consistency. Because of existing soil conditions, the extent of paved surfaces, and the shallow depth of tidally influenced groundwater, the airfield does not serve as a groundwater recharge resource. The proposed construction and operation will not significantly alter site recharge characteristics.

Policy 4

For new development, stormwater management systems must be designed to remove 80 percent of the average annual load of total suspended solids (TSS).

Consistency. Existing airfield runoff data indicate an average suspended solids concentration of approximately 11 mg/l, or less. Massport will install a low flow stormwater quality treatment device to handle first-flush drainage from paved areas where flow is being directed away from the West Outfall. For other sections of the airfield, solids removal will be accomplished as stormwater is directed across grassed infield areas via overland flow to the drainage system.

Policy 5

Stormwater discharges from areas with higher potential pollution loads require the use of specific stormwater Best Management Practices (BMPs). The use of infiltration practices without pretreatment is prohibited.

Consistency. Massport currently employs a range of BMPs in the operation of the airfield. Elements of these procedures include maintenance of stormwater catchbasins, inspection of the stormwater collection system, specified areas for vehicle maintenance, maintenance of spill reporting log, among other measures. The airfield is not considered a generator of higher pollutant loading.

Policy 6

Stormwater discharges to critical areas must utilize certain stormwater management BMPs for critical areas.

Consistency. All new stormwater drainage system components in areas of new runway and/or taxiway construction will be operated and maintained in accordance with Best Management Practices.

Policy 7

Redevelopment of previously developed sites must meet Stormwater Management Standards to the maximum extent practicable.

Consistency. Airfield redevelopment will meet the Stormwater Management Standards to the maximum extent practicable.

Policy 8

Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.

Consistency. A site-specific comprehensive erosion and sediment control plan will be developed for implementation until disturbed areas are stabilized, to prevent impacts during construction. No discharge will be made to critical areas.

Policy 9

All stormwater management systems must have an operation and maintenance (O&M) plan to ensure that systems function as designed.

Consistency. New components of the stormwater drainage system will be operated and maintained in accordance with current airfield stormwater management Best Management Practices included in the draft Stormwater Pollution Prevention Plan (SWPP) developed as part of Logan Airport's NPDES permit application.

6.7 Soils/Sediment Impacts

This section contains information on soil-related activities associated with the proposed construction of the Preferred Alternative. Construction will not take place in Boston Harbor and therefore impacts from the disturbance of marine sediment are not present.

Disposal of soils excavated for runway and taxiway construction will therefore be regulated under the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000) and will be managed in accordance with a project-specific Soil Management Plan. A discussion of the MCP and the Soil Management Plan is provided in the following sections.

6.7.1 Massachusetts Contingency Plan (MCP)

The purpose of the MCP is to "provide for the protection of health, safety, public welfare, and the environment" by instituting a uniform mechanism for identifying contaminated soils and groundwater and implementing appropriate corrective actions.

In terms of soil excavation, excess excavate from construction must be managed appropriately. Soils are termed "non-remediation wastes," if the constituents in the soil do not trigger the notification requirements for the site specific "site activities and uses." If the opposite is true and the contaminant constituents trigger DEP notification, the materials are termed "remediation wastes." The MCP procedures for the management of remediation wastes are at 310 CMR 40.0030.

The Soil Management Plan developed by Massport for construction projects at Logan Airport, which are described below, is consistent with the MCP and dictates how excess excavate will be reused, recycled or disposed.

6.7.2 Massport Soil Management Plan

For Logan Airport construction projects, Massport developed a Soil Management Plan which dictates specific requirements to which contractors must adhere to in determining the chemical characteristics of excavation materials and determine how the materials should be reused, recycled and / or disposed. Those same criteria will be applied in the Airside Project.

Massport's Soil Management Plan was adopted using a conservative approach to protect environmentally sensitive areas. The MCP (310 CMR 40.0000) contains criteria by which one can determine appropriate soil disposal conditions and / or locations, consistent with land use receptor characteristics as identified in Table 40.933(9) of the MCP. Massport has taken the conditions allowed within the MCP and adopted a more stringent approach that no excavation materials from Logan, no matter what the characterization results, will be disposed at sensitive areas such as residential, recreational or wetland areas.

The Massport Soil Management Plan considers soil to be either unregulated or regulated as follows:

- **Unregulated soils** are those soils having chemical concentrations equal to or of lower than the MCP Method 1 Risk Characterization soil standards for soil category S-1 and groundwater category GW-2 / GW-3. Unregulated soils may be used as backfill at Logan Airport or used off site on industrial sites where soil quality concentrations are higher than the unregulated soil, and which may be capped with pavement or loamed and seeded. Unregulated soils cannot be disposed of in sensitive areas such as residential, recreational or wetland areas.

- **Regulated soils** are those soils having chemical concentrations which are equal to or greater than the MCP Method 1 Risk Characterization soil standards for soil category S-1 and groundwater category GW-2 / GW-3. Regulated soils may only be beneficially reused or recycled at Logan Airport if the contaminant concentrations are less than S-2 levels, or at off-site DEP, permitted facilities. They may also be disposed of out-of-state at similar facilities. Regulated soils cannot be disposed in sensitive areas such as residential, recreational or wetland areas.

This combination of S-1/S-2 GW-2/GW-3 categories is the simplest form of risk characterization and means that Massport has eliminated all residential, recreation, and wetland areas as possible disposal sites for excavation materials from Logan.

6.7.3 Construction Area Soil Sampling Program

Construction of Runway 14/32 and the taxiway improvement components as part of the Preferred Alternative will require the excavation of unsuitable or excess soils. Table 6.6-2 of the Airside Project Draft EIS/EIR estimated that approximately 537,000 cubic yards of soil would be excavated if all the improvement elements were constructed. The Airside Project Draft EIS/EIR assumed a uniform depth of excavation throughout the construction area to develop a worst-case estimate. As the concept design has evolved between the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR, the excavation requirements have been refined, resulting in a revised excavation requirement of approximately 264,000 cubic yards. Of this excavation volume, approximately 131,000 cubic yards of miscellaneous fill will be reused at locations along the airfield construction during the final grading for shoulders and other uses. There will be 83,500 cubic yards of excavated soil materials and 49,500 cubic yards of bituminous pavement removed from Logan Airport for reuse/recycling/disposal at permitted facilities. The difference in excavation volumes between the Airside Project Draft EIS/EIR (537,000 cubic yards) and the Supplemental DEIS/FEIR (264,000 cubic yards) is due to site-specific soil data that were obtained through a recent soil boring program for geotechnical and environmental information (See Section 5.7.1).

6.7.3.1 Unidirectional Runway 14/32

The soil pre-construction characterization data indicate that the soil under the footprint of the proposed unidirectional Runway 14/32 does not exceed the Reportable Concentrations for S-2 soil. Design information indicates that there will not be any excavation of the common borrow that was used to fill Bird Island Flats and which underlies much of the runway alignment. An estimated 82,000 cubic yards of soil will be excavated. Of this volume, approximately 37,000 cubic yards will be reused for surface grading.

6.7.3.2 Centerfield Taxiway

Construction of the Centerfield Taxiway will require the excavation of approximately 52,000 cubic yards of soil material and the removal from the Airport of 11,000 cubic yards of existing fill. Approximately 41,000 cubic yards of soil will be reused. The soil pre-construction characterization data indicate that soil underlying the Centerfield Taxiway contains variable levels of contamination. The soil data indicate that no volatile compounds were present nor were any of the aliphatic fractions from the total petroleum hydrocarbon tests. The soil was found to exceed the S-2 Reportable Concentrations (RC S-2) for the polynuclear aromatic hydrocarbons, as determined in the EPH analysis. The PAH contamination was found from Taxiway Echo north to Taxiway Romeo. Beryllium

was the only priority pollutant metal to exceed the RC S-2. This condition was found adjacent to Runway 15L/33R and between Taxiways Echo and Charlie. Lead in the soil was found to exceed the 100 mg/Kg Toxicity Characteristic Leaching Procedure (TCLP) trigger level by a slight amount (110-120 mg/Kg) at three scattered locations. The TCLP test is one measure of the toxicity of a sample and upon exceeding regulatory limits it is determined to be TCLP hazardous. The results of the TCLP testing indicate that the soil did not exceed the TCLP regulatory limit of 5.0 mg/l for lead and is, therefore, not hazardous. The insecticide Dieldrin was found in the soil at eight locations. It is believed that the Dieldrin originated from historical mosquito control programs. The soil was found to not contain polychlorinated biphenyls.

6.7.3.3 Taxiway November Realignment

Soil underlying the area for the realignment of Taxiway November was found to be contaminated in excess of the Reportable Concentrations for S-2 soil with four polynuclear aromatic hydrocarbon (PAH) compounds and the insecticide Dieldrin. This contamination was only found in the surface soils (0-2 feet). The soil data indicate that no volatile compounds were present nor were any of the aliphatic fractions from the total petroleum hydrocarbon tests. Design information indicates that approximately 43,500 cubic yards of soil material will be excavated and 43,000 cubic yards of fill will be removed from Logan. Plans indicate that approximately 500 cubic yards will be reused onsite.

6.7.3.4 Southwest Corner Taxiway Reconfiguration

The soil sampling and analysis data indicate that the soil in the area of the Southwest Corner Taxiway Reconfiguration contains concentrations of four PAH compounds and the insecticide Dieldrin which exceed the Reportable Concentrations for S-2 soil. The soil data indicate that no volatile compounds were present nor were there any of the aliphatic fractions from the total petroleum hydrocarbon tests. Design information indicates that approximately 5,000 cubic yards of soil will be excavated and reused onsite.

6.7.3.5 Taxiway D Extension

The extension of Taxiway D will require the excavation of approximately 32,000 cubic yards of miscellaneous soil materials, all of which will be removed from the Airport except for 6,000 cubic yards reused onsite.

6.7.3.6 Massachusett Contingency Plan (MCP) Response Actions

As discussed in previous sections, certain contaminant concentrations were found to exceed the MCP Soil Category S-2 reportable concentrations resulting from a pre-construction characterization that was performed. As a result, Massport transmitted a Release Notification Form to DEP in January 2000. A Release Tracking Number (RN) of 3-19157 was assigned to the site by DEP. Through the performance of a Method 3 Risk Characterization, it was determined that certain concentrations of dieldrin in the vicinity of Sierra and Uniform

Taxiways and Runway 4R required remediation. Massport transmitted a Release Abatement Measure (RAM) Plan to DEP and subsequently removed the dieldrin source area. In January 2001, Massport transmitted a RAM Completion Report and Response Action Outcome. These documents state that a Condition of No Significant Risk to human health, safety, public welfare, and the environment exists at the site, and the conditions of a Class A-2 RAO have been met. No further MCP response actions are required.

6.7.4 Soil Management

The results of the soil pre-construction characterization program indicate that the soil underlying Runway 14/32 does not exceed the Reportable Concentrations for S-2 soil. Soil underlying the proposed construction areas for the Centerfield Taxiway, the realignment of Taxiway November and the Southwest Corner Taxiway realignment do exceed the Reportable Concentrations for S-2 soil. It is Massport's plan to reuse excavated soil on Logan Airport wherever feasible. Massport does not allow any soil from Logan Airport to be reused/recycled/disposed at sensitive off-site areas (near wetlands, drinking water supplies, and dwellings). Soil generated at Logan Airport may be reused in industrial sites as long as the soil is of comparable quality to the soil at the industrial site. Otherwise it must be disposed of at a state-approved lined landfill. In keeping with Massport's Soil Management Plan, the pavement will be either recycled at state approved in-state or out-of-state recycling facilities or disposed at approved in-state or out-of-state lined landfills.

6.8 Environmental Justice

The Environmental Justice analysis in the Airside Project Draft EIS/EIR was expanded for this Supplemental DEIS/FEIR. Noise was found to be the only adverse impact associated with the Preferred Alternative with the potential for environmental justice impacts. Additional demographic analyses of the noise-affected areas, as well as of the affected municipalities, were conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.

An additional area within the 65 dB DNL contour associated with the Preferred Alternative includes a predominantly Hispanic neighborhood in Chelsea that would experience an increase in noise of 0.6 dB DNL or less. Under FAA standards, this change is not a significant adverse impact (see discussion at Section 6.2.2.3). Moreover, mitigation of the increased noise will be provided to the affected community in the form of sound insulation. As a result, there is no disproportionate high and adverse impact on minority or low-income populations resulting from the Preferred Alternative.

As to the communities surrounding Logan, only 21 percent of the population within the 65 dB DNL contour is minority, compared to the Suffolk County minority population of 38 percent. Less than 2 percent of the population within the 65 dB DNL contour has a household income less than 150 percent of poverty level. The following sections provide a more detailed discussion of the environmental justice analysis of the impacts of the Preferred Alternative.

6.8.1 Introduction

The analysis of project impacts on minority and low-income communities that follows is conducted in accordance with federal Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the National Environmental Policy Act (NEPA), and the Department of Transportation Order to Address Environmental Justice in Minority Populations and Low-Income Populations (Final US DOT Order).[12]

EO 12898, issued in 1994, requires "each Federal agency [to] make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...." The U.S. Department of Transportation (DOT) published the Final US DOT Order in 1997,[13] setting forth a process by which DOT and its operating administrations will integrate the goals of EO 12898 with its existing regulations and guidance. The Final US DOT Order defines key terms, and provides guidance for identifying and addressing disproportionately high and adverse impacts to low-income and minority populations. Additional directives for implementing EO 12898 within the context of the NEPA process are provided by the Council on Environmental Quality (CEQ) in *Environmental Justice Guidance under the National Environmental Policy Act*.[14]

NEPA directs federal agencies to consider social, economic, and environmental factors in the evaluation of proposed actions. The Federal Aviation Administration has specified that environmental impact statements prepared for airports are to identify social impacts, such as community disruption, and identify the degree of impact and measures to minimize such impact.[15]

The May 7, 1999 EOEA Certificate Airside Project Draft EIS/EIR also directs Massport to provide the following information within the context of an environmental justice analysis: more detailed demographic data on the affected populations in both tabular and graphic form, analysis of the full range of impacts (including noise impacts within the 60 dB DNL contour), a comparison of the affected population with that of Boston and

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12 U.S. DOT, April 15, 1997, Final US DOT Order 5610.2, *Federal Register,* Volume 62, No. 72.
13 Ibid.
14 Council on Environmental Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act,* 1997.
15 FAA, October 8, 1985, *Airport Environmental Handbook*, Order 5050.4A.

the other affected municipalities, and a discussion of the community participation process used in preparing the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR.

6.8.2 Summary of Impacts of the Preferred Alternative

The following sections provide a summary of the environmental impacts of the Preferred Alternative as identified through the NEPA/MEPA environmental review process. For a more detailed discussion of each of these impact areas, refer to the appropriate section of this chapter. All impacts to biotic communities, water resources, and soils/sediments will occur on Massport property and will not affect adjacent communities within the study area.

6.8.2.1 Noise

The noise analysis is based on modeled noise impacts associated with the 29M Low Fleet scenario. This scenario presents the worst case for noise impacts in terms of the size of the noise-impacted population among all the alternative scenarios analyzed. All other scenarios show less noise impacts.

The established FAA threshold for adverse noise impacts in residential areas is 65 dB DNL. FAA Order 5050.4A, states "FAA's threshold of significance for noise impacts has been determined to be a 1.5 dB DNL increase in noise over any noise sensitive area located within the 65 dB DNL contour." Areas within the 60 dB DNL noise contour also were identified in accordance with the MEPA certificate.

Under the Preferred Alternative, unidirectional Runway 14/32 directs more airport noise over the water and allows for a more equitable distribution of aircraft operations consistent with PRAS goals. The Preferred Alternative results in a reduction of population exposed to DNL values greater than or equal to 70 and 75 dB DNL. These noise reductions benefit the communities that are currently most heavily impacted by noise—East Boston, Winthrop and Revere.

Under current conditions, Runway 15/33 is utilized significantly less than its intended utilization factor in accordance with the PRAS goals. This situation would be expected to continue without Runway 14/32. With Runway 14/32, Runway 15/33 will be able to be utilized at levels closer to those set out in the PRAS goals. (See discussion in Section 4.6.5.) The greater use of Runway 15R/33L in accordance with PRAS goals allowed by Runway 14/32 will result in a slightly larger population within the 65 dB DNL contour when compared to the No Action Alternative. The total population within the 65 dB DNL contour for the Preferred Alternative (29M Low Fleet scenario) is projected to be 17,894, an increase of 378 people (2 percent) when compared to the No Action 65 dB DNL population of 17,516.

According to the noise analysis conducted for this Supplemental DEIS/FEIR, the increase in noise levels is 0.6 dB or less in the area newly included within the 65 dB DNL contour under the Preferred Alternative. Under FAA's noise impact criteria, the increase in noise in these areas is not significant. Dwellings within these areas will become eligible for

sound insulation under FAA's criteria, and will be sound insulated as part of the Preferred Alternative. (See Chapter 8 for a discussion of mitigation commitments.)

Implementation of the Preferred Alternative is expected to produce a reduction in ground taxi noise at the following noise monitoring stations:

- Loring Road at Court (#7), Winthrop;
- Bayswater and Shawsheen (#10), East Boston;
- East Boston Yacht Club (#12);
- Somerset and Johnson (#6), Winthrop;
- Jeffries Point Yacht Club (#14), and
- Sumner Street near Lamson (A), East Boston.

Therefore there are no adverse ground noise impacts associated with the Preferred Alternative.

6.8.2.2 Land Use

The Preferred Alternative involves operational and construction improvements to reduce delay and enhance safety at Logan, and is restricted to activities and purposes compatible with normal airport operations and existing land use plans. The noise analysis indicates that the Preferred Alternative will reduce noise in areas with the highest noise impacts, but will slightly increase the population within the 65 dB DNL contour, when compared to the No Action Alternative.

All construction will occur on the existing airfield. There will be no displacement or relocation of any residential housing, community institutions or off-airport businesses as a result of implementation of the Preferred Alternative. The only relocation required is for the commercial tenants of Building 60 in the South Cargo area of the airport, and relocation assistance as required under state and federal law will be provided to mitigate this impact. A more detailed discussion of land use impacts is provided in Section 6.3.

6.8.2.3 Air Quality

Due to improved airfield efficiency and shorter delay periods, the Preferred Alternative is projected to result in a slight reduction of emissions of air pollutants when compared to the No Action Alternative. The increased use of Runway 15/33 under Preferred Alternative does not result in an adverse air quality impact as modeled at the Eagle Hill receptor site located in East Boston at the Runway 15 end. Ambient levels of air pollutants at the Eagle Hill receptor site, as well as throughout the study area, are expected to be well within ambient air quality standards and guidelines under all future fleet scenarios. Therefore, there are no adverse air quality impacts associated with the Preferred Alternative.

6.8.2.4 Construction

Construction of the runway and taxiway improvements will occur on the existing airfield. Construction will be managed to minimize air, noise and other impacts to the adjacent community. All construction vehicles will be required to access Logan Airport via Route 1A or the Ted Williams Tunnel on designated haul routes. Construction traffic will be kept on Logan Airport roadways or the state highway system and will not be allowed on local community streets, except for a short section of Neptune Road for access to the north construction gate. A more detailed discussion of construction impacts is provided in Section 6.9 of this Supplemental DEIS/FEIR**.**

An analysis of construction noise impacts indicates that the noise increases projected as a result of construction range from 0 dBA to 0.8 dBA with respect to the ambient level. Based on Federal Highway Administration criteria that categorizes less than a 5 dBA increase as 'no impact,' no construction noise impact is predicted at any off-airport residential sites. Therefore, there are no adverse construction impacts associated with the Preferred Alternative.

6.8.3 Methodology and Key Definitions

6.8.3.1 Methodology

The analysis of impacts conducted for this Supplemental DEIS/FEIR identified noise as the only off-site environmental impact associated with the Preferred Alternative with the potential to cause disproportionately high and adverse health or environmental effects on minority and/or low-income populations. The environmental justice analysis which follows therefore assesses the potential for disproportionate noise impacts to low-income and minority populations.

The data presented are based on 1990 U.S. Census Data[16] using Geographic Information System (GIS) technology to analyze impacts at a Census Block level where the data are available. The "Block" represents the most detailed level of census data. In addition, the estimates of 1995 population (total and minority) for all cities and towns in Massachusetts, developed by the Massachusetts Institute for Social and Economic Research (MISER), were reviewed. No comparable estimate of 1995 low-income population was available. The 1995 population estimates are not available at a Block Group level and therefore were not used to update this analysis. Nonetheless, the 1990 Census Block data were compared to the 1995 population estimates to assure that there are no meaningful differences in the data relevant to the environmental justice analysis (See Table 6.8-1).

16 The U.S. Bureau of the Census conducted the most recent decennial census in the spring of 2000. Initial data on statewide population was released in December 2000. More detailed information from the 2000 decennial census will become available with the release of Public Law 94-171 in March 2001 and continuing throughout 2003. These initial data are redistricting data summary files at the block level with population totals, age of population 18 and older, and race/ethnicity that are released to the legislature and governors of each state. In mid summer 2001, household relationship, detail age and housing tenure data will be available. Detailed socioeconomic data will be released throughout 2002. Source: U.S. Department of Commerce, U.S. Census Bureau Website (www.census.gov), and U.S. Department of Commerce, U.S. Census Bureau Boston Regional Office, Verbal Communication with Tia Costello, January 08, 2001.

Table 6.8-1
1995 Estimate of Minority Population in Study Area Political Jurisdictions Affected by 65 dB DNL

City	Total Population	Percent Change from 1990	1995 Estimated Population by Race/Hispanic Origin: White[1]		Percent Change from 1990	Non-White[2] and Hispanic		Percent Change from 1990
Boston	564,328	-1.75%	314,687	(56%)	-7.87%	249,641	(44%)	6.30%
Chelsea	29,727	3.54%	15,382	(52%)	-12.2%	14,345	(48%)	25.32%
Revere	43,698	2.13%	38,541	(88%)	-0.87%	5,157	(12%)	31.85%
Winthrop	18,195	0.38%	17,528	(96%)	-0.24%	667	(4%)	20.18%
Total (Suffolk County)	**655,948**	**-1.20%**	**386,138**	**(59%)**	**-6.54**	**269,810**	**(41%)**	**7.58%**

Source: Massachusetts Institute for Social and Economic Research (MISER).
1 Not of Hispanic origin.
2 Includes all persons who indicated their race as African-American, American Indian, Asian or Pacific Island and Other Race.

The minority and low income populations within the 65 dB DNL contour as delineated by the Airside Project noise impact assessment were identified for the No Action Alternative and Preferred Alternative under the 29M Low Fleet scenario, which represents the highest impact scenario. The 65 dB DNL contour is the thresholds established by FAA for adverse noise impacts in residential areas. A similar analysis was developed for the population within the 60 dB DNL noise contour in accordance with the Massachusetts Secretary of Environmental Affairs' Certificate on the Draft Environmental Impact Report.

The characteristics of the population within the 60 and 65 dB DNL contours were also compared to the characteristics of those political jurisdictions affected by these noise contours. The political jurisdictions affected by the 65 dB DNL contour include the Cities of Boston, Chelsea and Revere, and the Town of Winthrop, which collectively comprise Suffolk County. The City of Everett is added to the above list for communities affected by the 60 dB DNL contour.

Analysis conducted for the Airside Project Draft EIS/EIR first identified census blocks that were 50 percent or more minority, and then counted the total population within those blocks to determine the minority population. Low-income populations were identified by the median income for the census block group. The entire population of the block group was considered to be low-income if the median household income for the block group was at or below the identified poverty level. A combined total of the minority and low-income populations was reported in the Airside Project Draft EIS/EIR.

A more detailed demographic analysis was conducted for this Supplemental DEIS/FEIR, the results of which are described below.

All minority individuals for the census blocks within the 60 and 65 dB DNL noise contours were identified from the 1990 census data. The minority population presented in this Supplemental DEIS/FEIR represents the total minority population within the identified noise contours. The methodology to identify low-income populations was the same for both the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR. Low-income populations were identified by the median income for the census block group. The entire population of the block group was considered to be low-income if the median household income for the block group was at or below the identified poverty level. An additional level of analysis was conducted in this Supplemental DEIS/FEIR to identify the population at 150 percent of the federal poverty level. This Supplemental Draft EIS/Final EIR presents the minority and low-income populations separately, instead of as a combined total as was done for the Airside Project Draft EIS/EIR analysis.

6.8.3.2 Definitions

Minority Population

A minority person is defined as an individual who is a member of one of the following population groups: Black (not of Hispanic origin), Hispanic, Asian, and American Indian or Native Alaskan. According to the Final US DOT Order, a minority population means any readily identifiable groups of minority persons that live in geographic proximity. CEQ Guidance states that minority populations should be identified where either (a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. Information on race and Hispanic origin was analyzed at the Block Level utilizing the 1990 U.S. Census, which is the most detailed level of population data made available by the U.S. Bureau of Census.

Low Income

The Final US DOT Order defines low-income persons as those whose "median household income is below the United States Department of Health and Human Services poverty guidelines." CEQ Guidelines state that low-income populations should be identified with the annual statistical poverty thresholds developed by the Bureau of the Census. The Logan Airside Project improvements Planning Project used the 1990 U.S. Census as the data base for demographic analyses.

The federal definition of poverty level varies by size of family and number of related children under 18 years. Average poverty thresholds in 1990 ranged from $6,652 for one person, to $26,280 for households with nine or more family members**.** (See Appendix I.) According to the 1990 census, the average household size in Massachusetts is 2.68 persons, and in Suffolk County it is 2.51 persons. (Logan Airport and the majority of the study area

are located in Suffolk County.[17]) A family size of three therefore was selected as representative.

The population was considered to be a low-income population if the median household income was at or below $10,560. This represents the 1990 federal poverty level for a three-person household as defined by the U.S. Department of Health and Human Services.[18] In order to provide additional analysis of a broader range of incomes, the environmental justice analysis was also conducted using a median household income of 150 percent ($15,840) of the poverty level for a family of three. Information on income was analyzed at a Block Group level, the most detailed level of information available from the 1990 Census regarding income.

High and Disproportionate Adverse Impacts

Adverse impacts to low-income and / or minority populations are considered "high and disproportionate" if: (a) the adverse impact is predominantly borne by a minority population and / or a low-income population, or (b) the adverse impact that will be suffered by the minority population and / or low-income population is more severe or greater in magnitude than the adverse impact that will be suffered by the non-minority population and / or non-low-income population. The Final US DOT Order directs FAA to determine disproportionate impact, taking into account mitigation, enhancement measures and all off-setting benefits to the affected populations, as well as the design, comparative impacts and the relevant number of similar existing system elements in non-minority and non-low income areas.

6.8.4 Baseline Socioeconomic and Demographic Characteristics of Affected Jurisdictions

A determination of "disproportionately high and adverse impacts" to a low-income or minority population is based on a comparison of the impacts on these populations to the impacts experienced by the affected population as a whole. The Area of Potential Affect for the Logan Airport Airside Project improvements Project was identified as those political jurisdictions (cities and towns) affected by the 65 dB DNL contour, which is consistent with the federal definition of adverse noise impact contained in FAR Part 150. The potentially affected area for noise impacts was chosen to delineate the study area because noise is the most widespread impact. The population within the 60 dB DNL noise contour was also analyzed to be consistent with the MEPA Certificate on the Airside Project Draft EIS / EIR. The political jurisdictions affected by the 65 dB DNL contour include Boston, Chelsea, Winthrop and Revere, which collectively comprise Suffolk County. The City of Everett is added to this list of potentially affected communities under the 60 dB DNL noise contour. Tables 6.8-2 to 6.8-6 provide a summary of selected socio-economic and demographic characteristics of these communities. This information is used to provide a baseline against which to compare the characteristics of the population within the 65 and 60 dB DNL contours.

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17 Average household size was determined by dividing the number of persons by the number of households as provided in Landview III, which uses the 1990 U.S. Census as a database.

18 The 1999 poverty level for a family of three as report by the U.S. Department of Health and Services is $13,880.

Table 6.8-2
Median Household Income of Political Jurisdictions within the 60 dB DNL Noise Contour

Jurisdiction	Median Household Income ($)	Percent Below Poverty Level
Boston	29,180	18.7%
South Boston[1]	25,539	17.3%
East Boston[1]	22,925	19.3%
Chelsea	25,144	24.1%
Everett	30,786	9.6%
Revere	30,659	11.6%
Winthrop	37,240	5.7%
Suffolk County	29,399	18.1%

1 Neighborhoods within the City of Boston provided for informational purposes. Population included within the City of Boston totals.
Source: 1990 U.S. Census Data

Table 6.8-3
Minority Population of Political Jurisdictions Affected by the 65 dB DNL Noise Contour

City	Total 1990 Population	1990 Population by Race/Hispanic Origin	
		White[1]	Non-White[2] and Hispanic
Boston	574,283	339,458 (59%)	234,825 (41%)
South Boston[3]	29,495	28,257 (96%)	1,238 (4%)
East Boston[3]	32,941	25,171 (76%)	7,770 (24%)
Chelsea	28,710	17,263 (60%)	11,447 (40%)
Revere	42,786	38,875 (91%)	3,911 (9%)
Winthrop	18,127	17,572 (97%)	555 (3%)
Total (Suffolk County)	**663,906**	**413,168 (62%)**	**250,788 (38%)**

Source: 1990 U.S. Census Data
1 Not of Hispanic origin.
2 Includes all persons who indicated their race as African-American, American Indian, Asian or Pacific Island and Other Race, not of Hispanic origin.
3 Neighborhoods within the City of Boston provided for informational purposes. Population included within the City of Boston totals.

Table 6.8-4
Minority Population of Political Jurisdictions Affected by the 60 dB DNL Noise Contour

City	Total 1990 Population	1990 Population by Race/Hispanic Origin			
		White[1]		Non-White[2] and Hispanic	
Total Suffolk County[3]	663,906	413,168	(62%)	250,788	(38%)
Everett	35,701	32,010	(90%)	3,691	(10%)
Total	**699,607**	**445,178**	**(64%)**	**254,479**	**(36%)**

Source: 1990, U.S. Census Data
1 Not of Hispanic origin.
2 Includes all persons who indicated their race as African-American, American Indian, Asian or Pacific Island and Other Race, not of Hispanic origin.
3 See Table 6.8-2 for detailed information on political jurisdictions within Suffolk County.

Table 6.8-5
Estimate of 1995 Minority Population in Study Area Political Jurisdictions Affected by 60 dB DNL

City	Total Population	Percent Change from 1990	1995 Population by Race/Hispanic Origin					
			White[1]		Percent Change from 1990	Non-White[2] and Hispanic		Percent Change from 1990
Total Suffolk County	655,948	-1.20%	386,138	(59%)	-6.54%	269,810	(41%)	(7.58%)
Everett	36,307	1.69%	32,336	(89%)	1.01%	3,971	(11%)	(7.59%)
Total	**692,255**	**-1.06%**	**418,474**	**(60%)**	**-6.35%**	**273,781**	**(40%)**	**(7.58%)**

Source: Massachusetts Institute for Social and Economic Research (MISER).
1 Not of Hispanic origin.
2 Includes all persons who indicated their race as African-American, American Indian, Asian or Pacific Island and Other Race.
3 Not of Hispanic origin.

Table 6.8-6
Estimated Population within the 65 dB DNL Contour
No Action Alternative - 29M Low Fleet Scenario

	Non-Hispanic White Population 65 dB DNL	Minority Population 65 dB DNL	Total Population 65 dB DNL	Household Income	
				<$10,560 Poverty Level	<$15,840 150 percent Poverty Level
Back Bay	0	0	0	0	0
Charlestown	0	0	0	0	0
Chelsea	1,154	1,902	3,056	0	68
Dorchester	0	0	0	0	0
East Boston	5,756	1,361	7,117	0	0
Everett	0	0	0	0	0
Jamaica Plain	0	0	0	0	0
Long Island	0	0	0	0	0
Quincy	0	0	0	0	0
Revere	2,736	265	3,001	0	0
Roxbury	0	0	0	0	0
South Boston	49	17	66	18	18
South End	0	0	0	0	0
Winthrop	4,231	60	4,291	0	0
Total	**13,926 (79.4%)**	**3,605 (20.6%)**	**17,531**	**18 (0.1%)**	**86 (0.4%)**

Source: 1990 U.S. Census Data, HMMH, 1999.
1 Minority population calculated from two Census Categories: Persons by Race, and Persons of Hispanic Origin.

The 1995 population estimates indicate that population has declined in the City of Boston, and increased in the other communities, particularly in Revere and Chelsea. Overall the minority population within the study area has increased, while the white population has declined.

6.8.5 Analysis of Impacts to Minority or Low Income Populations

6.8.5.1 Impacts to Minority Populations

Under the No Action Alternative, the total population within the 65 dB DNL contour under the 29M Low Fleet scenario is 17,531. Of that total, approximately 79.4 percent of the affected population is white (non-Hispanic) and 20.65 percent of the affected population are members of a minority group. The population within the 65 dB DNL contour increases slightly (by 378 people) under the Preferred Alternative; however, the characteristics of the affected population are essentially the same. Of the total population of 17,909 within 65 dB DNL, 78.6 percent of the population is white (non-Hispanic) and 21.4 percent of the population is minority. The comparison indicates that under either Alternative, the affected population is predominately (79 to 80 percent) non-minority.

The Preferred Alternative allows noise impacts to be distributed more equitably across communities and over water in accordance with runway utilization goals that have been incorporated into PRAS. One of the primary goals of PRAS is to limit the number of people exposed to the highest noise levels (70 to 75 dB DNL). Implementation of unidirectional Runway 14/32 under the Preferred Alternative (29M Low Fleet scenario) reduces the noise-impacted population within 75 dB DNL from 257 to 77, a net reduction of 70 percent. The Preferred Alternative (29M Low Fleet scenario) also reduces the noise-impacted population within the 70 dB DNL contour from 1,521 to 1,459, a 4 percent reduction.

The difference in affected minority populations within the 65 dB DNL contour between the Preferred Alternative and the No Action Alternative is 0.9 percent. The percentage of the affected population within the 65 dB DNL contour for Preferred Alternative classified as minority (21.4 percent) is significantly lower than the percentage of the population of the affected jurisdictions (Boston, Chelsea, Revere and Winthrop) classified as minority (38 percent). This assessment still holds true assuming a 7.58 percent increase in the minority population within Suffolk County from 1990 to 1995 (See Table 6.8-4). An increase of this magnitude would increase the minority population within 65 dB DNL under Preferred Alternative from 3,834 (21.4 percent) to 4,124 (23.0 percent), which is still significantly lower than the 41 percent of the 1995 population of Suffolk County estimated to be minority. (See Tables 6.8-6 and 6.8-7 for a more detailed comparison of the affected population within the 65 dB DNL contour for the No Action Alternative and the Preferred Alternative, respectively.)

An area located in Chelsea added to the 65 dB DNL under the Preferred Alternative is inhabited predominantly by a Hispanic population. Approximately 227 minority residents within Chelsea will experience a noise increase of 0.6 dB or less. Sound insulation of the affected homes has been included as part of the Preferred Alternative to mitigate adverse noise impacts.

The noise effect of the Preferred Alternative does not represent an adverse impact to minority populations because it does not exceed the FAA threshold of significant impact (greater than a 1.5 dB change for populations within the 65 dB DNL). Moreover, overall airport noise does not represent a disproportionate impact to minority populations because only 21 percent of the population within the 65 dB DNL contour is minority compared to a 38 percent minority population for Suffolk County. In addition, the noise impact suffered by the minority population is not appreciably more severe or greater in magnitude than the adverse effect suffered by the non-minority population. In the 37M High Fleet scenario, the noise affected population of Chelsea is expected to be reduced. Finally, all noise impacts on Chelsea residents falling within the 65dB DNL noise contour will be mitigated with sound insulation.

Table 6.8-7
Estimated Population within the 65 dB DNL Contour
Preferred Alternative - 29M Low Fleet Scenario

	Non-Hispanic White Population 65 dB DNL	Minority Population[1] 65 dB DNL	Total Population 65 dB DNL	Household Income	
				<$10,560 Poverty Level	<$15,840 150 percent Poverty Level
Back Bay	0	0	0	0	0
Charlestown	0	0	0	0	0
Chelsea	1,171	2,129	3,300	0	339
Dorchester	0	0	0	0	0
East Boston	5,890	1,366	7,256	0	0
Everett	0	0	0	0	0
Jamaica Plain	0	0	0	0	0
Long Island	0	0	0	0	0
Quincy	0	0	0	0	0
Revere	2,734	265	2,999	0	0
Roxbury	0	0	0	0	0
South Boston	80	18	98	18	18
South End	0	0	0	0	0
Winthrop	4,200	56	4,256	0	0
Total	**14,075 (78.6%)**	**3,834 (21.4%)**	**17,909**	**18 (0.1%)**	**357 (1.9%)**

Source: 1990 U. S. Census Data, HMMH, 1999.
1 Minority population calculated from two Census Categories: Persons by Race, and Persons of Hispanic Origin.

A similar conclusion can be reached when comparing the affected minority populations within the 60 dB DNL for the No Action Alternative and the Preferred Alternative. The affected population within 60 dB DNL is predominately white (Non-Hispanic) for No Action Alternative (79.3 percent) and for Preferred Alternative (78.9 percent). The percentage of the affected population within 60 dB DNL classified as minority is essentially the same; 20.7 percent for No Action Alternative and 21.1 percent for Preferred Alternative. In addition, the percentage of the affected population within the 60 dB DNL contour for Preferred Alternative classified as minority (21.1 percent) is lower than the percentage of the population of affected jurisdictions (Boston, Chelsea, Everett, Revere, and Winthrop) classified as minority (38 percent). Tables 6.8-9 and 6.8-10 provide a more detailed comparison of the affected population within the 60 dB DNL contour for the No Action Alternative and the Preferred Alternative, respectively.

Table 6.8-8
Comparison of Noise Impacts in Chelsea for Census Blocks Added to or Removed from the 65 dB DNL Contour - 29M Low Fleet Scenario

Tract	Block	No Action Alternative (dB)	Preferred Alternative (dB)	Difference (dB)
1602	202	64.8	65.2	0.4
1602	204	64.8	65.4	0.6
1602	402	65.0	64.9	-0.1
1604	405	64.9	65.1	0.2

Table 6.8-9
Estimated Population within the 60 dB DNL Contour
No Action Alternative – 29M Low Fleet Scenario

				Household Income	
	Non-Hispanic White Population 60 dB DNL	Minority Population[1] 60 dB DNL	Total Population 60 dB DNL	<$10,560 Poverty Level	<$15,840 150 percent Poverty Level
Back Bay	0	0	0	0	0
Charlestown	0	0	0	0	0
Chelsea	4,399	5,833	10,232	1	1,227
Dorchester	0	0	0	0	0
East Boston	20,527	5,508	26,035	0	1,977
Everett	214	6	220	0	0
Jamaica Plain	0	0	0	0	0
Long Island	0	0	0	0	0
Quincy	0	0	0	0	0
Revere	4,827	400	5,227	0	125
Roxbury	0	0	0	0	0
South Boston	5,672	338	6,010	42	1,488
South End	0	0	0	0	0
Winthrop	11,559	240	11,799	0	0
Total	**47,198 (79.3%)**	**12,325 (20.7%**	**59,523**	**43 (0.07%**	**4,817 (8.0%)**

Source: 1990 U.S. Census Data, HMMH, 1999.
1 Minority population calculated from two Census Categories: Persons by Race, and Persons of Hispanic Origin.

Table 6.8-10
Estimated Population within the 60 dB DNL Contour
Preferred Alternative – 29M Low Fleet Scenario

	Non-Hispanic White Population 60 dB DNL	Minority Population[1] 60 dB DNL	Total Population 60DNL	Household Income <$10,560 Poverty Level	Median Income <$15,840 150 percent Poverty Level
Back Bay	0	0	0	0	0
Charlestown	0	0	0	0	0
Chelsea	4,407	5,963	10,370	1	1,227
Dorchester	0	0	0	0	0
East Boston	20,650	5,510	26,160	0	1,977
Everett	321	19	340	0	0
Jamaica Plain	0	0	0	0	0
Long Island	252	250	502	502	502
Quincy	0	0	0	0	0
Revere	4,727	388	5,115	0	125
Roxbury	0	0	0	0	0
South Boston	6,202	401	6,603	42	1,488
South End	0	0	0	0	0
Winthrop	11,122	206	11,328	0	0
Total	**47,681 (78.9%)**	**12,737 (21.1%)**	**60,418**	**545 (0.9%)**	**5,319 (8.8%)**

Source: U. S. Census Data, HMMH, 1999.
1 Minority population calculated from two Census Categories: Persons by Race, and Persons of Hispanic Origin.

Figure 6.8-1 illustrates the relationship of the 60 and 65 dB DNL noise contours for the No Action Alternative and the Preferred Alternative to the minority populations within the communities adjacent to Logan.

6.8.5.2 Impacts to Low-Income Groups

There are no low-income populations within 75 dB DNL or 70 dB DNL under either the No Action or the Preferred Alternatives.

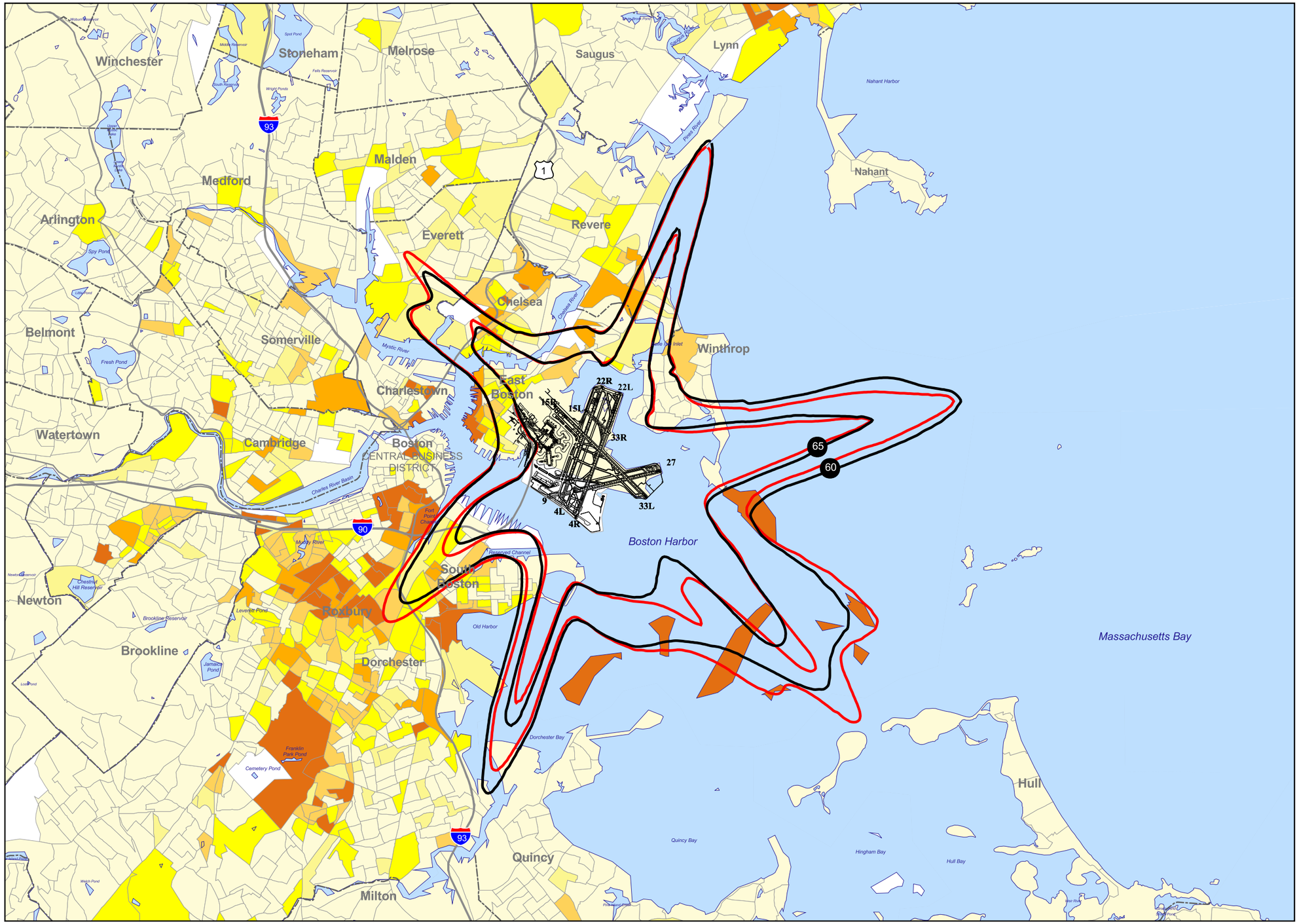
Implementation of the Preferred Alternative would not have a significant impact on low-income populations, since 98 percent of the affected population within the 65 dB DNL contour has a household income greater than $15,840 (150 percent of the federal poverty level). The total population within the 65 dB DNL contour under the 29M Low Fleet scenario with a household income of less than $10,560 is 18 persons for both the No Action Alternative and Preferred Alternative, which represents 0.1 percent of the total affected population. The affected population with household incomes less than $15,840 increases slightly under Preferred Alternative to 1.9 percent, but is still a very small percentage of the affected population as a whole. Both percentages are

significantly lower than the percentage (18.1 percent) of the population of Suffolk County below the poverty rate. (See Tables 6.8-6 and 6.8-7 for a more detailed comparison of the affected low income population within the 65 dB DNL contour for the Preferred and No Action Alternatives, respectively.)

A similar conclusion can be reached when comparing the affected low-income populations within the 60 dB DNL contour for the No Action and Preferred Alternatives. Approximately 0.07 percent of the affected population within the 60 dB DNL contour for No Action Alternative has a household income of less than $10,560. This increases slightly to 0.9 percent of the population for the Preferred Alternative primarily due to the inclusion of the institutional population on Long Island within the 60 dB DNL contour. The percentage of the affected population within 60 dB DNL with household incomes less than $15, 840 is 8.0 percent for the No Action Alternative and increases slightly to 10.1 percent for the Preferred Alternative. These percentages of low-income populations within the 60 dB DNL contour for the Preferred Alternative are lower than the percentage of the population of affected jurisdictions (Boston, Chelsea, Everett, Revere, and Winthrop) classified as below the poverty level (See Table 6.8-1) (See Tables 6.8-9 and 6.8-10 for a more detailed comparison of the affected low income population within the 60 dB DNL contour for the No Action Alternative and Preferred Alternatives, respectively).

The noise effect of the Preferred Alternative does not represent a disproportionate impact to low income populations because it is not predominately borne by that population. The environmental justice analysis indicates that the population within the 65 dB DNL contour is not predominately low-income. Less than 0.1 percent of this population is at poverty level ($10,840), and only 1.9 percent have incomes below 150 percent of poverty level ($15,584) based on 1990 census data. (Estimates of 1995 income levels by community were not available.) In addition, the noise impact suffered by the minority population is not appreciably more severe or greater in magnitude than the adverse effect suffered by the non-minority population. There are no low-income populations within the 75 dB DNL and 70 dB DNL contours under the Preferred Alternative.

Figure 6.8-2 illustrates the relationship of the 60 and 65 dB DNL noise contours for the No Action and Preferred Alternatives to the low income populations within the communities adjacent to Logan.



Legend

No Action Alternative 29M Low

60 and 65 DNL

Preferred Alternative 29M Low

60 and 65 DNL

1990 Median Household Income

- Unpopulated (< 10 persons)
- Less than $10,560
- $10,560 - $15,840
- $15841 - $21,120
- $21,121 - $26,400
- $26,401 - $29,399
- Greater than $29,399

N

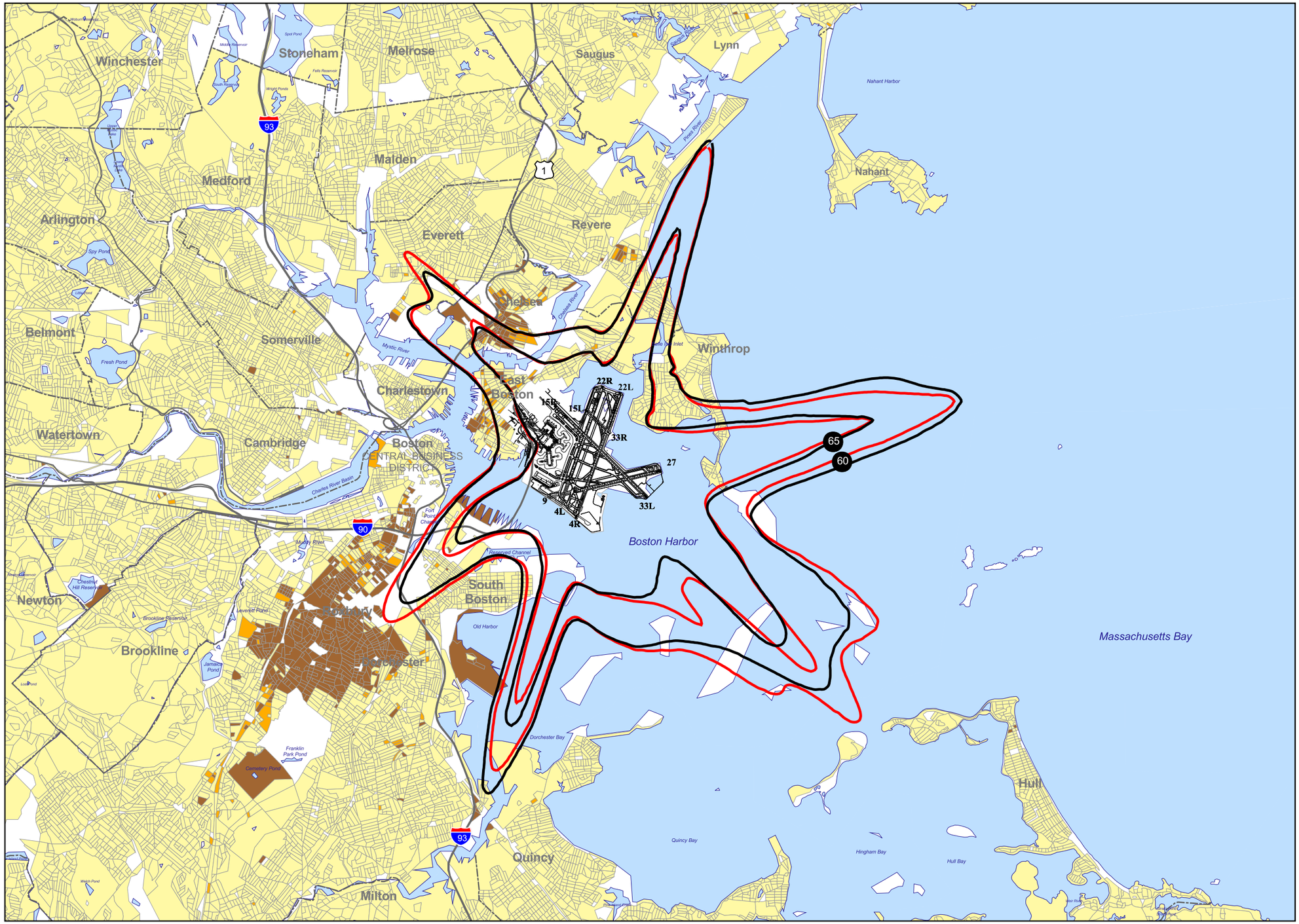
0 0.5 1 1.5 Miles

massport

Figure 6.8-1

1990 Median Household Income by Block Group

Source: Harris Miller Miller & Hanson



Legend

No Action Alternative 29M Low

60 and 65 DNL

Preferred Alternative 29M Low

60 and 65 DNL

Minority Population by Census Block

- Greater Than 49.9% Minority
- 38% to 49.9% Minority
- Less Than 38% Minority
- Unpopulated (< 10 Persons)

N

0 0.5 1 1.5 Miles

massport

Figure 6.8-2

Percent Minority Population by Census Block

Source: Harris Miller Miller & Hanson

6.8.5.3 Comparison of 1998 and No Action Alternative Noise Affected Population

The 1998 GEIR Annual Update presented noise contours for Logan Airport based on aircraft activity during 1998. In that year, the population within the 65 dB DNL contour was approximately 23,300. Comparison to the projected noise contour for the 29M Low Fleet scenario No Action Alternative shows a substantial reduction in the population exposed to 65 dB DNL. Under the 29M Low Fleet scenario No Action Alternative projections, total population exposed to 65 dB DNL or greater is approximately 17,500 persons, representing a 25 percent decline from reported 1998 levels.

The principal reason for this decline in overall airport noise impacts is the continuing phase out of noisier Stage 2 jet aircraft from the Logan Airport fleet. Secondarily, improved adherence to the Runway 27 ROD departure track will eliminate significant numbers of South Boston residents from the 65 dB noise contour. Both these developments are discussed in Chapter 5 of the 1998 GEIR Annual Update.

In addition to the predicted population reductions within the 1998 65 dB DNL contour that will occur as noted above, the Preferred Alternative will redistribute aircraft activity and their associated noise impacts over Boston Harbor. The proposed project will facilitate greater use of Runway 15R/33L in accordance with the PRAS goals. This will result in increased use of over water routings and will shift noise impacts from areas north and south of Logan Airport to areas east and west of it. However, these flight shifts will increase the number of Chelsea residents included in the 65 dB DNL noise contour. To mitigate these impacts, Massport and FAA will sound insulate the homes newly included in the project's 65 dB DNL contour. In addition, Massport and FAA will continue their residential sound insulation efforts for all residences within the 1998 65 dB DNL contour.

6.8.6 Other Environmental or Human Health Considerations

The Council on Environmental Quality (CEQ) asks federal agencies, to the extent practicable, to consider the following when assessing environmental justice impacts:

- Whether health effects [of the proposed action] are significant or above generally accepted norms;

- Whether the risk or rate of exposure to an environmental hazard [caused by the proposed action] is significant or appreciably exceeds the risk or rate of exposure to the general population;

- Whether health effects [of the proposed action] occur in minority or low-income populations [already] affected by cumulative or multiple adverse exposures from [other] environmental hazards;

- Whether [the proposed action] will cause significant impacts on the environment that adversely impact affected populations;

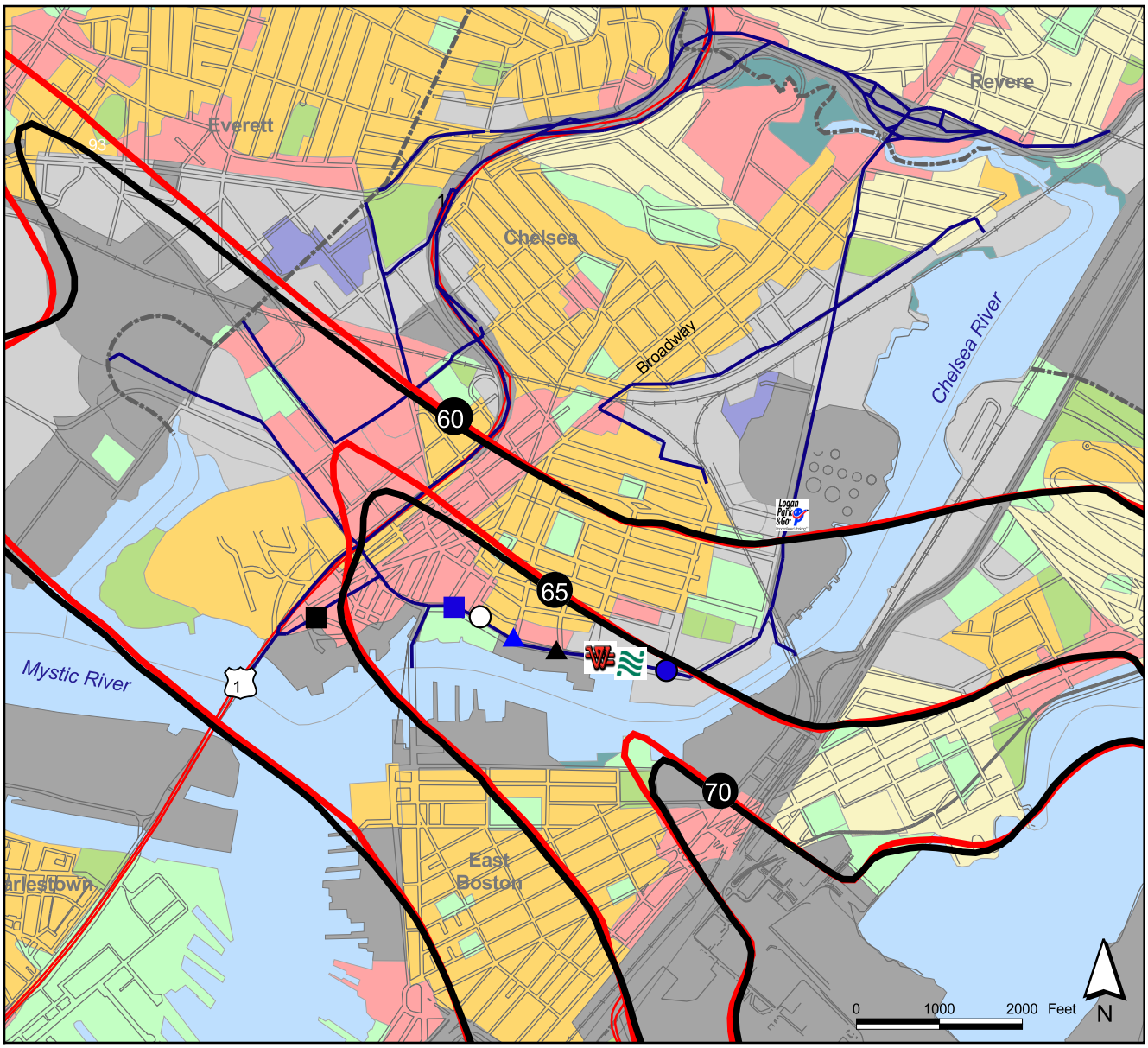
- Whether a significant, adverse impact on a minority or low-income population appreciably exceeds [similar] impacts on the general population; and whether the environmental effects occur in minority or low-income populations [already] affected by cumulative or multiple adverse exposures from [other] environmental hazards.

Environmental and health studies relating to the City of Chelsea have been reviewed in an effort to assess other cumulative or multiple adverse exposures within the affected minority population. Although demographic analysis has found no disproportionately high and adverse effect from direct project impacts, an analysis of these additional factors for the City of Chelsea was conducted since the area added to the 65 dB DNL contour under the Preferred Alternative includes this community. A summary of these studies follows.

Chelsea is a small (2.1 square mile) city with an ethnically diverse population. It is bounded on the north by the City of Everett, on the east by Mill Creek and the City of Revere, on the south by Chelsea Creek and East Boston, and on the west by the Mystic River and Charlestown. Access from Chelsea to East Boston is provided via the Chelsea Street and McArdle Bridges and to Charlestown and Downtown Boston via the Tobin Bridge, which carries Route 1 over the Mystic River. Designated truck routes through the City of Chelsea include Route 1, Beacham, Williams and Marginal Streets, Eastern Avenue, and parts of Broadway. Additional streets designated for truck traffic include Second and Spruce Streets and parts of Everett Avenue, as well as Gerrish Street and Crescent Avenue.

Approximately one-third of Chelsea's land area is commercial or industrial land that is either currently in industrial use or once housed heavy industries. Many of these sites are vacant or underutilized properties that border residential areas.[19] Much of the industrial property is concentrated on the waterfront along Marginal Street and Eastern Avenue. Chelsea is home to numerous oil and fuel storage facilities as well as industrial facilities that utilize toxic materials in their manufacturing processes. Given these characteristics, many of the environmental issues identified in Chelsea center on toxic discharges associated with industries in Chelsea and contamination of Chelsea Creek. Figure 6.8-3 illustrates Chelsea land use and environmental issues in relationship to the 29M Low Fleet scenario 65 dB DNL noise contours.

19 US Environmental Protection Agency, Brownfields Assessment Demonstration Pilot, Chelsea, MA, May 1998.



Legend

Industrial / Parking Facilities
- Logan Park & Go
- National Car Rentals
- Walton Systems
- Boston Hydes & Furs
- Chelsea Terminal Limited
- Creekside Parking

- Derby / Coastal Oil
- Eastern Minerals
- Molly Corporation

Alt.4 29M Low
- 60, 65 and 70 DNL

Alt. 1A 29M Low
- 60, 65 and 70 DNL

1991 Land Use
- Single Family Residential
- Multi-family Residential
- Commercial
- Industrial
- Golf, Playgrounds, Stadiums
- Open Land, Urban Open
- Forest
- Wetland
- Water
- Transportation
- Various

Source: Harris Miller Miller & Hanson

massport

Figure 6.8-3
Chelsea Land Use and Environmental Issues
29M Low Fleet Scenario
65 dB DNL Noise Contours

6.8.6.1 Industrial Pollution and Brownfields Initiatives in Chelsea

Industrial Pollution

The Massachusetts Department of Environmental Protection lists approximately 50 21E sites in Chelsea with some degree of oil or hazardous material contamination and approximately 115 spill incidents identified in accordance with the provisions of the Massachusetts Contingency Plan (310 CMR 40.000). (See Appendix I for a list of DEP sites.) There are no US Environmental Protection Agency Superfund sites in Chelsea, although the former Forbes Lithographic Company on Marginal Street is listed as a site awaiting a National Priority List (NPL) decision.

A survey by the Massachusetts Toxics Campaign Fund examined the extent of industrial pollution in Chelsea and its possible relation to the socioeconomic status of Chelsea residents.[20] The survey revealed that the most significant industrial pollution sources in Chelsea are found in the city's eastern sections in close proximity to residential neighborhoods, and in the sparsely populated western industrial section. The survey also recognized that higher levels of pollution appear to be present in neighborhoods with a higher percentage of low-income residents or minority populations. According to the survey, the census tract with the highest percentage of people of color living below the poverty line (census tract 1605) experienced the highest level of continuous toxic releases. In addition, the survey concludes that the two census tracts with the highest percentage of Hispanic residents (census tracts 1602 and 1604) demonstrated a higher incidence of toxic releases than other parts of the city.

The survey recommended that public access to information on industrial toxic hazards needs to improve, and that a closer examination of such hazards in close proximity to residential neighborhoods and schools be conducted. This survey did not compare industrial toxic release findings of Chelsea with other exposures in other communities.

Brownfield Initiatives

EPA has selected the 43 acre Everett Avenue Urban Renewal District in Chelsea as a Brownfields Assessment Demonstration Pilot. The objective of the project is to assess and plan for the clean up of the area in order to encourage redevelopment of the site. An EPA grant was also provided to STRIVE-Boston Employment Services, Inc. for a Brownfields Job Training Development Demonstration Pilot to train 60 low-income participants from Chelsea as environmental technicians.

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20 The Massachusetts Toxics Campaign Fund, *Industrial Pollution in Chelsea*, 1998.

6.8.6.2 Community Initiatives

There are numerous community groups active in environmental initiatives, including the Chelsea Human Services Collaborative / Green Space and Recreation Committee, and the Chelsea Creek Action Group, a coalition of the East Boston Ecumenical Community Council, Neighborhoods for Affordable Housing, and the Chelsea Human Services Collaborative / Green Space and Recreation Committee.

The Chelsea Human Services Collaborative was awarded an EPA Educational Grant in 1997 to provide educational outreach programs focused on environmental issues in Chelsea. This organization also received an EPA Environmental Justice Grant in 1998 to halt the expansion of and to address environmental and public health hazards associated with the 100,000-ton Eastern Minerals rock salt receiving, storage and distribution site located on Chelsea Creek. The Chelsea Human Services Collaborative also produced a series of maps that illustrate demographics, land use, industrial facilities, and pollution sources in Chelsea.

6.8.6.3 Other Environmental Documents

Environmental documents filed with the Massachusetts Environmental Policy Act (MEPA) Office relative to projects in Chelsea for the period from 1989 to the present (September 30, 1999) were also reviewed. Of those projects, only the following three resulted in the submission of an EIR:

- EOEA # 10335 - Massachusetts Water Resources Authority Combined Sewer Overflow
- EOEA# 9146 - Parking Garage, 270 Central Avenue
- EOEA# 8695 - Boston Harbor Dredging Project, Berthing Areas

The majority of the ENFs for Chelsea filed with MEPA were for new public buildings or infrastructure improvements. (See Table 6.8-11 for a list of other environmental documents filed with MEPA.)

6.8.6.4 Public Health

In addition to environmental effects, EO 12898 also directs federal agencies to consider adverse human health effects of its programs, policies and activities. CEQ guidelines direct agencies to consider relevant public health data to the extent that such information is reasonably available.

Table 6.8-11
Environmental Documents Filed with MEPA

EOEA No.	Project Name	Certificate Date	Location
11511	Everett Avenue Urban Revitalization	April 10, 1998	Everett Avenue, Chelsea
11476	Chelsea Police Station Renovation	March 13, 1998	19 Park Street, Chelsea
11068	Chelsea Parking Project	September 8, 1997	Eastern Avenue, Chelsea
10980	Chelsea Street Movable Bridge	January 9, 1997	Chelsea Street Bridge, Chelsea
10311	Chelsea Early Learning Center at the Shurtleff School	May 10, 1995	76 Congress Street, Chelsea
10100	Proposed Dredging in Chelsea River/ Eastern Minerals/ SMP Trust	January 13, 1995	37 Marginal Street, Chelsea
9981	Chelsea Middle School Project	June 23, 1994	170-180 Walnut Street, Chelsea
9810	Chelsea High School	March 10, 1994	Carter Street at Everett Avenue, Chelsea
9750	Chelsea Elementary Schools Campus	January 21, 1994	399 Eastern Avenue, Chelsea
9487	New Chelsea Court House	August 9, 1993	Williams Street, between Chestnut Street and Broadway, Chelsea
8876	Bridge Protection and Navigation Improvements Project	December 23, 1991	Boston Inner Harbor at Tobin Bridge
8806	Revere Water Transmission Main Project	October 10, 1991	Chelsea: Hy-Sil Avenue, Reservoir Avenue, Carrol Way, Prospect Avenue, Broadway
8418	Maintenance Dredging at Three Marine Terminals	November 23, 1990	99 Marginal Street, Chelsea 22 Lee Burbank Highway, Revere - 900 First Street, South Boston
8329	Northeast Petroleum	August 10, 1990	324 Marginal Street, Chelsea

In response to EO 12898, public health issues in Chelsea were researched. Local[21] and state[22] public health agencies, as well as EPA Region 1 staff[23], [24] were interviewed, and it was determined that there are no published studies relative to public health issues in Chelsea. The Massachusetts General Hospital, Memorial Health Center in Chelsea is collecting information regarding asthma, but such information has not been published.[25] The only information available for Chelsea was a summary public health profile prepared by the Institute for Health Policy, Massachusetts General Hospital / Partners Healthcare System. This report indicated that in the period from 1989 to 1997, hospital discharges for asthma for Chelsea residents declined from a high of 433.1 per 100,000 population in 1992, to a low of 244.9 per 100,000 population in 1997. However, the 1997 rate of 244.9 for Chelsea residents was still higher than the Massachusetts average rate of

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21 Telephone conversation with Frank Singleton, Chelsea Public Health Department, September 10, 1999.
22 Telephone conversation with Benson Chin, Health Policy Analyst, Massachusetts Department of Health ,Division of Health Care Finance and Policy, September 21, 1999
23 Telephone conversation with Peg Nelson, Head Librarian, EPA Region 1 library, September 14, 1999
24 Telephone conversation with Dr. Mary Beth Smuts, Health Department, EPA Region 1, September 30, 1999
25 Telephone conversation with Ruth Gomez, Asthma Coordinator, Chelsea Memorial Health Center. September 30, 1999

135.5 for the same year.[26] Additional public health information on the City of Boston and other communities was found to be available and is presented in Section 6.8.7 for informational purposes.

Interviews with local community groups indicate that there are public health concerns about emissions from private-sector petroleum facilities along Chelsea Creek (especially those located near the Tobin Bridge / Marginal Street waterfront), with the burning of high-sulfur fuels at Boston Edison's Mystic Plant in Everett, and with emissions from diesel trucks that drive through Chelsea neighborhoods.[27]

The Chelsea Creek Action Group was awarded an EPA grant in March 1999 to conduct a two-year study of environmental and health risks for East Boston and Chelsea residents living near Chelsea Creek. The purpose of the study was to conduct a comprehensive outreach effort to ascertain from residents, physicians, public health experts and environmental leaders what their perspectives are about environmental and health risks in the Chelsea Creek area in order to help the communities prioritize actions that can reduce those risks. A survey of residents in East Boston and Chelsea was conducted by the Chelsea Creek Action Group as part of Phase 1 of the comparative risk assessment to ascertain public opinion on issues regarding public health, the environment and quality of life. A total of 325 people were either interviewed or submitted surveys. A large number of people (124) did not respond to questions regarding their individual health or community health concerns (86). Air pollution was listed as the most frequent environmental concern (86 respondents), with cars, buses, airplanes and ships all mentioned as potential sources. Trash was listed second most frequently (65 respondents) as a concern. A little less than half of the residents responded to the information on quality of life issues and no particular quality of life issue was identified as more important than others.[28] Phase II of the study involves a resident community group further defining the major issues to address by incorporating the results of the survey and additional technical information provided by the EPA, state and city agencies. Phase II is anticipated to be completed by the end of 2001, with a final report and possible action plan by March 2002. [29]

Community health studies funded by Massport have addressed health issues relating to lead paint use in Chelsea. The studies have shown that elevated blood lead levels in children are associated with the presence of lead paint on or in residential units. Massport stopped using lead-based paint on the Tobin Bridge in 1977, and instead utilized an organic zinc-based paint as a substitute. Portions of the lead paint on the bridge were removed via grit blasting that utilized a vacuum system to remove and collect lead paint particles and grit so that they would not be released to the community. Massport financially supported a Chelsea community organization (CAPIC) that was

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26 2000 Chelsea Public Health Profile, A Report from the Institute for Health Policy, Massachusetts General Hospital/Partners Healthcare System and MGH Community Benefit Programs, no date. Provided by Luis Prado, Director, Chelsea Health and Human Services Department, 1/22/01.
27 Conversation with Roseanne Bongiovanni, Chelsea Human Services Collaborative. October 4, 1999
28 Chelsea Creek Action Group, *Comparative Risk Assessment Stage 1 Report (Survey & Questionnaire)*, no date.
29 Telephone conversation with Susan Loucks, Chelsea Creek Action Group Project Coordinator, January 23, 2001.

conducting studies of elevated blood lead levels in children. Children and pregnant women living near the Tobin Bridge were tested, and those children with elevated blood lead levels were given medical treatment. In no cases were the blood lead levels a result of the painting process or lead flaking from the bridge. Rather the elevations were due to the presence of lead paint on or in residential units. Houses where lead paint was identified were eventually deleaded.

Massport also conducted an extensive soil removal program in areas near the bridge with elevated soil lead levels, regardless of the source of the contamination. Contaminated soils were replaced with clean soil and the area revegetated. Lead levels in the soil are monitored annually.

Currently, Massport utilizes an aluminized epoxy paint system that requires less removal of lead paint and employs power tool cleaning instead of grit blasting. All painting operations are carefully monitored for particulate emissions as well as air lead levels.

6.8.7 Other Public Health Studies

The available public health studies for communities adjacent to Logan Airport were reviewed, consistent with the directives of CEQ Guidance. Public health status reports prepared by the Boston Department of Health and Hospitals and the Boston Public Commission were available for the City of Boston. Comparable public health reports were not available from the Public Health Departments of Chelsea,[30] Revere,[31] and Winthrop.[32] The available studies are summarized below for informational purposes.

Boston Neighborhood Health Status Report, Boston Department of Health and Hospitals (1994)

This series of reports identifies and discusses health-related issues for each of Boston's sixteen neighborhoods. These reports compare reportable data relative to births (natality), deaths (mortality) and illness (morbidity) to the demographics/ socio-economics of each of the neighborhoods and to the City of Boston as a whole. They are intended to provide a broad picture of the health of the community, as opposed to a study correlating human health to other environmental factors. For example, no correlation between air pollution and public health was made. Health status indicators were also compared to federal U.S. Department of Health and Human Services goals set forth in *"Healthy People 2000: National Health Promotion and Disease Prevention Objectives."* A summary of key findings for the neighborhoods closest to the airport, East Boston and South Boston, are presented below:

30 Telephone Conversation - Frank Singleton, Chelsea Public Health Department, 9/10/99.
31 Telephone Conversation - Francis Hyland, Revere Public Health Department, 9/10/99 /Telephone conversation with Nicolas Catinazzo, Revere Public Health Department, 1/19/01.
32 Telephone Conversation -Bea Farnham, Winthrop Public Health Department, 9/14/99/ Telephone conversation with Bea Farnham, Winthrop Public Health Department,1/23/01.

- **East Boston—**East Boston contained approximately 5.7 percent of the City of Boston's residents in 1990. The top five leading causes of death in East Boston were: heart disease, cancers, accidents, pneumonia / influenza and liver disease. The age adjusted rate (AAR) of cancer deaths per 100,000 in East Boston was 134.5, which is close to the Healthy People 2000 goal of 130 deaths per 100,000 population. East Boston has a lower rate of cancer deaths than Boston as a whole, which has an AAR for cancer deaths of 157.0. The overall standard mortality ratio for the East Boston population was 0.86, indicating that fewer deaths occurred in East Boston than expected when compared to the mortality in Boston as a whole.

- **South Boston**—South Boston contained approximately 5.1 percent of the City of Boston's residents in 1990. The top five leading causes of death in South Boston were: heart disease, both cerebrovascular disease (strokes) and accidents, chronic obstructive pulmonary disease and pneumonia / influenza. The age adjusted rate (AAR) of cancer deaths per 100,000 in South Boston was 198.3, which is higher than the AAR for cancer deaths of 157.0 in Boston, and the Healthy People 2000 goal of 130 deaths per 100,000 population. The standard mortality ratio for the South Boston population was 1.32 indicating that 32 percent more deaths occurred in South Boston than expected when compared to the mortality in Boston as a whole.

Report to the Mayor, Health of Boston (1999, 2000)

The *Health of Boston* is an annual public health assessment to provide the local government and general public with an overview of health issues and problems that affect the Boston population. The information in this report is used by the Boston Public Health Commission to assist in the establishment of public health priorities for the present and future. The report is organized by health care subject, such as lung cancer, breast cancer, suicide, infant mortality, HIV / AIDS, cigarette smoking, health insurance and adolescent pregnancy. This report does not present health issues in relation to specific environmental conditions.

The *Health of Boston 1999* reported that the leading cause of death in the city was cancer, followed by heart disease, injury, cerebrovascular disease (stroke) and homicide. Even though it was the top cause of death, cancer-related mortality decreased by 4.7 percent between 1991-1994 and 1995-1997. The age-adjusted lung cancer mortality rate in Boston decreased by 10.9 percent for the same period.

Cancer, heart disease and injury remained the top three causes of death, but HIV / AIDS and substance abuse were reported as the fourth and fifth leading causes of death in the *Health of Boston 2000.* Cancer–related mortality continued to decline, with a 5.2% decrease in between the periods of 1993-1995 and 1996-1998. The lung cancer age-adjusted mortality rate of 41.7 deaths per 100,000 population is 6.9 percent below the Healthy People 2010 target rate goal of no more than 44.8 deaths per 100,000.

The 1999 report presented the status of environmental health issues in Boston, specifically childhood lead poisoning and asthma. Asthma is a chronic inflammatory lung disease characterized by recurrent and reversible symptoms of airflow obstruction. House dust mites, cockroaches, mold, and animal dander have been identified as the principal allergens that trigger asthma symptoms. Secondhand smoke, upper respiratory viral infections, and certain air pollutants can also trigger an attack and worsen the effects of allergens. Asthma is the ninth leading cause of hospitalizations in the United States. Approximately 6.5 percent of the population in Massachusetts were estimated to have asthma in 1998. Boston residents had an average annual rate of asthma hospitalizations (3.5 per 1000 residents) that was double the rate for all Massachusetts residents, with children having the highest rates. The two neighborhoods with the highest rates of asthma in 1997 based on administration of the drug albuterol by Emergency Medical Technicians were Dorchester (30.5 percent) and Roxbury (21.0 percent), followed by Jamaica Plain (9.4 percent) and Mattapan (9.0 percent). East Boston and South Boston each accounted for 4.3 percent of the albuterol incidents.

The 2000 report indicated that over time, asthma hospitalization among children has declined in Boston, despite an increase in the overall incidence of childhood asthma. The number of Boston residents under 18 that were hospitalized for this condition in 1998 fell 11.0% in one year, from 636 in 1997 to 566 in 1998. Children under five had the highest rates of asthma hospitalization, with males more likely than females to be hospitalized for asthma. Roxbury, South Dorchester and North Dorchester had the city's highest rate of asthma hospitalization for males under five years of age for the period of 1994 to1998, with a rate per 1,000 population of 18.6, 14.8 and 13.7, respectively. By comparison, the rate of asthma hospitalization for males under five years of age for the same period for East Boston was 9.5, and the rate for South Boston was 8.2. Roxbury, Jamaica Plain, North Dorchester, and the Fenway had Boston's highest rates of asthma hospitalization for females under five years of age, but these rates were lower than for males of the same age.

South Boston Particle Source Apportionment Study by the Harvard School of Public Health

This ongoing study is attempting to characterize air quality within the South Boston community by measuring particulate matter and gaseous pollutants. The purpose of the study is to identify and assess the contribution of various air pollution sources through air monitoring and modeling, provide data for the purposes of health effects assessment, and to recommend measures to improve air quality within the community in a cost-effective manner.

An air pollution monitoring study was conducted during the period of January 1995 through March 1997 that measured particulate matter 10 micrograms or less in diameter (PM_{10}), and particulate matter 2.5 micrograms or less in diameter ($PM_{2.5}$). Initial results of the study indicate that the majority of fine particles ($PM_{2.5}$) observed at the Boston monitoring sites are associated mostly with sources located outside of the Boston metropolitan area, and to a lesser extent with local motor vehicle emissions. Particulate and gaseous air pollutant concentrations observed during the study were typical of the

northeastern United States. In addition, the two-year average particulate concentration levels experienced in South Boston were lower than those experienced in other Northeastern urban environments, such as Washington, DC, Philadelphia, PA, and Nashville, TN. The highest average fine particle concentrations in South Boston were found at the monitoring site adjacent to the Southeast Expressway (I-93). [33]

Winthrop Community Health Survey

The July 1999 survey by the Winthrop Environmental Health Facts Subcommittee, a voluntary group made up of residents of the Town of Winthrop, studied whether activities at Logan Airport have a negative impact on their health. The survey indicated that individuals residing in Winthrop neighborhoods surrounding Logan Airport show a considerably higher incidence of respiratory and cardiovascular diseases, including lung cancer, chronic obstructive pulmonary disease, asthma and allergic rhinitis, compared to the statewide average. The survey acknowledged that it has not been possible to determine whether Logan Airport operations contribute to this health burden, since the urban location of these communities presents a complex picture of pollution sources.

The methodology utilized in the survey included dividing the town into ten neighborhoods. Two neighborhoods were selected as likely representing areas of highest and lowest exposure. A questionnaire was devised and interviews conducted on diagnosed illnesses, symptoms, frequency and smoking history. The survey stated that individuals in the presumed high exposure zones experienced approximately twice the frequency of symptoms when compared with the presumed low exposure group. The survey also recognized that the true difference in exposure to airborne pollutants between the low and high exposure groups is not known, the total sample size is small, and that it cannot claim to have proven an association between airport-related pollution generation and respiratory disease in Winthrop.

The Massachusetts Department of Public Health, Bureau of Environmental Health Assessment reviewed the results of the Winthrop Health Study and concluded that while the study raised interesting questions, the methodology used to conduct the study and interpret the results limited the validity of the conclusions which were drawn by the investigators.[34]

Massachusetts Department of Public Health/Bureau of Environmental Health Assessment Public Health Study

Language in the 1999 state budget states that "$150,000 shall be expended for the purpose of the Director of Environmental Health Assessment to conduct an environmental assessment of the health impacts of Logan Airport on any community that is located within a five-mile radius of the airport and is potentially affected by said airport."

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33 Harvard School of Public Health, *Report on Initial Findings from the South Boston Air Quality Monitoring Study*, March 26, 1999.

34 Letter from Susan K. Condon, Director, Bureau of Environmental Health Assessment to William P. Frazier, Director, Department of Health, Town of Winthrop dated January 5, 2000.

The Massachusetts Department of Public Health / Bureau of Environmental Health Assessment (BEHA) proposes to study the relationship between air pollution and public health, focussing on respiratory and cardiovascular effects for communities within a five-mile radius of Logan Airport. BEHA will examine human exposures to jet fuel emissions, particulate matter and meteorological factors, as well as behavioral (e.g. cigarette smoking), occupational, and construction-related exposures. Other potential area sources such as rental car and vehicle service and maintenance facilities will also be examined. A series of meetings with communities within the study area as well as with Massport were held during the summer of 2000 to discuss the scope and methodology for the study. The final protocol for the study is being developed and the study is expected to be completed in the summer of 2002.

Massport's Participation in Air Quality/Public Health Studies

Massport has been cooperating with the City of Boston and the Commonwealth of Massachusetts on public health issues. In September 1995, the Secretary of the Executive Office of Environmental Affairs (EOEA) established a Scope for the analysis of potential environmental impacts of airport-related air emissions. In response to EOEA's directive, Massport consulted with both the Massachusetts Department of Public Health and the Boston Department of Health and Hospitals. Discussions focused on addressing general community concerns and determining the nature and extent of follow-up required to identify potential sources of air emissions.

In January 1996, Massport reviewed available public health data, including mortality and morbidity data from each neighborhood report and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time, a conclusion which was confirmed by state and local agencies with public health expertise.

Massport has provided public health agencies with off-airport air quality monitoring data, results from monitoring conducted by the Massachusetts Department of Environmental Protection (DEP) adjacent to the Sumner Tunnel entrance, and emissions inventories compiled for the Logan Airport GEIRs and Annual Updates.

Massport prepared the Soot Deposition Study[35] and shared the findings with the Boston Public Health Commission and the state Department of Public Health. That study indicated that there were no ongoing, chronic soot impacts from airport-related activities and that soot deposition in communities adjacent to Logan Airport resulted primarily from ambient urban conditions, as opposed to aircraft sources at the airport.

35 *Soot Deposition Study: Logan Airport and Surrounding Communities*, prepared for Massport, prepared by: KM Chng Environment, Inc. January 1997.

Since the completion of the *Boston-Logan International Airport 1994/1995 Generic Environmental Impact Report*, Massport has continued discussions with public health agencies, and attended meetings and reviewed results from the *South Boston Particle Source Apportionment Study*, sponsored by the Harvard School of Public Health (HSPH). Massport is also cooperating with the Massachusetts Department of Public Health / Bureau of Environmental Health Assessment in the development of the protocol for the Logan Airport public health study. Massport will continue to facilitate monitoring of airport-related emissions by HSPH and DEP by assisting in monitoring site selection and providing agencies with air quality data, airport activity data and meteorological data.

6.8.8 Mitigation and Off-Setting Benefits

In making a determination regarding disproportionately high and adverse effects on minority and low-income populations, the Final US DOT Order directs FAA to take into account mitigation and enhancement measures as well as all off-setting benefits to the affected minority and low-income populations.

Mitigation

Noise has been identified as the only impact to surrounding communities associated with implementation of the Preferred Alternative. While the noise impact in Chelsea falls below the FAA threshold for identifying significant adverse impacts, Massport and the FAA recognize the high representation of low-income and minority populations within Chelsea, and the presence of pre-existing environmental conditions within the community that are unrelated to Logan. In recognition of these factors, Massport and the FAA are committing to providing sound insulation to all Chelsea residents newly included in the project's 65 dB DNL contour.

Noise impacts will be mitigated by sound insulating affected residences in Chelsea that fall within the 65 dB DNL contour for the Preferred Alternative as defined by the 29M Low Fleet scenario. To the extent that federal funding is provided, the proposed sound insulation program will include not only all residences that fall within the Preferred Alternative 's 65 dB DNL contour when compared to the Airside No Action 65 dB DNL contour, but also those that fall within the actual 1998 65 dB DNL contour as presented in the *Logan Airport 1998 Annual Update*. The number of dwelling units in Chelsea to be sound insulated is estimated to be 1,100 to 1,200 dwelling units. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary to implement sound insulation. The number of residences to be included within the noise mitigation program is subject to a more detailed block by block analysis to be performed during implementation.

Off-Setting Benefits

The benefits associated with Logan Airport are provided without regard to race, creed, color, or economic status, and include the transportation services provided to passengers flying in and out of Logan, as well as jobs and economic benefits to Boston and other communities adjacent to the airport.

Logan Airport is a significant contributor to the economy and a major employer for the metropolitan region. According to a 1995 survey, approximately 14,551 persons were employed at the airport.[36] Of those employed at Logan, the largest percentage (18.5 percent, or 2698) live in the City of Boston, with most (1230) living in East Boston. Other communities with significant employment at Logan Airport include Revere (1225), Winthrop (884), Lynn (476), Peabody (357), Malden (354), Saugus (346), Chelsea (294), Everett (283), and Salem (210). These ten communities account for 49 percent of the employment at Logan.

Logan Airport is an essential component of the economic health of both the Metropolitan Boston area and the New England region. The regional economy is largely comprised of a mix of travel-intensive service industries, including high-technology, financial services, and tourism, that depend upon high-quality air transportation services. It is estimated that the annual contribution of Logan Airport to the economy is $5 billion of direct and indirect local spending.[37]

As part of the Logan Airside Improvement Project, Massport is taking initiatives to promote Chelsea's greater participation in the economic benefits of Logan. Currently, approximately 294 residents of Chelsea are employed at Logan. In an effort to increase the level of airport employment of Chelsea residents, Massport will encourage airport-based employers to recruit employees from, and conduct job training initiatives targeted at airport affected communities including Chelsea. Massport also proposes to work with the Chelsea Chamber of Commerce to establish business connections with Chelsea businesses.

Massport is also facilitating increased airport employment opportunities and other economic initiatives for Chelsea. Currently, Massport provides to Chelsea $500,000 in annual in-lieu-of-tax payments; $500,000 in economic development grants; and approximately $70,000 in annual grants for student summer employment programs, scholarships, athletic, elderly and educational programs. In addition the $300,000 Chelsea Gateway Beautification Project that will landscape the entrances to the City of Chelsea from the Tobin Bridge is expected to begin construction in the spring of 2001.

36 1995 Logan Employment Survey, Massachusetts Port Authority.
37 Fiscal 1998 Logan Economic Impact Study, Massachusetts Port Authority.

6.8.9 Public Participation Process

6.8.9.1 Public Participation Directives

Under NEPA and the federal Environmental Justice policy, agencies should work to ensure that public documents, notices, and other information relating to impacts of the proposed action on human health and the environment are concise, understandable, and readily available to the public, including minority and low-income populations. Public participation should occur early in the NEPA process and should continue through scoping, draft, and final EIS phases. Environmental justice review should heighten attention to Alternatives, mitigation strategies, monitoring needs and preferences expressed by the affected community or population. Pursuant to the Final US DOT Order, meaningful opportunities for public involvement by members of minority populations and low-income populations are to be provided during the planning and development of activities. Additionally, access to public information concerning the human health and environmental impacts of activities, including information that will address the concerns of minority and low-income populations, is to be provided.

6.8.9.2 Public Participation for the Airside Improvement Project

Since the initial scoping[38] of the proposed Logan Airside Improvement Project, and throughout each phase of the environmental review process, FAA and Massport have established a dialogue with community leaders and the public through public hearings, briefings, responses to comment letters, and circulation of the Airside Project Draft EIS/EIR for public review and comment.[39] Over 700 copies of the Airside Project Draft EIS/EIR were distributed for public review including copies sent to the Chelsea Human Services Collaborative, the Centro Hispano de Chelsea, and the Chelsea Commission on Hispanic Affairs. Copies of the Airside Project Draft EIS/EIR were also distributed to every public library in each of the 28 communities represented on the CAC. Approximately 1,300 comment letters were received on the Airside Project Draft EIS/EIR.

Over 100 meetings, designed to elicit participation from community leaders and the public at large, have taken place since the project scoping. To encourage participation Massport conducted meetings in more than 15 communities surrounding Boston and Logan, including Chelsea, Winthrop, East Boston, South Boston, Charlestown, Revere, Jamaica Plain, Milton, Dorchester and Roxbury.

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38 Massport, Proposed Scope: Airside Project Draft EIS/EIR Logan Airside Improvement Planning Project" (The initial stage of this evaluation is a planning effort that is designed to use the operations and environmental analysis, and related public input process to further assess the efficacy and interrelationship of the various improvement concepts.) (1995).

39 66 comment letters were received in response to the Environmental Notification Form (ENF). *See* Commonwealth of Massachusetts Executive Office of Environmental Affairs, Certificate of the Secretary of Environmental Affairs on the Environmental Notification Form for Logan Airside Project improvements Planning Project EOEA #10458 (Nov. 22, 1995). Response to comments on the ENF were provided in Volume II of the Logan Airside Project improvements Planning Project, Airside Project Draft EIS/EIR.

The Airside Review Committee (ARC) was formed in December 1995, to provide advisory input from the community to Massport and the FAA. The ARC consists of the Logan Airport Citizens Advisory Committee (CAC) to Massport and representatives of regional business and aviation organizations. The CAC is comprised of representatives from 28 neighborhoods, cities and towns. The ARC has met 15 times since it was formed, providing an exchange of ideas and concerns at every stage of the project development process, and there have been approximately 15 additional meetings with the CAC that Massport staff have attended. Extensive information about the proposed action and its environmental impacts was presented to the ARC by agency staff and consultants, and ARC members commented, questioned, and discussed their concerns with technical presenters and Massport planning staff.

Presentations to the public were provided in various formats, from briefings to large public meetings. For example, Massport provided a briefing to Chelsea community leaders on January 19, 1999. There were approximately 35 people in attendance, including members of the Chelsea City Council, and representatives of community groups. At the March 3, 1999 Chelsea City Council public hearing, over one hundred citizens had the opportunity to speak and comment to Massport officials following a presentation of the proposed project; the meeting was broadcast on the local cable station. Consistent with FAA policy of providing translation on request, a Spanish-language interpreter was present at the February 23, 1999 meeting with the Latin American Planning and Development Group**,** at which representatives of the Chelsea Hispanic Community were present.

At public meetings and at the request of interested community members, Massport has provided full access to the public concerning the Logan Airside Improvements Planning Project and its associated social and environmental effects. At meetings, Massport and FAA officials have provided an overview of Logan Airport's current operations and the need for changes. In addition, they have described the impacts of proposed changes on particular communities and efforts to mitigate adverse noise impacts. Public participation has resulted in additional studies and refinement of the mitigation program. (See Chapter 8 for a discussion of mitigation.)

6.8.10 Summary of Findings

The Preferred Alternative is intended to reduce congestion and delay at Logan, and to increase the safety and efficiency of airport operations.

A disproportionately high and adverse effect means an adverse effect that is predominately borne by a protected population, or an adverse effect which is appreciably more severe or greater in magnitude in its impact on a protected population than on other populations which are also affected. The Final US DOT Order directs FAA to determine whether its programs, policies, and activities will have a disproportionately high and adverse impact on minority or low-income communities, taking account of mitigation, enhancement measures, and all off-setting benefits to the affected populations, as well as the design,

comparative impacts, and the relevant number of similar existing system elements in non-minority and non-low-income areas.

There is no disproportionate adverse impact associated with the Preferred Alternative. The increased exposure to aircraft noise is 0.6 dB or less in affected communities, which is below the FAA threshold for determining significant adverse impacts. Mitigation of the increased noise will be provided in the form of sound insulation.

In addition, off-setting economic benefits will be provided to Chelsea to help that community participate more fully in the economic benefits of Logan.

Taking account of the small incremental noise impacts within the affected areas, the proposed sound insulation and economic initiatives, the economic benefits of Logan Airport in which Chelsea residents will share, and the safety, operational, and environmental benefits of the Preferred Alternative to the population at large that are not achievable under other Alternatives, the Preferred Alternative will not have a disproportionate high and adverse impact on minority or low-income communities.

6.9 Construction Impacts

This section provides an overview and description of the proposed airside improvement construction activities and associated impacts. Construction activities associated with the Preferred Alternative include Runway 14/32 and the Centerfield Taxiway, as well as taxiway realignments and extensions associated with Taxiway Delta, Taxiway November and the configuration of the Southwest Corner. All construction phases and sequences would be carefully planned to ensure the continued safe and efficient operation of the airport, and the successful and timely completion of the project.

Potential impacts resulting from the construction of the Airside Project improvements Planning Project can be separated into two broad categories for discussion purposes: impacts on the direct users of the airfield, and impacts on the group consisting of the surrounding communities and other users of the airport in general. It is Massport's goal to avoid or to mitigate such impacts to the maximum extent possible.

The estimate of truck volumes presented in this Supplemental DEIS/FEIR is less than that presented in the Airside Project Draft EIS/EIR, which had assumed a worst case scenario. Since publication of the Airside Project Draft EIS/EIR, a subsurface investigation (boring) program was undertaken to characterize the suitability of the soils for construction of the Airside Project improvements. This investigation found that much of the existing soil material on the airport is suitable for construction, and thus the total estimate of soil to be excavated and removed from the airfield has been reduced. (See Section 6.7 for a more detailed discussion of soil characteristics.) This in turn reduces the amount of truck trips required for construction. In addition, the Airside Project Draft EIS/EIR had assumed that 215,000 cubic yards of soil stockpiled by the Massachusetts Highway Department Central

Artery Project (CA/T) on Governors Island would need to be relocated to construct Runway 14/32. However, this has been moved off-site for use as cover material to close the Rubchinuk Landfill in Middleton, Massachusetts. (See Section 5.7.2 for additional discussion.) Transfer of the approximately 240,000 cubic yards of the CA/T soil from Governor's Island was completed in November 2000. See Table 6.9-1 for excavate material quantities from Logan Airside Project improvements.

Table 6.9-1
Excavated Material From Construction of Logan Airside Project improvements

	Total Excavated Material * (cubic yards)	Unclassified Excavate Reused On Site (cubic yards)	Unclassified Excavate Removed from Site (cubic yards)	Existing Bituminous Pavement Removed from Site (cubic yards)
Runway 14/32	111,000	37,000	45,000	29,000
Centerfield Taxiway	52,000	41,000	11,000	0
Southwest Corner Taxiway	14,000	5,000	0	9,000
Taxiway November	55,000	500	43,000	11,500
Taxiway Delta	32,000	0	32,000	0
TOTAL	264,000	83,500	131,000	49,500

Source: HNTB 12/1/99
Includes soil and existing bituminous pavement.

6.9.1 Construction Elements of the Preferred Alternative

This section describes the individual construction elements of the Preferred Alternative. A summary of construction costs and duration of the Preferred Alternative, by individual construction elements, is presented in Table 6.9-2.

Table 6.9-2
Summary of the Preferred Alternative by Construction Elements

Construction Element	Construction Cost Estimate ($ millions)	Estimated Construction Period (Days[1])
Unidirectional Runway 14/32	33	300
Centerfield Taxiway	20	See Note 2
Southwest Taxiway System Reconfiguration	14	240
Taxiway Delta Extension	6	180
November Taxiway Realignment	3	180
TOTAL	$76	Phased over ± 5 years

1 Days are consecutive calendar days, inclusive of Saturdays and Sundays. Does not include winter construction shut down period.
2 Construction of the northern segment of the Centerfield Taxiway is estimated to take 180 days; construction of the southern segment of the Centerfield Taxiway is estimated to take 210 days. There is some overlap of the two construction periods.

6.9.1.1 Unidirectional Runway 14/32

This element involves the construction of a new 5,000-foot runway and associated taxiway. The runway would be 100 feet wide with two 35-foot wide paved shoulders. The project would also include reconstruction of 2,000 feet of existing pavement in the South Cargo Area for use as a taxiway to the Runway 14 end.

Construction of Runway 14/32 would require the removal of existing surface vegetation and approximately 29,000 cubic yards of pavement and 45,000 cubic yards of unclassified excavated soil material, which will be taken off-site for reuse/recycling. The subsurface investigation conducted in the area of the Airside Project improvements found that the soils in the vicinity of proposed Runway 14/32 are well drained and provide a suitable foundation for construction. Therefore, less soil material needs to be removed from the site than had been assumed in the Airside Project Draft EIS/EIR. A subbase and crushed aggregate base course will be placed prior to paving with a bituminous concrete mix. All aggregate base would be obtained from commercial sites rather than disturbed sites. Should Massport need to find new sites for aggregate base or sand materials, Massport will do so from sites that have undergone the appropriate environmental review and permitting processes. A runway/taxiway drainage system would be constructed and integrated into the existing airfield drainage system, and conduits for lighting and other instrumentation would be installed.

Construction of Runway 14/32 would require demolition of Buildings 60 and 61 in the South Cargo area, which together have a total footprint of 155,000 square feet. Both buildings are essentially large hangar-type spaces with truck loading docks located along the landside and large roll-up doors located along the airside for passage of freight and cargo. Ground floor slabs and exterior foundation walls are poured concrete. Exterior walls are primarily metal panels over steel framing, with some masonry construction between the loading dock roll-up doors at the landside. Flat roofs are supported by steel columns, girders and trusses. Demolition of these buildings would yield approximately 35,000 cubic yards of construction debris. Table 6.9-3 provides a breakdown of construction debris by type of material. All demolition material will be recycled to the extent feasible.

Table 6.9-3
Total Estimated Building Demolition Materials

Material	Volume (cubic yards)
Subsoil	6,400
Concrete	9,400
Masonry	9,100
Metal	4,000
Miscellaneous Building Materials	5,700
Total	34,600

6.9.1.2 Centerfield Taxiway

The Centerfield Taxiway would be constructed between, and parallel to, Runways 4L/22R and 4R/22L. The taxiway would be 9,300 feet long (a length that incorporates some elements of the southwest taxiway system) and 100 feet wide, with two paved shoulders each 35 feet wide. A parallel service road, 24 feet wide, would be constructed along the eastern side of the Centerfield Taxiway.

Construction of the Centerfield Taxiway would entail the removal of existing vegetated soil. Approximately 11,000 cubic yards of existing soil will be excavated and removed from the site and replaced with coarser and better draining materials to form a suitable base. Approximately 41,000 cubic yards of unclassified excavate will be reused on site. The taxiway drainage system would be constructed and integrated into the existing airfield drainage system, and conduits for lighting and other taxiway instrumentation would be installed.

Construction of the Centerfield Taxiway would take place in two segments: Centerfield Taxiway-North, situated between Taxiway Romeo and Runway 15R/33L, and Centerfield Taxiway-South, between Runway 15R/33L and Taxiway Whiskey.

6.9.1.3 Southwest Corner Taxiway System Reconfiguration

Optimization of the present southwest corner taxiway system would entail the realignment of Taxiways Alpha, Echo, Kilo, Sierra and Whiskey, and integration of the Centerfield Taxiway. Approximately 9,000 cubic yards of existing bituminous pavement would be excavated and removed from the site. No existing soil would be removed from the site for construction of these improvements. Approximately 5,000 cubic yards of unclassified excavate will be reused on site.

Construction would consist of restriping existing pavement and the placement of new pavement and drainage in other areas. As noted in Section 6.5.1, approximately 6.1 acres of new vegetated area would be created upon completion of the taxiway optimization.

6.9.1.4 Taxiway Delta Extension

Taxiway Delta would be extended approximately 1,800 feet from the intersection with Taxiway Charlie southwest to Runway 4R/22L. Associated with this extension would be a slight realignment of the east end of Taxiway Echo to meet Taxiway Delta. Taxiway Delta would be 100 feet wide with two 35 foot paved shoulders. It is estimated that 32,000 cubic yards of soil material would be excavated and removed from the site during construction.

6.9.1.5 Taxiway November Realignment

The realignment of Taxiway November would consist of the reconstruction of approximately 1,800 linear feet of pavement, resulting in a taxiway 100 feet wide with two 35-foot wide paved shoulders. A majority of the area to be reconstructed is within the footprint of the existing taxiway, and construction would result in the excavation and

removal of approximately 43,000 cubic yards of fill and 11,500 cubic yards of existing bituminous pavement. Approximately 500 cubic yards of material will be reused on site.

6.9.2 Construction Sequence

A multi-year phased construction sequencing program has been designed to implement the construction elements of the Airside Project. The following policies guide the logic of the sequence:

1. Aircraft operational and safety needs take precedence over construction activity. Airport activity, runway configurations and so on dictate construction sequence, phasing and pace - not vice versa. Particularly where construction entails tying into an existing runway or taxiway, Massport Operations personnel would strictly control construction activity, in close coordination with FAA air traffic control personnel.
2. Construction of Runway 14/32 would occur first. This runway would significantly decrease congestion and delay at Logan, and would provide increased flexibility to FAA control tower personnel and Massport in devising taxiway routings during reconfiguration of the Southwest Taxiway System.
3. The Centerfield Taxiway would be built after Runway 14/32. This would permit Massport to address taxiway congestion and delay at Logan, thus eliminating some elements of noise and air quality emissions. Once in place, the Centerfield Taxiway would permit new taxi patterns bypassing the Southwest Corner to be established, thus isolating it and enabling construction activity to proceed in this location.
4. Taxiway improvements would then be addressed in an order which further promotes airfield safety and efficiency.

The work would be phased over five years, beginning in Year 1 with construction of Runway 14/32. A year-by-year summary of construction activity is illustrated in Table 6.9-4.

6.9.2.1 Construction Activities

A series of different construction contracts would be issued for each of the construction elements to be accomplished. The contractor(s) would be required to work an accelerated schedule during the first, second and third years in order to complete all of the proposed work. This would require the contractor to work extended periods of time (six or seven days a week, 12 to 16 hours a day) or the weekends at critical points in time. Construction work will occur primarily during the period of April through December with the exception of demolition work in the South Cargo area, which could occur during the months of January, February, and March if the weather permits.

Table 6.9-4
Construction Sequence and Schedule

Construction Element	Year 1 2003 Quarter 1	2	3	4	Year 2 2004 Quarter 1	2	3	4	Year 3 2005 Quarter 1	2	3	4	Year 4 2006 Quarter 1	2	3	4	Year 5 2007 Quarter 1	2	3	4
Runway 14/32	■	■	■	■																
Centerfield Taxiway						■	■	■												
Southwest Taxiway										■	■	■								
System Reconfiguration																				
Taxiway Delta Extension														■	■					
Taxiway November Realignment																		■	■	

The general nature of the construction activity is similar to that of a highway construction or rehabilitation project: excavation; placement and compaction of fill; installation of electrical conduits, drainage pipes and appurtenances; placement of asphalt; and installation of airport lighting and navigation systems.

Figure 6.9-1 illustrates the year-by-year location of construction activities.

Year 1

- Construction Element..... Runway 14/32
- Work Periods ..... January 2003 - December 2003

Following the receipt of all environmental and procedural clearances, construction of Runway 14/32 will begin with the following preliminary items: relocation of the Runway 27 localizer (a navigation aid) and realignment of Taxiway Bravo; relocation of the tenants and operations in Building 60, and the subsequent demolition of Building 60 and 61.

Runway 14/32 is intended to be operational for visual flight rules (VFR) operations in late 2003 or early 2004, after FAA flight checks.

Most construction work for Runway 14/32 would occur during daylight hours. However, at critical locations, such as the realignment of Taxiway Bravo the intersection with Runway 4R, construction will take place at night and/or weekends during periods of decreased airfield activity.

Year 2

- Construction Element.....Centerfield Taxiway
- Work Periods .....April 2004 - December 2004

Construction of the Centerfield Taxiway will include excavation and placement of subgrade material, paving, drainage, electrical work and tie-ins to the existing taxiway systems as well as final grading, loam and seeding.

During the construction of the Centerfield Taxiway, the contractor's forces will have to obtain ATC tower clearance to cross active taxiways and runways.

Year 3

- Construction Element.....Southwest Taxiway System Reconfiguration
- Work Periods .....April 2005 - December 2005

Nighttime and weekend construction will be necessary for the reconfiguration of the Southwest Taxiway System, due to the operational sensitivity of these taxiways. Small sections of the overall project will be phased to minimize operational impacts to the airport. For construction to proceed, requests will be made to Massport Operations and FAA ATC personnel to pavement these sections to aircraft traffic on a nightly basis (11:00 PM to 6:00 AM) or during "weekend specials" (11:00 PM Friday to 2:00 PM Sunday). Construction will take place within these limited periods.

Year 4

- Construction Items.....Taxiway Delta Extension
- Work Periods .....April 2006 - September 2006

A major portion of the Taxiway Delta extension will be constructed during the daytime period. Given the proximity of multiple runways and the required crossing of these runways by contractor vehicles and equipment, construction activity in this area is particularly sensitive. Tie-ins of Taxiway Delta to the existing runways and other taxiways will require nighttime or weekend construction to minimize operational impacts.

Year 5

- Construction Element.....November Taxiway Realignment
- Work Periods .....April 2007 to September 2007

As construction here would impact operations on Runways 15R and 15L, as well as ground movements of aircraft taxiing to/from Runways 22R and 22L, the bulk of construction activity will take place at night and weekends. Operational impacts to taxiing aircraft will be mitigated by assigning this traffic to the Centerfield Taxiway.

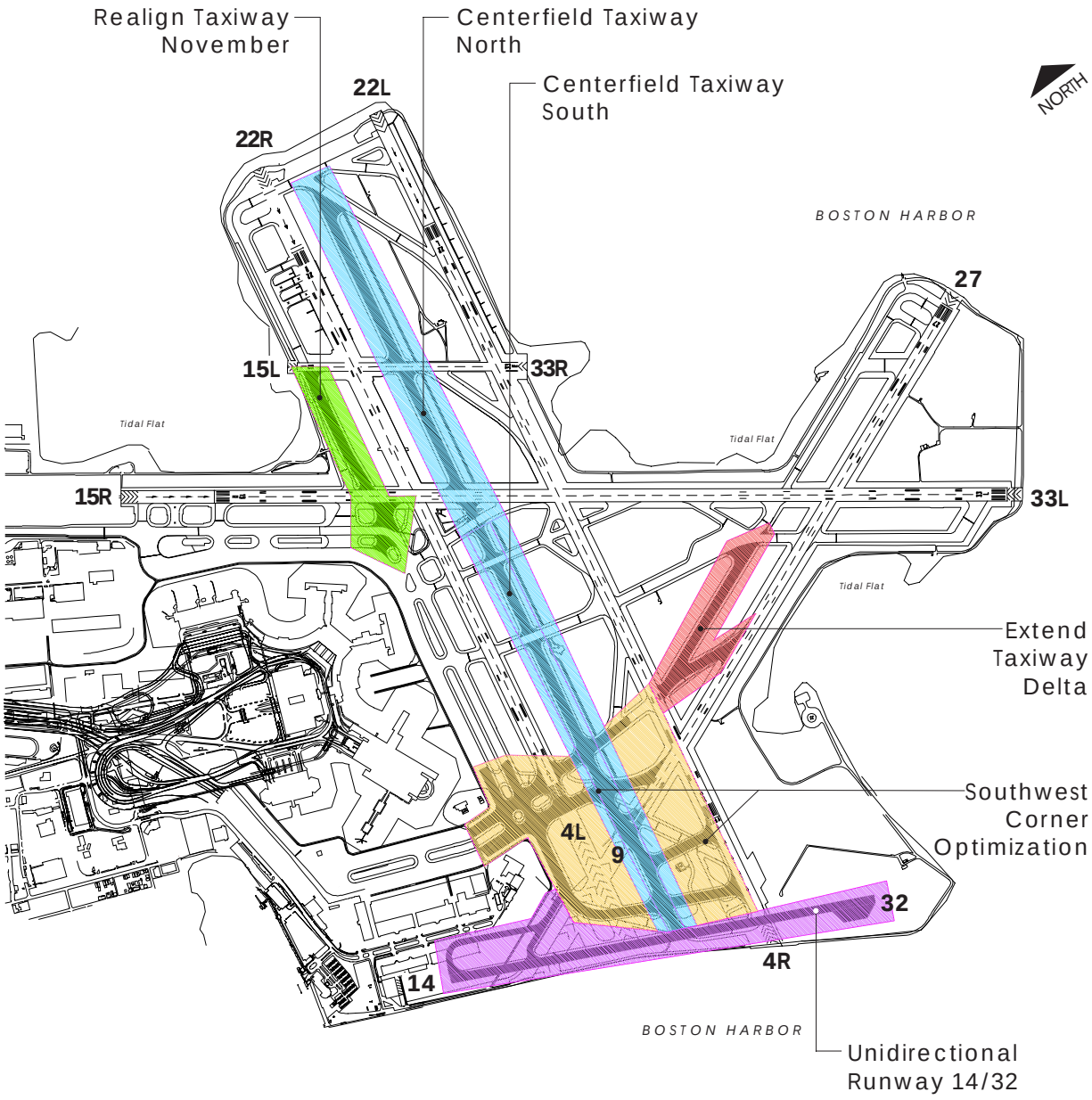

Figure 6.9-1

Year-By-Year Construction Activities - Alternative 1

7466-FIG-6.9-1.p65

6.9.3 Airfield Operations

Construction must not interfere with the ability of the existing airfield to efficiently process the tens of thousands of passengers who pass through Logan Airport on a daily basis. In addition, the safety of these passengers and airline crews during construction must be assured. The construction process has been planned bearing these two issues in mind.

A multi-year construction sequence will be employed to minimize potential disruptions on the airfield and to the staffing levels and work loads of ATC personnel. A Construction Phasing Plan, with these same goals, will be developed in close coordination with Massport Operations, and FAA control tower personnel. Massport will take the appropriate steps to ensure that all functions of the airfield continue to be provided in an efficient and safe manner during the construction period, and that any impacts to users that do occur are kept to a minimal level.

While the implementation of the Preferred Alternative presents challenges to Massport, Massport addresses such challenges frequently, as construction on and maintenance of the airfield are continuous Massport activities.

The operational and safety procedures which Massport and FAA have developed and employed successfully on past projects will be applied to the improvements proposed in the Airside Project.

6.9.3.1 FAA Regulations Governing Construction on Airfields

All construction activity at Logan Airport is governed by FAA Advisory Circular (AC) 150/5370-2C, Operation Safety on Airports During Construction. This document prescribes both general and specific measures to be employed during construction, including the following provision:

> *"Each bidding document (construction plans and/or specifications) for airport development work or air navigation facility (NAVAID) installation involving aircraft operational areas should incorporate a section on safety on airports during the construction activity. The section, as a minimum, should contain the appropriate provisions outlined in appendix 1 to this AC. (Para. 5b)"*

There is one guiding precept to the FAA regulations: aircraft operational and safety needs take precedence over construction. In practice, this translates to the following: construction activity adjusts both in location and in timing to airport runway configurations and taxiway patterns. In other words, runway configurations will not be altered to accommodate construction, except in instances where a number of runway configurations are available to the FAA personnel in ATC, and after coordination with FAA personnel as described below.

Massport follows FAA AC 150/5370-2C beginning with preliminary design and continuing throughout the construction period. A detailed safety section is presently included in all Massport bidding documents covering construction activity on the airfield, and such a section will be included in all construction bid documents (and subsequent construction contracts) for work on this project.

6.9.3.2 Airfield Operational Safety during Airside Project Construction

Preliminary Design

To minimize impacts on airfield operations, careful coordination would begin in the early stages of design to develop a coordinated Construction Phasing Plan for daily implementation. During the development of the Construction Phasing Plan, representatives from Logan Airport Operations, and the FAA will be consulted.

The Construction Phasing Plan would identify the following:

- a preliminary phasing plan, indicating the sequence of construction;
- construction areas, with nearby runways and taxiways and clearance requirements clearly demarked and highlighted;
- specific start and stop dates;
- hours and days of the week when the contractor is allowed to work within certain operationally sensitive areas of the airport;
- protocol and procedures for notifying FAA air traffic control personnel when an existing FAA NAVAID would be affected; and,
- preliminary construction traffic plan, indicating procedures and means of access/egress to/from the airfield and means of circulating within the airfield.

Construction of Runway 14/32 will entail the relocation of the Runway 27 localizer, a key element in the instrument landing system by the FAA. The localizer signal is used to establish and maintain an aircraft's horizontal position until the pilot makes visual contact with the runway. The Construction Phasing Plan will detail protocols and procedures to be followed when relocating and reinstalling this device. NAVAID closures will be coordinated with FAA air traffic control personnel, FAA safety personnel and Logan Airport Operations personnel. Notices to Airmen (NOTAMS) will be issued as appropriate. As necessary, FAA will broadcast information over the Logan Automatic Terminal Information Service (ATIS), describing areas of construction, NAVAID status, and closures or cautions on the use of runways and taxiways. As FAA ATC personnel update these radio broadcasts hourly, they provide pilots with a constant up-to-date status of construction activity on the airfield.

Construction

Once construction is underway, the contractor's performance for the previous week will be evaluated and discussions relevant to the work proposed for the following week will be included in the weekly job meetings and operations meetings held at Logan. Typically, these meetings are attended by representatives from Massport Logan Airport Operations, Capital Programs, FAA and contractors.

During these meetings, preliminary runway/taxiway closures or cautions would be discussed with Logan Airport Operations and FAA ATC personnel. As part of the requested closures or cautions, any interim taxi routing would also be discussed. Construction contingency plans would be prepared in case the contractor would not be allowed to work in the preferred location. All parties would agree with the proposed Construction Phasing Plan, which would then form the basis of the following week's construction activities.

The day-to-day decisions on whether a particular runway/taxiway would be available for construction work would be made by Logan Airport Operations and FAA ATC personnel. The following protocol would be utilized:

- Massport contacts FAA ATC personnel and requests applicable portion of the runway/taxiway (in accordance with the Construction Phasing Plan);
- FAA reviews wind and weather conditions, projected activity, and other factors and grants or denies request;
- If granted, Massport implements this decision and notifies the contractor accordingly; and,
- If denied, Massport implements this decision and notifies the contractor that work in another area of the airport, in accordance with the contingency plan established previously, would be required.
- Consistent with current Massport protocol, the public would be notified of changes in runway use during construction.

Under very poor weather conditions, Massport has the authority to deny or restrict the contractor's access to the entire airfield in which case, no work is done on the airfield.

Construction Vehicle Traffic Plan

The movement of construction equipment and trucks to and from the airfield construction site(s) is of particular concern to FAA and Massport. FAA notes that aircraft (and air passenger) safety is endangered by four principle causes: increased vehicle traffic volume, non-standard vehicle traffic patterns, vehicles without radio communications and marking, and operators untrained in the airport's safety procedures. Hence, according to FAA AC 150/5370-2C:

> *"...airport management must develop and coordinate a construction vehicle traffic plan with airport users, air traffic control and the appropriate construction engineers and contractors. This plan, when signed for all participants becomes a part of the contract." (AC 150/5370-2C, Appendix 1, para. 8)*

Such a vehicle traffic plan will be included in the Construction Phasing Plan developed by Massport for all construction projects on the airfield.

For both safety and security reasons, access to the airfield proper is available only through manned gates. For work on the south side of the airport (i.e., the southwest taxiway system, Taxiway Delta) the contractor would likely enter the airport through the existing South Gate located to the west of the airfield lighting vault (see Figure 6.9-2 for access points and circulation routes). From this point, the contractor would be escorted by licensed drivers approved by Logan Airport Operations in clearly marked contractor vehicles to the construction site using the airfield perimeter roadway. At critical junctures, such as the crossing of a runway or taxiway, Contractor licensed personnel request and receive permission from the FAA ATC prior to crossing.

For work on Runway 14/32, the contractor would typically use an existing construction-access gate located near the U.S. Postal Service facility (Building 61) on the south side of the airport. This access point provides a more direct access to the airfield perimeter roadway and has greater width to facilitate the turning of large trucks.

For all other construction projects, e.g., Taxiway November and the Centerfield Taxiway, access to the airfield would likely be through the North Gate. As per Massport's operating procedures, the contractor will be escorted to/from the construction site by trained personnel approved by Logan Airport Operations.

Contractor access locations will be verified during the development of the Construction Phasing Plan for the Airside Project improvements.

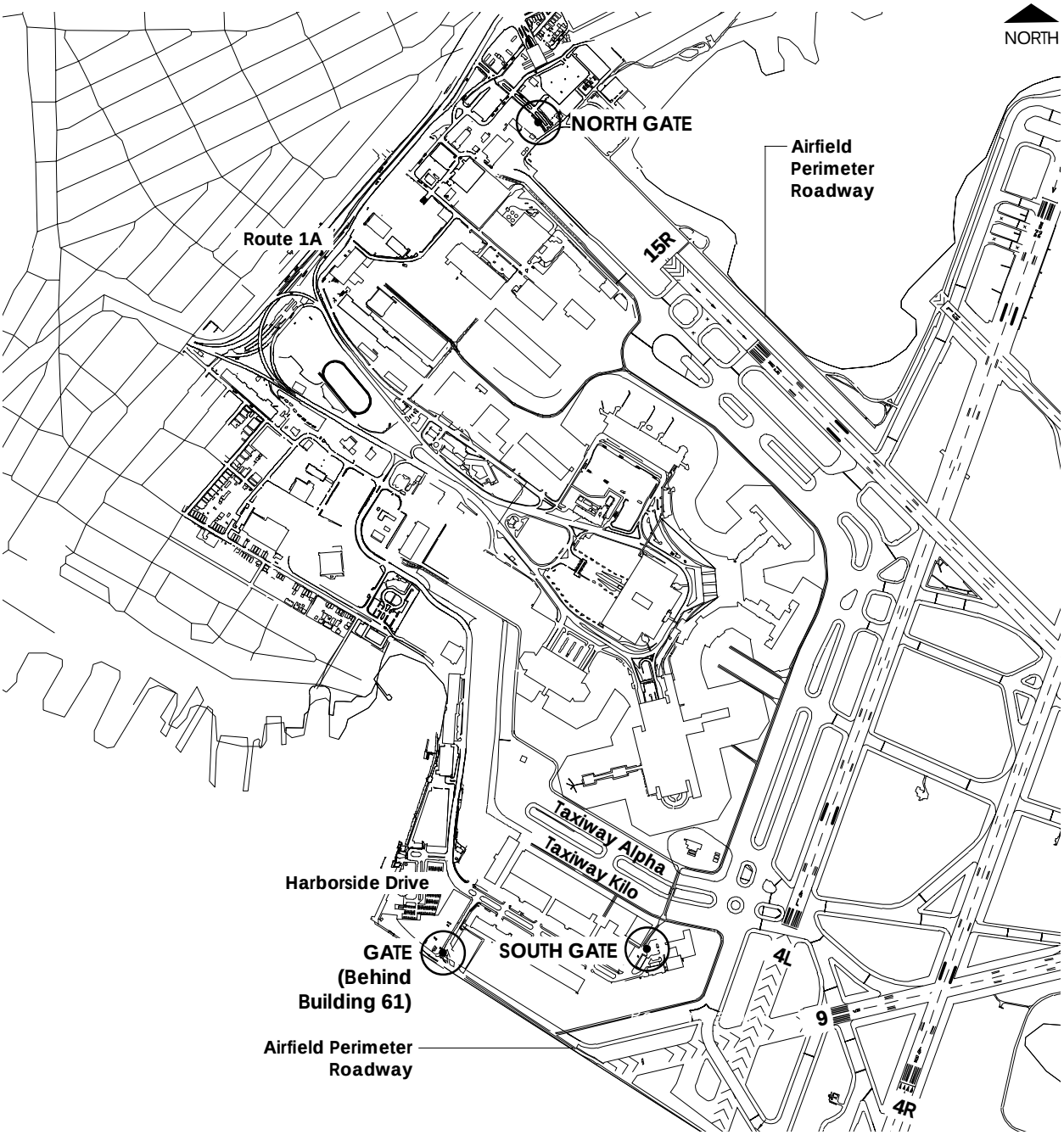

Figure 6.9-2
Airside Access Points

7466-FIG-6.9-2.p65

6.9.4 Impacts on the Surrounding Communities

For impacts other than those which might directly affect operations on the airfield, construction period impact assessments have been conducted with regard to existing ground transportation, air quality, noise and nighttime construction lighting. Each of these subject areas is discussed in the following sections of this chapter. Accompanying each of these assessments is a discussion of the mitigation measures that will be employed to minimize the impacts.

A variety of measures of activity have been developed in order to identify and mitigate the potential impacts of constructing the Preferred Alternative. These activity estimates are based on anticipated construction methods and projected construction schedules. Truck trips, the types of heavy construction equipment on the site, and the noise effects of similar construction projects are estimated. These data constitute key inputs to the construction impact analyses.

Average daily round-trip truck trip information was used in the assessment of ground transportation impacts and, in combination with estimates of heavy equipment use, in the noise impact assessment.

6.9.4.1 Ground Transportation

Impacts to ground transportation at Logan Airport during construction of the proposed airport improvements are not expected to result from the presence of construction-related vehicles (trucks or other heavy equipment) on the airport's roadway system. There will be no need to institute temporary detours for the main airport roadway as a result of the construction process. Roadway detours are only anticipated for the Perimeter Roadway on the airfield during construction of Runway 14/32, and a section of Harborside Drive in the South Cargo area during demolition of Cargo Buildings 60 and 61.

Construction-related Vehicles

The number of truck round trips required throughout construction of the Preferred Alternative is derived from the estimated quantities of construction materials to be brought to or removed from the site; bulk materials and equipment to be delivered to the site; truck capacity; quantity of excavate and building demolition debris to be removed; and production rate per workday.

The types of trucks included in the analysis are the following:

- Ten-wheel, tri-axle dump trucks (capacity of 10 to 15 cubic yards);
- Flat bed trailers to transport heavy construction equipment; and,
- Concrete trucks (capacity of 9 to 12 cubic yards).

The average daily number of truck round trips required to support the construction are depicted (by calendar quarter) in Table 6.9-5.

Table 6.9-5
Average Daily Truck Round Trips Per Quarter

Year/Quarter	Average Daily Round Trips	Daytime Trips	Nighttime Trips
2003 / 1st Quarter	61	61	0
2003 / 2nd Quarter	61	43	18
2003 / 3rd Quarter	61	61	0
2003 / 4th Quarter	61	61	0
2004 / 1st Quarter	--	--	--
2004 / 2nd Quarter	92	92	0
2004 / 3rd Quarter	92	46	46
2004 / 4th Quarter	92	92	0
2005 / 1st Quarter	--	--	--
2005 / 2nd Quarter	18	0	18
2005 / 3rd Quarter	18	5	13
2005/ 4th Quarter	18	5	13
2006 / 1st Quarter	--	--	--
2006 / 2nd Quarter	47	47	0
2006 / 3rd Quarter	47	38	9
2006 / 4th Quarter	--	--	--
2007 / 1st Quarter	--	--	--
2007 / 2nd Quarter	56	28	28
2007 / 3rd Quarter	56	28	28
2007 / 4th Quarter	--	--	--

These truck volumes should be viewed in the proper perspective: trucks will be prohibited from using local streets and thus will not impact local residential streets in communities surrounding the airport. Construction vehicles will be required to use state highways and / or main airport roadways, which are designated, truck routes. Vehicles with origins / destinations south of Boston would access the airport via the Ted Williams Tunnel and the Haul Road, or other designated haul routes, with access to I-93. Vehicles traveling to / from the north would use Route 1A. (See Figure 6.9-3.)

Construction traffic from the improvements associated with the Preferred Alternative would not add significantly to the existing volume of traffic using these roads. Peak airside truck traffic

is estimated to be approximately 184 truck trips per day.[40] This is reduced significantly from 648 peak truck trips presented in the Airside Project Draft EIS/EIR as a result of the reduction of soil material to be removed off-site. Average weekday traffic on the major highways accessing Logan Airport in 1998 was approximately 113,300 vehicles.[41] Construction vehicles associated with the Airside Project represent less than 0.2 percent of the total traffic volume and will not have a significant impact on the regional highway system.

Traffic Operations

During the multi-year construction of the Airside Project improvements, Massport will seek to maintain the full operation of Harborside Drive at all times. As necessary, temporary roadways will be constructed prior to the disruption or closure of existing airfield roadways. (Access to airfield roadways is restricted to authorized vehicles only.) Police details will be employed at appropriate locations on the airport to manage traffic and ensure public safety.

6.9.4.2 Air Quality

Construction-related activities can result in short-term impacts on ambient air quality. These potential impacts include increased emissions from motor vehicles on the airport roadways, direct emissions from construction equipment, and fugitive dust emissions. The latter can occur during ground excavation, movement of equipment at the site, and transport of material to and from the site. Fugitive dust during periods of intense activity can present a problem, particularly in windy or dry weather conditions, although the problem is localized.

During the construction process, a regular program of street sweeping will minimize dust from movements of construction vehicles on airport roads. Fugitive dust will also be controlled with water spray as needed during demolition and construction; no chemical soil stabilizers will be used. To the extent it is safe, practicable, and feasible within the airfield environment, fencing will be used around the perimeter of demolition and construction areas to shield the public from fugitive dust and to help contain fugitive dust within the construction area. All trucks hauling demolished and excavated materials from the site will be covered and truck wheel wells will be washed before leaving the site. Because of these mitigation measures and the distance from the construction site to the nearest residential neighborhood, it is projected that fugitive dust from construction of the Airside Project improvements will not impact the surrounding communities.

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40 92 round trips equal 184 total trips.
41 *Logan Airport 1998 Annual Update*, October 1999.

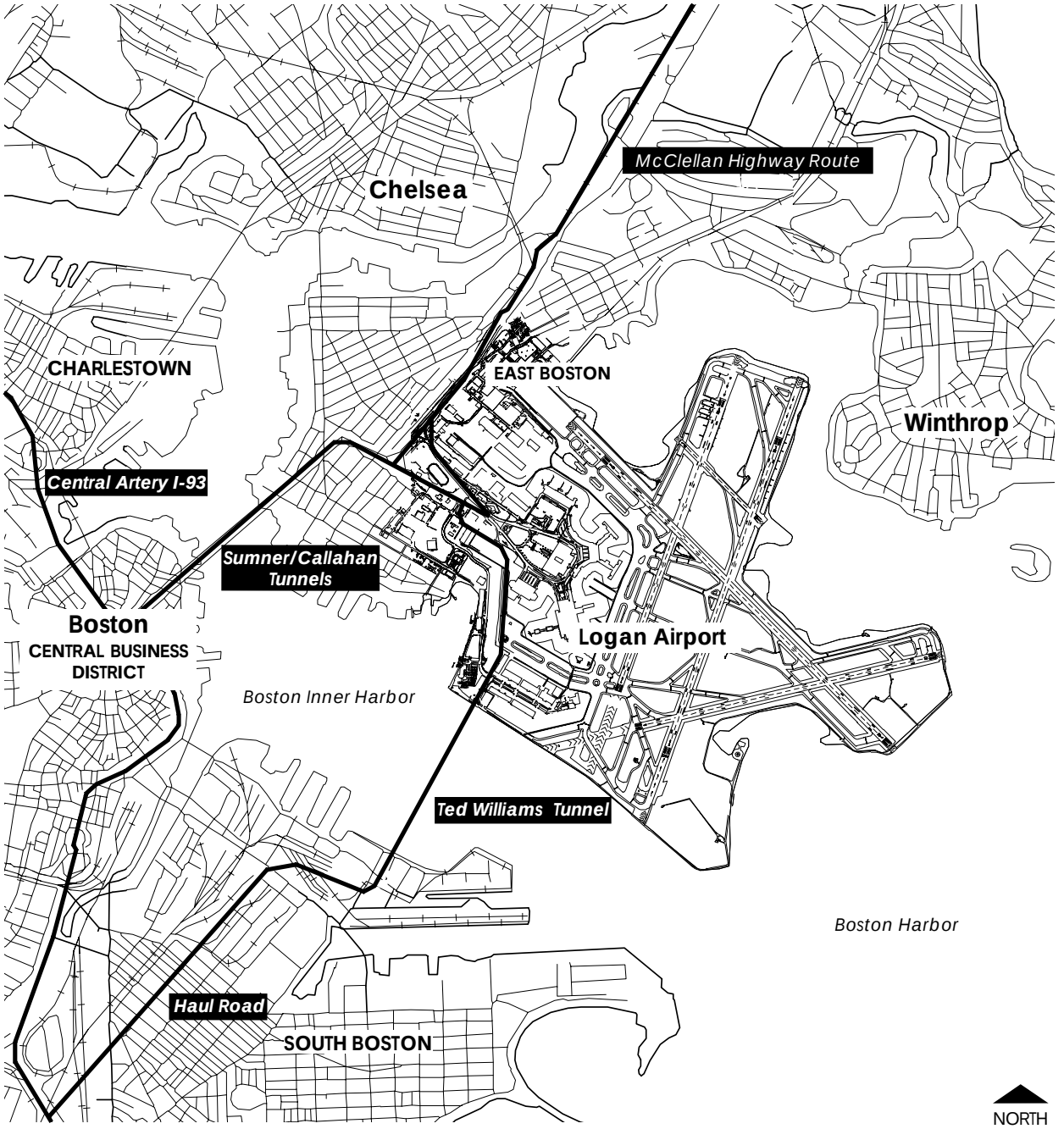

Figure 6.9-3
Proposed Construction Traffic Routes

7466-FIG-6.9-3.p65

Airborne particulate matter such as dust is measured by monitoring ambient PM-10 (particulate matter less than 10 microns in diameter). The closest PM-10 monitoring station, and the one most representative of the project site, is at 340 Bremen Street, East Boston. Published data from DEP (for the year 1998) indicate that the second highest maximum 24-hour PM-10 level measured at this monitoring station was 49 micrograms per cubic meter ($\mu g / m^3$). The 24-hour NAAQS for PM-10 is 150 $\mu g / m^3$, which is a level set to protect public health and welfare. It is expected that total levels of particulate matter will remain in compliance with the NAAQS during construction, since the existing worst-case PM-10 concentration is only 33 percent of the health standard. This will be ensured through the mitigation measures discussed above.

Emissions from all construction equipment, including those listed below in Section 6.9.4.4, were quantified by year using appropriate emissions factors from the EPA models. MOBILE5a_H and PART5 were used with inputs provided by MADEP to determine emission factors for diesel and gasoline trucks at a speed of 15 miles per hour (e.g., asphalt tanker trucks and stake trucks), while NONROAD (draft) was used to determine non-road emissions (e.g., demolition hammers, backhoes, graders, etc.). The emissions factors in this model incorporate national averages for equipment loading factors and engine horsepower. The activity levels (hours per year) and emissions associated with each equipment type are contained in Appendix J.

Paving activities associated with the airfield projects have associated emissions of VOCs, which are components of asphalt. These emissions have been quantified and are included in the summary of construction-related air emissions in Table 6.9-6.

Table 6.9-6
Construction-Related Air Emissions in Tons per Year (tpy)

Year	VOCs	NOx	CO	PM
2002	19.98	34.34	72.52	2.56
2003	29.40	25.53	50.58	1.64
2004	30.39	9.82	35.81	0.86
2005	7.11	5.79	20.88	0.41
2006	7.83	7.95	20.98	0.61

Note: *De minimis* values for VOCs and NOx are each 50 tons per year (tpy); 100 tpy for CO. No *de minimis* levels apply for PM because the area attains the standards for this pollutant.

As shown, emissions of VOCs, NOx, and CO are all below the *de minimis* rates that would trigger a Clean Air Act conformity determination. Furthermore, Massport is committed to implementing the Clean Air Construction Initiative in cooperation with MADEP and Northeast States for Coordinated Air Use Management (NESCAUM). This program is currently in place for the Central Artery/Tunnel, where conversion of

25 percent (70 pieces) of construction equipment will reduce emissions of hydrocarbons (or VOCs), CO, and particulate matter (PM). NESCAUM studies show that use of an oxidation catalyst, which may also be used in conjunction with a fuel-borne catalyst, can reduce, on average, VOCs by 42 percent, CO by 31 percent, and PM by 23 percent. Use of a particulate filter can reduce PM by 81-96 percent and, when the filter is coated with an oxidation catalyst, CO and VOCs can be reduced by 66 percent. None of the tested technologies has had an effect on NOx emissions. The reductions attributable to this initiative have not been incorporated into the results in Table 6.9-6 above, and they would have the effect of further reducing emissions below *de minimis* thresholds.

6.9.4.3 Noise

The assessment of construction noise impacts was based on the following primary inputs:

- The quantity of heavy construction equipment anticipated to be used during construction;
- The number of truck trips to or from each construction area;
- The location of the proposed construction on the airfield; and,
- The amount of night time and day time construction.

The number of truck trips is as developed in Section 6.9.4.1. The other levels of activity are derived as described below.

6.9.4.4 Heavy Construction Equipment

Estimates of the number of pieces of heavy construction equipment in use at the site were based on such factors as the productivity rate per workday and the duration of construction. The types of equipment expected to be utilized are listed below and are described in greater detail in Appendix J. The average daily number of pieces of equipment scheduled to be used for the calendar quarter and daytime and nighttime construction also is provided in Appendix J.

- Dump trucks
- Mobile cranes
- Graders
- Concrete trucks
- Front end loaders
- Pavement milling machines
- Liquid asphalt tanker truck
- Compressors
- Pavements saws
- Tractor-trailers (materials)
- Backhoes
- Demolition hammers
- Back hoes with hoe-rams
- Generator
- Compactors
- Excavators
- Sweepers
- Bulldozers
- Paving machine

6.9.4.5 Construction Period Noise Analysis

Analysis Summary

The construction period noise analysis evaluates the potential noise impact from the Airside Project on the closest noise-sensitive areas to the construction zone and follows the methodology used previously for the West Garage and International Gateway environmental analysis. Potential construction noise impacts were evaluated at the following receptor locations:

- Receptor 6 Somerset and Johnson, Winthrop
- Receptor 7 Loring Road near Court, Winthrop
- Receptor 10 Bayswater / Shawsheen, East Boston
- Receptor 12 East Boston Yacht Club, East Boston
- Receptor C[42] Coleridge Street Residence, East Boston
- Receptor A Sumner near Lamson, East Boston
- Receptor 14 Jeffries Point Yacht Club, East Boston
- Receptor E Farragut Road at Second, South Boston

Predictions of average daily equivalent (Leq) and day-night equivalent (DNL) noise levels were made for each receptor.

Noise impact may result from annoyance and activity interference due to the operation of a variety of heavy construction equipment and trucks used to transport construction materials and equipment to and from the site. A number of mitigation measures are proposed in the construction noise mitigation discussion below.

Because environmental noise fluctuates from moment to moment, it is common practice to condense all this information into a single number, called the “equivalent” sound level (Leq). Leq can be thought of as the steady sound level that represents the same sound energy as the varying sound levels over a specified time period; it accounts for all the noise that occurs during this period. Many surveys show that Leq properly predicts annoyance, and thus this metric is commonly used for the assessment of cumulative noise impact. For the purposes of this study, Leq is evaluated over an average daily 8-hour construction shift during each quarterly construction period. The analysis of Leq was conducted for both the daytime and nighttime construction periods. Criteria for evaluating construction noise impact in terms of Leq are described below.

The day-night equivalent level (DNL) measures noise over a 24-hour period. It is calculated in the same manner as a 24-hour Leq, except that noise that occurs in the nighttime (defined as 10:00 PM to 7:00 AM) is penalized by 10 dB to account for peoples’ increased sensitivity to nighttime noise.

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42 Same as “Receptor E” in International Gateway, EIR/EA, October 15, 1996.

Potential construction noise impact associated with the Airside Project was assessed in terms of average daytime equivalent sound levels, average nighttime equivalent sound levels, and day-night equivalent level, using criteria based on the existing noise environment as well as applicable standards. A summary of the analysis method is provided below, including descriptions of the noise measures, criteria, and modeling methods used. Detailed input and output data for the construction noise projections are provided in Appendix J.

The results of the construction period noise analysis indicate that, under worst-case conditions, no perceptible construction noise impact during the daytime or nighttime construction period is expected within the community as a result of the Airside Project.

Analysis Conditions

The potential noise impacts associated with the Airside Project construction activities were evaluated on a quarterly basis over the proposed five-year construction period (2002 to 2006). During each quarterly period, potential noise impacts were evaluated on a worst-case basis, based on the projected average daily heavy construction equipment usage and truck operations and whether construction occurred during the day time or night time. For the purpose of impact assessment, ambient noise conditions were based on existing information from noise monitoring stations maintained by Massport.

For noise analysis purposes, all construction activities related to the Airside Project were divided into two construction locations: those on the north side of the airfield which would use the North Gate for construction access, and those on the south side which would use the South Gate or Construction Gate for access (see Figure 6.9-2). The dividing line between the two construction areas was defined as Runway 15L / 33R.

A cumulative assessment of construction noise for all significant construction at Logan Airport during the 2002 to 2006 timeframe of Airside Project improvements construction is presented in Chapter 7.

Noise Impact Criteria

Criteria for the assessment of construction impacts from the Airside Project are based on consideration of applicable federal standards. Although there are no specific federal criteria for construction noise impact assessment, most federal agencies (including the Environmental Protection Agency (EPA), Housing and Urban Development (HUD), Federal Aviation Administration (FAA), and Federal Highway Administration (FHWA)) recommend the use of Leq-based noise descriptors for general assessments of noise impact. The relevant provisions of federal standards that apply to construction noise are summarized below.

The 1990 CA/T *Final Supplemental EIS/R* and *Supplemental Final Section 4(f) Evaluation* evaluated the noise impacts of the CA/T Project construction based on FHWA standards. The following excerpt from that document provides a discussion of noise impact criteria:

> *"FHWA recognizes that an adverse, or substantial, noise impact occurs when existing noise levels are exceeded by more than 15 dBA. Increases of less than 15 dBA over existing levels may be classified into one of three subjective impact categories, depending on the extent of the increases. Less than a 5 dBA increase would be categorized as 'no impact.' A 5 to 9 dBA increase would be considered a 'minor impact,' while a 10 to 15 dBA increase over existing levels would be a 'moderate impact.' "*

For the Airside Project and concurrent construction projects at Logan, noise impact is assessed on a relative basis, as an increase over existing ambient noise level at each receptor, in a manner consistent with the CA/T Project.

These descriptors thereby allow a meaningful comparison of project noise and ambient noise, and provide a means to evaluate cumulative noise impact from concurrent projects. Furthermore, the results of attitudinal surveys of noise impact have shown that Leq-based descriptors correlate with annoyance better than any other descriptors. For these reasons, the assessment of noise impact from constructing the Airside Project is based on Leq according to the federal standards described above. Projections of day-night equivalent noise levels are provided as additional information to help evaluate the effect of nighttime construction.

Off-Airport Noise During Construction

Quarterly construction noise projections are provided in Tables 6.9-7, 6.9-8, and 6.9-9 for receptor locations 6, 7, 10, 12, 14, A, C, and E. These tables compare the projected average daily DNL and Leq for day and night during each quarterly construction period for the Airside Project to the existing ambient noise. Noise impact is assessed based on the projected increases above the ambient noise level. These increases represent worst-case conditions that are expected to occur intermittently, based on wind direction, in any quarter.

The results of the construction period noise analysis indicate that during construction, the average daily DNL at the receptor locations ranges from 0.5 dB to 3.0 dB over ambient noise levels. The Leq during construction ranges from 0.4 dB to 2.0 dB over ambient noise levels during the daytime construction period and 0.5 dB to 3.9 dB over ambient noise levels during the nighttime construction period. All increases in noise associated with construction of the Airside Project are less than 5 dB, and therefore are considered to have "no impact" according to FHWA standards.

The noise increases projected as a result of Airside Project construction range from 0.4 dBA to 3.9 dBA with respect to the ambient level. Based on the FHWA criteria described above, no impact is predicted at any of these residential sites.

Table 6.9-7
Airside Construction Noise DNL in Decibels

Receptor	Activity	2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
6	Construction	47.8	58.5	48.8	47.4	0.0	57.0	63.9	54.3	0.0	56.8	56.9	56.9	0.0	53.4	59.3	0.0	0.0	60.8	61.2	0.0
	Ambient	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
	Total	65.6	66.3	65.6	65.6	65.5	66.1	67.8	65.8	65.5	66.0	66.1	66.1	65.5	65.8	66.4	65.5	65.5	66.8	66.9	65.5
7	Construction	49.1	56.1	50.2	48.7	0.0	59.1	66.0	56.4	0.0	56.0	56.2	56.2	0.0	53.4	56.7	0.0	0.0	61.9	62.3	0.0
	Ambient	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
	Total	75.1	75.2	75.1	75.1	75.1	75.2	75.6	75.2	75.1	75.2	75.2	75.2	75.1	75.1	75.2	75.1	75.1	75.3	75.3	75.1
10	Construction	47.5	54.4	48.6	47.1	0.0	56.0	63.2	53.4	0.0	54.1	54.3	54.3	0.0	48.8	54.6	0.0	0.0	60.1	60.5	0.0
	Ambient	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
	Total	65.2	65.5	65.2	65.2	65.1	65.6	67.3	65.4	65.1	65.4	65.4	65.4	65.1	65.2	65.5	65.1	65.1	66.3	66.4	65.1
12	Construction	48.9	55.8	49.9	48.5	0.0	57.1	64.0	54.5	0.0	55.7	55.9	55.9	0.0	49.5	55.3	0.0	0.0	63.2	63.6	0.0
	Ambient	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
	Total	70.0	70.2	70.0	70.0	70.0	70.2	71.0	70.1	70.0	70.2	70.2	70.2	70.0	70.0	70.1	70.0	70.0	70.8	70.9	70.0
C	Construction	49.0	56.0	50.1	48.7	0.0	56.0	62.9	53.5	0.0	56.1	56.3	56.3	0.0	49.3	55.1	0.0	0.0	62.9	63.3	0.0
	Ambient	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
	Total	69.6	69.8	69.6	69.6	69.6	69.8	70.4	69.7	69.6	69.8	69.8	69.8	69.6	69.6	69.8	69.6	69.6	70.4	70.5	69.6
A	Construction	53.6	60.5	54.7	53.2	0.0	50.8	57.5	48.2	0.0	55.6	55.8	55.8	0.0	45.4	50.8	0.0	0.0	53.8	54.2	0.0
	Ambient	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
	Total	61.9	63.9	62.1	61.8	61.2	61.6	62.8	61.4	61.2	62.3	62.3	62.3	61.2	61.3	61.6	61.2	61.2	61.9	62.0	61.2
14	Construction	55.5	62.5	56.6	55.1	0.0	50.8	54.5	48.3	0.0	53.4	53.6	53.6	0.0	43.0	47.9	0.0	0.0	52.6	53.0	0.0
	Ambient	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
	Total	63.3	65.5	63.5	63.2	62.5	62.8	63.1	62.7	62.5	63.0	63.0	63.0	62.5	62.5	62.6	62.5	62.5	62.9	63.0	62.5
E	Construction	52.4	53.8	53.5	52.0	0.0	49.1	55.9	46.5	0.0	55.1	55.3	55.3	0.0	47.4	53.1	0.0	0.0	51.3	51.7	0.0
	Ambient	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
	Total	61.8	62.0	62.0	61.8	61.3	61.6	62.4	61.4	61.3	62.2	62.3	62.3	61.3	61.5	61.9	61.3	61.3	61.7	61.8	61.3

Table 6.9-8
Airside Construction Noise Leq Day in Decibels

Receptor		2003				2004				2005				2006				2007			
NMS#	Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
6	Construction	50.1	57.0	51.2	49.7	0.0	59.3	60.1	56.7	0.0	0.0	47.3	47.3	0.0	55.8	52.5	0.0	0.0	53.4	53.2	0.0
	Ambient	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
	Total	64.5	65.1	64.5	64.5	64.3	65.5	65.7	65.0	64.3	64.3	64.4	64.4	64.3	64.9	64.6	64.3	64.3	64.7	64.7	64.3
7	Construction	51.4	51.0	52.5	51.0	0.0	61.4	62.2	58.8	0.0	0.0	46.5	46.5	0.0	55.8	49.9	0.0	0.0	54.5	54.2	0.0
	Ambient	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
	Total	72.3	72.3	72.3	72.3	72.3	72.6	72.7	72.5	72.3	72.3	72.3	72.3	72.3	72.4	72.3	72.3	72.3	72.3	72.3	72.3
10	Construction	49.8	49.4	50.9	49.4	0.0	58.3	59.0	55.8	0.0	0.0	44.7	44.7	0.0	51.2	47.9	0.0	0.0	52.8	52.5	0.0
	Ambient	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
	Total	63.9	63.8	63.9	63.8	63.7	64.8	64.9	64.3	63.7	63.7	63.7	63.7	63.7	63.9	63.8	63.7	63.7	64.0	64.0	63.7
12	Construction	51.2	50.8	52.3	50.8	0.0	59.4	60.2	56.9	0.0	0.0	46.3	46.3	0.0	51.8	48.6	0.0	0.0	55.9	55.6	0.0
	Ambient	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
	Total	67.7	67.7	67.7	67.7	67.6	68.2	68.3	67.9	67.6	67.6	67.6	67.6	67.6	67.7	67.6	67.6	67.6	67.6	67.6	67.6
C	Construction	51.4	51.0	52.5	51.0	0.0	58.4	59.0	55.8	0.0	0.0	46.7	46.7	0.0	51.7	48.4	0.0	0.0	55.6	55.3	0.0
	Ambient	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
	Total	66.7	66.6	66.7	66.6	66.5	67.1	67.2	66.9	66.5	66.5	66.6	66.6	66.5	66.7	66.6	66.5	66.5	66.9	66.8	66.5
A	Construction	55.9	55.5	57.0	55.5	0.0	53.1	53.8	50.6	0.0	0.0	46.2	46.2	0.0	47.7	44.9	0.0	0.0	46.6	46.4	0.0
	Ambient	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
	Total	60.9	60.7	61.2	60.7	59.2	60.1	60.3	59.7	59.2	59.2	59.4	59.4	59.2	59.5	59.3	59.2	59.2	59.4	59.4	59.2
14	Construction	57.9	57.4	58.9	57.5	0.0	53.2	53.8	50.6	0.0	0.0	44.0	44.0	0.0	43.2	43.1	0.0	0.0	45.5	45.2	0.0
	Ambient	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
	Total	62.9	62.7	63.2	62.7	61.2	61.8	61.9	61.6	61.2	61.2	61.3	61.3	61.2	61.3	61.3	61.2	61.2	61.3	61.3	61.2
E	Construction	54.7	54.3	55.8	54.3	0.0	51.5	52.2	48.9	0.0	0.0	45.7	45.7	0.0	49.5	46.5	0.0	0.0	44.1	43.8	0.0
	Ambient	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
	Total	61.0	60.9	61.3	60.9	59.9	60.5	60.6	60.2	59.9	59.9	60.0	60.0	59.9	60.3	60.1	59.9	59.9	60.0	60.0	59.9

Table 6.9-9
Airside Construction Noise Leq Night in Decibels

Receptor		2003				2004				2005				2006				2007			
NMS#	Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
6	Construction	0.0	51.0	0.0	0.0	0.0	0.0	57.4	0.0	0.0	51.5	51.4	51.4	0.0	0.0	53.5	0.0	0.0	55.1	55.6	0.0
	Ambient	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
	Total	57.7	58.5	57.7	57.7	57.7	57.7	60.6	57.7	57.7	58.6	58.6	58.6	57.7	57.7	59.1	57.7	57.7	59.6	59.8	57.7
7	Construction	0.0	50.0	0.0	0.0	0.0	0.0	59.5	0.0	0.0	50.8	50.7	50.7	0.0	0.0	50.9	0.0	0.0	56.1	56.6	0.0
	Ambient	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
	Total	68.3	68.4	68.3	68.3	68.3	68.3	68.8	68.3	68.3	68.4	68.4	68.4	68.3	68.3	68.4	68.3	68.3	68.6	68.6	68.3
10	Construction	0.0	48.3	0.0	0.0	0.0	0.0	56.9	0.0	0.0	48.9	48.8	48.8	0.0	0.0	48.8	0.0	0.0	54.4	54.9	0.0
	Ambient	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
	Total	57.5	58.0	57.5	57.5	57.5	57.5	60.2	57.5	57.5	58.1	58.1	58.1	57.5	57.5	58.0	57.5	57.5	59.2	59.4	57.5
12	Construction	0.0	49.7	0.0	0.0	0.0	0.0	57.5	0.0	0.0	50.5	50.4	50.4	0.0	0.0	49.4	0.0	0.0	57.5	58.0	0.0
	Ambient	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
	Total	63.0	63.2	63.0	63.0	63.0	63.0	64.1	63.0	63.0	63.2	63.2	63.2	63.0	63.0	63.2	63.0	63.0	64.1	64.2	63.0
C	Construction	0.0	49.9	0.0	0.0	0.0	0.0	56.4	0.0	0.0	50.9	50.8	50.8	0.0	0.0	49.3	0.0	0.0	57.2	57.7	0.0
	Ambient	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9
	Total	62.9	63.1	62.9	62.9	62.9	62.9	63.8	62.9	62.9	63.2	63.2	63.2	62.9	62.9	63.1	62.9	62.9	63.9	64.0	62.9
A	Construction	0.0	54.4	0.0	0.0	0.0	0.0	51.1	0.0	0.0	50.4	50.2	50.2	0.0	0.0	44.9	0.0	0.0	48.0	48.5	0.0
	Ambient	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
	Total	54.0	57.2	54.0	54.0	54.0	54.0	55.8	54.0	54.0	55.6	55.5	55.5	54.0	54.0	54.5	54.0	54.0	55.0	55.1	54.0
14	Construction	0.0	56.4	0.0	0.0	0.0	0.0	46.3	0.0	0.0	48.2	48.0	48.0	0.0	0.0	41.7	0.0	0.0	46.8	47.3	0.0
	Ambient	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8
	Total	54.8	58.7	54.8	54.8	54.8	54.8	55.4	54.8	54.8	55.7	55.6	55.6	54.8	54.8	55.0	54.8	54.8	55.4	55.5	54.8
E	Construction	0.0	44.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0	49.9	49.8	49.8	0.0	0.0	47.2	0.0	0.0	45.5	46.0	0.0
	Ambient	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
	Total	53.7	54.1	53.7	53.7	53.7	53.7	55.1	53.7	53.7	55.2	55.2	55.2	53.7	53.7	54.6	53.7	53.7	54.3	54.4	53.7

On-Airport Noise Assessment

The quantitative noise analyses presented above address potential impact to community areas outside the airport. Given the ambient noise level at the airport and the fact that construction will occur on the airfield and away from the terminals, it is not likely that construction noise would be audible to airport patrons. Because the terminal buildings are designed to reduce noise from outside sources (in particular from aircraft) construction noise should not be intrusive to patrons inside the terminals.

6.9.4.6 Nighttime Construction Lighting

Area lighting will be required for nighttime construction. Contractors would be required to aim the lights on the construction site and away from the neighborhoods, pilots and control tower.

The typical lighting device is a light station mounted on a trailer with a generator. The generator has a muffler to minimize the engine noise. Once at the construction site, the light station is extended above the trailer to an overall height of approximately 10 to 15 feet, aimed toward the construction area and turned on. At the end of the nighttime period, the light station is lowered onto the trailer and the generator stopped. The entire unit is then transported to the contractor's equipment storage area.

The number of light stations will depend on the size of the work site. A maximum of eight light stations would normally be used during paving operations.

6.9.5 Construction Mitigation

An extensive array of construction period mitigation measures is proposed for the proposed Airside Project improvements. Measures specifically addressing safety, traffic, air and water quality, light and noise will be written into the contract documents and specifications governing the contractors and subcontractors constructing the improvements. As in Logan Airport Modernization and other major construction projects at the airport, Massport will employ a team of on-site resident engineers and inspectors to monitor the contractors' compliance with these mitigation measures.

Safety is of paramount concern since major construction will be occurring in proximity to operating runways and taxiways. All construction activity will be governed by the requirements of FAA AC 150/5370-2C Operational Safety on Airports During Construction.

Construction mitigation measures in a number of categories are described below.

6.9.5.1 Traffic Operations

During the construction of the proposed Airside Project improvements, Massport will seek to maintain the full operation of the airport roadway system at all times. If and as

necessary, temporary roadways will be constructed prior to the disruption or closure of the South Cargo area section of Harborside Drive as well as the existing airfield roadways, with current lane capacity being maintained to the maximum extent feasible.

Specific traffic mitigation measures to be employed will include, but not necessarily be limited to, the following:

- Construction vehicles will be required to use State highways or Logan Airport roadways, including the Ted Williams Tunnel, except for access to the North Gate or when seeking access to local businesses. A clause to this effect will be inserted in all construction contracts relating to the Airside Project improvements.
- Truck routes for Logan Airport projects are established which minimize impacts on the local communities. Construction vehicles would be restricted from using Neptune Road (except to access the North Gate), Maverick Street, and Porter Street in East Boston. Designated truck routes will be specified in all construction contracts.
- No construction employee parking spaces will be permitted on the construction site nor will provisions be made for them elsewhere on-airport with the exception of a small number of spaces for supervisory personnel. It is expected that construction workers will access the airport via public transportation or via shuttle buses from off-airport parking areas.
- Police details will be employed at appropriate locations on the airport to manage traffic and ensure public safety.

6.9.5.2 Air Quality

As part of its continued commitment to reduce impacts to the environment, Massport will require contractors to retrofit their heavy construction equipment with advanced pollution control devices during construction in accordance with DEP's Clean Air Construction Initiative. Contractor-owned equipment such as front-end loaders, backhoes, cranes and excavators will be retrofitted with oxidation catalysts. This device filters out and breaks down hydrocarbons, particulate matter and carbon dioxide associated with diesel emissions. Contractors would also have the option of using alternative fuel vehicles.

Additionally, air quality impacts will be minimized using the following techniques:

- During the construction process, a regular program of street sweeping will be employed to minimize dust from construction vehicle movements on airport roads.
- Fugitive dust also will be controlled with water spray as needed during demolition and construction; no chemical soil stabilizers will be used.
- All trucks hauling demolition materials and excavate from the site will be covered. Truck wheel washing will be performed prior to vehicles leaving the site to help suppress fugitive dust.

6.9.5.3 Noise

General construction noise will be limited using techniques such as:

- Use of concrete crushers or pavement saws for building demolition or similar construction activity;
- Use of local power grid to reduce the use of generators, to the extent practicable and feasible.
- Attaching: (1) intake and exhaust mufflers, shields, or shrouds; (2) noise-deadening material to inside of hoppers, conveyor transfer points, or chutes.
- Limiting: (1) the numbers and duration of equipment idling on the site; (2) the use of annunciators or public address systems; (3) the use of air or gasoline-driven hand tools.
- Configuring, to the extent feasible, the construction site in a manner that keeps loud equipment and activities as far as possible from noise-sensitive locations.

When construction is scheduled during the nighttime hours and near the community sensitive areas (i.e., Bayswater, Winthrop) the following noise mitigation measures will be employed:

- The use of backup alarms for all pieces of equipment will be prohibited. The Contractor will be required to provide additional laborers to assure that equipment backup is safe and complies with OSHA regulations.
- Trucks delivering bituminous concrete or other materials will be prohibited from slamming their tail gates to clean out the beds of their trucks after dumping.
- During paving operations, the contractors will be required to turn off their vibratory compactors prior to exiting off of the newly placed pavement and onto the old existing pavement.

Further noise control options will be evaluated when the project design commences to define their effectiveness and feasibility. Appropriate operational specifications and performance standards will be incorporated into the construction contract documents.

6.9.5.4 Water Quality

A site-specific Stormwater Pollution Prevention Plan (SPPP) will be required of all contractors in accordance with EPA regulations to mitigate water quality impacts and to keep the airport's existing stormwater system free of sediment and contaminants during construction. The SPPP will be developed as part of the construction NPDES permit.

In accordance with the SPPP, extensive siltation controls will be installed prior to the commencement of construction and maintained until the project area is fully stabilized. Because of the airfield's flat topography, erosion is more controllable than on more variable topography. Precipitation falling on or running into the excavation area will be

collected at sumps and pumped to stormwater and dewatering detention tanks. The siltation controls will include, but not be limited to, siltation fencing, haybales, haybale checkdams, temporary seeding, inlets controls and regular Best Management Practices (BMP) inspections.

6.9.5.5 Overall Project Construction Mitigation

In addition to the specific measures cited above, Massport has developed a number of mandatory construction mitigation procedures for all construction contractors. Massport will be responsible for overseeing all activities related to the proposed Airside Project improvements including the following management practices:

- Full coordination with the CA/T Project, and with all relevant agencies including the FAA, MBTA, Massachusetts Turnpike Authority, Massachusetts DEP, Massachusetts CZM, Massachusetts Water Resources Authority (MWRA), City of Boston, Boston Water and Sewer Commission (BWSC), and utility companies, as appropriate.
- Preparation of detailed pre-construction plans for traffic maintenance, construction specifications for contractors, and coordinated scheduling of all construction activities (as well as the other measures noted in the ground transportation section above).

General construction practices will be established by Massport for all work to be performed on the Airside Project. These practices will incorporate in the contract specifications the following elements:

- Hours of work generally will be limited to typical working hours of 7:00 AM to 3:00 PM, when feasible and practical, depending on traffic and travel conditions. When necessary, as in the construction of Runway 14/32, a second shift will be employed with typical working hours of 3:00 PM to 11:00 PM. There are periods, however, when construction at night and/or on weekends when airfield activity is low, is the most appropriate and safe period for construction. Such periods are the crossing of major runways and taxiways, and construction of the Southwest Taxiway system. This night and weekend activity will serve to reduce the overall duration of the heavy construction period.
- An additional shift between 11:00 PM Friday and 2:00 PM Sunday may be scheduled when the contractor has to work within operationally sensitive areas. In these instances, the contractor will be required to concentrate on one isolated location on the airfield to complete all of the required work within the 39 hours allocated. Construction activities involving the existing runways and taxiways would occur during this construction shift.
- A list of construction Do's and Don'ts will be distributed to all construction workers during pre-construction orientation meetings. This simple set of guidelines and rules (developed in concert with the local East Boston community) will help keep the construction program safe, efficient, and non-disruptive.
- As previously noted, all trucks will access the site by the main airport roadways and the Ted Williams Tunnel only. Use of the Haul Road through South Boston will further limit

truck traffic on local streets. Trucks will be prohibited from using local streets, except for a short section of Neptune Road that provides access to the North Gate or by contractors when seeking access to local businesses.

- A transportation management plan will be required of the contractor. Subject to the review and approval of Massport, this plan will describe how the contractor intends to comply with the on-airport employee parking restrictions set by the terms of the Airside Project improvements construction contract.
- Fugitive dust will be controlled through wetting, sweeping, and other dust suppression techniques. Massport will require contractors to maintain on-site water trucks. All trucks hauling materials and excavate from the site will be covered.
- Soils borings, testing and environmental characterization in the area of the proposed project will be conducted.
- A Soils Use Policy will be developed. Based upon the practices and procedures of a soils management plan similar to that developed for Logan Airport Modernization, as well as a detailed program of subsurface investigations in the airfield, the plan will outline standards and procedures for the identification, handling and disposal of contaminated materials that may be encountered on the airfield. Soil tracking protocols will be detailed from the point of excavation to designated stockpile areas and to the ultimate disposal site.
- A Health and Safety Plan similar to that developed for Logan Airport Modernization will be adapted to establish the minimum health and safety standards that contractors must meet during construction on the airfield. This includes requirements for environmental monitoring, personal protective equipment, site control and security, and training.
- Massport will work with the contractor to encourage the recycling of materials, including construction debris from the demolition of Buildings 60 and 61, pavement grindings and suitable excavate, during construction of the airfield improvements.

6.9.5.6 Agency and Community Coordination

In order to ensure that all best efforts to mitigate construction impacts are continued throughout the construction process, Massport will carry out the following ongoing mitigation efforts:

- Placement of personnel and equipment to monitor and report on the status of construction, construction-related impacts, and the effectiveness of mitigation measures.
- Creation of specific construction-related performance standards for incorporation in construction contracts.
- Publication of periodic community newsletters advising the public as to the status of the project.

6.10 Adverse Impacts Which Cannot Be Avoided

Implementation of the Preferred Alternative will reduce the population within the 70 and 75 dB DNL noise contour but is predicted to increase the noise-impacted population within the 65 dB DNL noise contour by about 2 percent. Affected residences will be sound insulated to mitigate this impact. Measures will also be employed to mitigate impacts to the tenants of Cargo Building 60 that will be displaced by construction and to provide off-site habitat enhancement for the upland sandpiper habitat that will be lost due to construction of the Centerfield Taxiway.

6.11 Short-Term Uses and Long-Term Productivity

Logan Airport is an important element in the regional transportation network and a key factor in the economy of New England. Implementation of the Preferred Alternative, which includes Runway 14/32, will improve the efficiency, safety and reliability of current and projected operations at Logan. No other viable Alternative that would accomplish the goals of the Preferred Alternative exists. The Preferred Alternative would reduce annual runway delays and virtually eliminate delay associated with northwest wind conditions. Construction of Runway 14/32 increases the FAA's runway selection options to the extent that the achievement of PRAS goals is predicted to nearly double compared to the No Action Alternative. Similarly, by increasing operations over water, Runway 14/32 reduces the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. As a result, the Preferred Alternative would be effective in reducing the population in severely impacted communities within the 70 and 75 dB DNL noise contours.

As noted in preceding sections of this Supplemental DEIS/FEIR, the impacts associated with the Preferred Alternative include: the dislocation of the tenants of Cargo Building 60, a two percent increase in the population within the 65 dB DNL noise contour, and the loss of approximately 37 acres of upland sandpiper habitat. An extensive series of mitigation measures and commitments are proposed to address these impacts, including the provision of relocation assistance to the cargo building tenants in accordance with applicable laws and sound insulation of affected residences within the 65 dB DNL noise contour. Sound insulation of the few historic residential properties within this contour will be undertaken in accordance with standards established by the Secretary of the Interior (36 CFR 800.5(b) – see Appendix H for a copy of the letter from the Massachusetts Historical Commission, December 21, 1999.) A Conservation and Management Plan has been developed to provide a long-term net benefit to the upland sandpiper population, including off-site restoration of 150 acres of habitat.

In consideration of the benefits to be derived from the Preferred Alternative and the measures to be employed to mitigate impacts, the short-term use of resources required to implement the proposed action is consistent with the long-term goal of improving the efficiency and reliability of airside operations at Logan.

6.12 Irreversible and Irretrievable Commitment of Resources

Implementation of the Preferred Alternative would require certain irreversible and irretrievable commitments of resources; however, there are no new, unusual, or limited sources of materials associated with the Preferred Alternative. Construction of the runway and taxiway improvements will consume fuel and result in the consumption of raw materials such as gravel, concrete and other materials required for the construction process. Materials from demolition of existing structures will be recycled to the extent possible. There are no materials required for the construction or operation of the Preferred Alternative that are known to be in short supply. Although there will be some impacts to natural resources, measures will be implemented to mitigate both short-term (construction) and long–term impacts to the greatest extent practicable.

7 Cumulative Impacts

Key Points

In the Airside Improvements Planning Project Draft Environmental Impact Statement / Environmental Impact Report (Airside Project Draft EIS / EIR), Chapter 7 presented an assessment of incremental environmental impacts of the alternatives in the context of other landside projects and identified the interrelationships / independence of Massport's airside and landside initiatives. This chapter of the Supplemental Draft EIS / Final EIR (DEIS / FEIR) presents an updated construction management plan that quantifies the number of daily and total truck trips and includes construction activity that will occur simultaneously with the Central Artery / Tunnel construction in East Boston, other Logan Airport projects, and any other major construction activities planned to occur in East Boston.

- The Logan Airside Improvements Planning Project (Airside Project) has independent utility, and will not stimulate, preclude or otherwise determine other development anticipated as part of Massport's landside planning efforts. The Airside Project is needed whether or not passenger levels at Logan International Airport (Logan) continue to grow.
- The Airside Project noise assessment is cumulative by its nature, examining all aircraft operations, including in-flight as well as ground taxi noise. By reducing delay and increasing the ability to meet Preferential Runway Advisory System (PRAS) goals, the Preferred Alternative (Alternative 1A) provides a significant reduction in noise for the most severely impacted areas. After sound insulating to mitigate impacts within the 65 decibel (dB) day-night sound level (DNL) noise contour, the Preferred Alternative provides net long-term benefits.
- There are no significant aircraft noise impacts associated with the operation of the other present and reasonably foreseeable landside projects at Logan, and therefore no cumulative noise impacts created by the combination of these projects with the proposed Airside Project improvements. The future fleet forecasts and airport operations associated with the proposed terminal improvements at Terminal B and Terminal E, and the proposed replacement of Terminal A, are consistent with the analysis assumptions made for the Preferred Alternative.
- There are no long-term cumulative air quality impacts. The Airside Project air quality assessment evaluated cumulative impacts associated with all airport-related sources of air emissions, including on- and off-airport motor vehicles. Results indicate that overall air quality impacts are beneficial or will remain within the National Ambient Air Quality Standards (NAAQS).

- A cumulative air quality benefit is achieved as a result of the net effect of the Airside Project, the Logan Modernization landside projects, and the Central Artery/Tunnel (CA/T) improvements, which independently produce positive air quality benefits.

- Construction traffic from the proposed Airside Project improvements associated with the Preferred Alternative would not add significantly to the existing volume of traffic. Peak airside project truck traffic is estimated to be approximately 184 trips per day.[1] This is reduced significantly from 648 peak truck trips presented in the Airside Project Draft EIS/EIR as a result of the reduction of soil material to be removed off-site. Construction vehicles on Logan associated with the Airside Project represent less than 0.2 percent of the total traffic volume and will not have a significant impact on the regional highway system.

7.1 Introduction

As the discussion in the preceding chapters demonstrates, Logan Airport is a multi-faceted facility that involves a wide variety and level of transportation-related operations that have various environmental impacts. From both functional and environmental impact perspectives, Logan can be divided into two components: landside facilities and airside facilities. Functionally, the landside facilities are those which accommodate the ground movement of passengers to-and-from Logan and to-and-from aircraft. Landside facilities consist primarily of roadways, vehicular parking lots and garages, passenger terminals, and airport service areas. The primary functions of the airside facilities are to accommodate aircraft operations (i.e., landings and takeoffs) and movements (i.e., taxiing). The airside facilities consist of Logan's runways, taxiways and apron areas.

Analysis and consideration of both project-specific and cumulative environmental impacts are important elements in the Massachusetts Port Authority (Massport) process for identifying and, where appropriate, recommending and implementing capital improvement projects. For those project concepts which meet certain established regulatory threshold criteria, the environmental evaluation process is formalized through appropriate documents prepared and submitted for public review in accordance with both federal law (the National Environmental Policy Act (NEPA) as amended), and pertinent implementing regulations and agency orders, and state law (the Massachusetts Environmental Policy Act (MEPA) as amended), and pertinent implementing regulations.

Environmental review of Logan Airport operations takes place at two levels. The first is a comprehensive, cumulative analysis in the form of the state required Logan Airport Generic Environmental Impact Report (GEIR) now known as the Logan Airport Environmental Status and Planning Report (ESPR), and associated Logan Airport Annual Updates, now known as Environmental Data Reports (EDRs). The GEIR/ESPR cycle, which includes the *1994/95 GEIR*, *1996 Annual Update*, *1997 Annual Update*, and the *1998*

1 92 round trips equal 184 total trips.

Annual Update, and the recently submitted *1999 ESPR* (i) presents annual environmental conditions for noise, ground access, air quality and water quality, and assesses the cumulative impacts of current and predicted levels of the various types of operations on both the landside and airside facilities; (ii) reports on the status of planning, design, and construction activities at Logan, and (iii) presents and tracks Massport's mitigation commitments. The GEIR/ESPR provides context to on-going planning at Logan and is intended to enhance Executive Office of Environmental Affairs' (EOEA's) and FAA's review of individual project concepts.

The second level of environmental review is project specific. Potential improvement projects that proceed from the planning to the proposal stage are also subject to individual project NEPA and MEPA review if such projects fall within established guidelines. The level of such review varies, and may include initiating a federal Environmental Assessment (EA) or Environmental Impact Statement (EIS) in anticipation of Federal Aviation Administration (FAA) funding or layout plan approval, and/or filing an Environmental Notification Form (ENF) to initiate the state review process that may include the preparation of an Environmental Impact Report (EIR). The focus of individual project review centers on the comparative analysis of impacts/benefits associated with various project alternatives, including the Preferred Alternative and a No Action Alternative. Both federal and state individual project review also includes consideration of project impacts within a cumulative project impact context.

This Airside Project Supplemental DEIS/FEIR assesses cumulative environmental impact in accordance with Council on Environmental Quality (CEQ) regulations and guidance[2] and FAA implementing directives, as well as the MEPA regulations, respectively. CEQ defines cumulative impact as that "which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions..." (CEQ, 40 CFR 1508.7). In determining the scope of environmental documents with regard to cumulative impact, the CEQ requires that agencies consider actions which may be "connected" (i.e., actions that automatically trigger other actions, cannot proceed in the absence of other actions, or are interdependent parts of a larger action), "cumulative" (i.e., when viewed with other actions have cumulatively significant impacts), or "similar" (i.e., when viewed with other reasonably foreseeable or proposed actions have similarities that provide a basis for evaluating their consequences together.) This information is provided in Section 7.3.

The purpose of the Airside Improvements Planning Project is to address aircraft operating delays and to enhance the safety of the Logan airfield. The proposed Airside Project improvements focus on improving the efficiency of aircraft operations. These proposed airside improvements serve a functionally different purpose than the many different landside projects that are designed to improve the ground access of passengers to and from Logan and to and from aircraft, or to improve passenger processing and services.

2 "Considering Cumulative Effects Under the National Environmental Policy Act," Council on Environmental Quality, January 1997.

The Airside Project has independent utility, and will not stimulate, preclude, or otherwise determine other development anticipated as part of Massport's landside planning effort. None of the past, present, or foreseeable future projects described in Section 7.3 are functionally or economically interdependent with the proposed Airside Project. The project will not foreclose future options or irretrievably commit resources to future projects. Therefore none of the past, present or reasonably foreseeable future landside projects are functionally "similar" or "connected" with the Airside Project.

In accordance with the FAA directives, as the lead federal agency under NEPA, this Airside Project Supplemental Draft EIS addresses the question of whether the environmental effects of the proposed Airside Project will cause cumulative environmental impacts when added incrementally to the environmental effects of past, present and reasonably foreseeable future actions at Logan.

In addition, this chapter provides an analysis of short-term cumulative impacts from construction activities associated with the Preferred Alternative. This cumulative impact analysis is conducted within the context of short-term construction impacts associated with other projects that are anticipated to be in the construction stage at the same time the construction program for the Preferred Alternative is underway as specified in the May 7, 1999 EOEA Certificate. See Section 7.5 for a discussion of cumulative construction impacts. Section 7.5.1.1 includes a refinement of the truck traffic projected in the Airside Project Draft EIS/EIR from both the Preferred Alternative and other concurrent on-airport projects.

7.2 Relationship to the GEIR/ESPR

The Logan Airport 1994/95 Generic Environmental Impact Report (GEIR*)* and its *1996*, *1997* and *1998 Annual Update*s, EOEA # 3247/5146, (collectively the GEIR) and the subsequent *1999 Environmental Status and Planning Report* (ESPR), EOEA # 3247, provide a comprehensive evaluation of the cumulative effects of growth and change at Logan and serve as a planning tool for current and future projects proposed by Massport. The GEIR/ESPR provides an overview of the relationship of airport operations, as a whole, to local and regional noise, ground access, air quality, and water quality conditions. Individual projects such as the Airside Improvements Planning Project, are described in the GEIR/ESPR. These projects subsequently undergo individual project review under NEPA and/or MEPA if environmental review thresholds are met.

This Supplemental DEIS/FEIR provides in-depth analysis of Logan's future airfield operating conditions with and without the Preferred Alternative. This Supplemental DEIS/FEIR builds upon the Airside Project Draft EIS/EIR and the GEIR/ESPR in its analysis of impacts, and provides a broader understanding of the potential benefits and impacts of proposed changes to existing and future Logan airside operations.

The analysis conditions presented in the GEIR/ESPR are consistent with those used for the Supplemental DEIS/FEIR. Both documents evaluate future conditions at Logan associated with annual passenger levels of 29 million and 37.5 million. The GEIR/ESPR evaluated

impacts for future analysis conditions and all passenger levels using a mid-range aircraft fleet. The *1999 ESPR* evaluated a high "Regional Jet" fleet (High RJ Fleet) for the 37.5 million annual passenger activity level. To more fully identify the range of potential impacts associated with future airfield operations, this Airside Project Supplemental DEIS/FEIR expanded the GEIR/ESPR airport operational analysis by evaluating both a High and Low range Fleet that bracketed the GEIR/ESPR mid-range fleet assumptions. In addition, this Supplemental DEIS/FEIR also evaluates the 37.5 million annual air passenger fleet with a high proportion of regional jets (High RJ Fleet). These fleets represent a range of operational scenarios, reflecting higher and lower numbers of aircraft operations and fleet mixes to deliver the same specific passenger level. In this manner, the impacts of Airside Project proposed improvements are identified as a function of aircraft operations.

This Airside Project Supplemental DEIS/FEIR provides a comprehensive analysis of cumulative impacts associated with the Preferred Alternative. It involves a review of impacts generated by airfield operations (i.e., aircraft takeoffs and landings and taxiing) for 1993 Historic Modeled Conditions, 1998 Actual Conditions and future scenarios of 29 million annual air passengers with a Low Fleet assumption (29M Low Fleet), and 37.5 million air passengers with an RJ Fleet as well as the High Fleet (37.5M High Fleet). The impact analysis applicable to future years is based on passenger forecasts and fleet forecasts and employs detailed modeling. (See discussion at Chapter 4.0 for assumptions and other details of these forecasts and modeling techniques.) The *1994/95 GEIR* provided a similar review of comprehensive impacts for such operations, based on identical passenger forecasts and similar modeling techniques.

As discussed in more detail in the following sections, this Airside Project Supplemental DEIS/FEIR supplements the analysis of impacts from airside operations that was provided in the *Logan Airport 1994/95 GEIR* and the *1996, 1997, and 1998 Annual Updates* and the *1999 ESPR* by including the following:

- Analysis of high and low aircraft fleets scenario, compared to analysis of mid-range fleet in the GEIR;
- New cumulative noise impact analysis which takes into account changes in runway utilization that result from some of the improvements under review and a greater ability to achieve PRAS goals; and
- New cumulative air quality impact analysis based on changes in aircraft taxiing routes and patterns that are intended to result from certain of the improvements under review.

It should be noted that the GEIR/ESPR air quality comprehensive impact analysis is based on two component categories of operation, landside and airside. The air quality analysis provided in this Airside Supplemental DEIS/FEIR supplements the GEIR/ESPR analysis only to the extent that it incorporates changes associated with the proposed Airside Project improvements. Airside Project improvements under review do not relate to or affect any of the landside facilities or operations, and consequently, do not change any of the air quality impact analysis of landside facilities or operations presented in the GEIR/ESPR.

Overall, this Airside Supplemental DEIS/FEIR complements the findings of the GEIR/ESPR and provides an analysis of the potential cumulative impacts and benefits of the airside and landside projects. The assessment of the environmental effects of airport operations described in the *1994/95 GEIR* and the *1996, 1997, and 1998 Annual Updates* and the *1999 ESPR* are incorporated by reference in this Supplemental DEIS/FEIR and provide a starting point for the environmental impact analysis presented in this Supplemental DEIS/FEIR.

7.3 Relationship of the Logan Airside Improvements Planning Project To Other Logan Projects

The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvement**s**. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects.

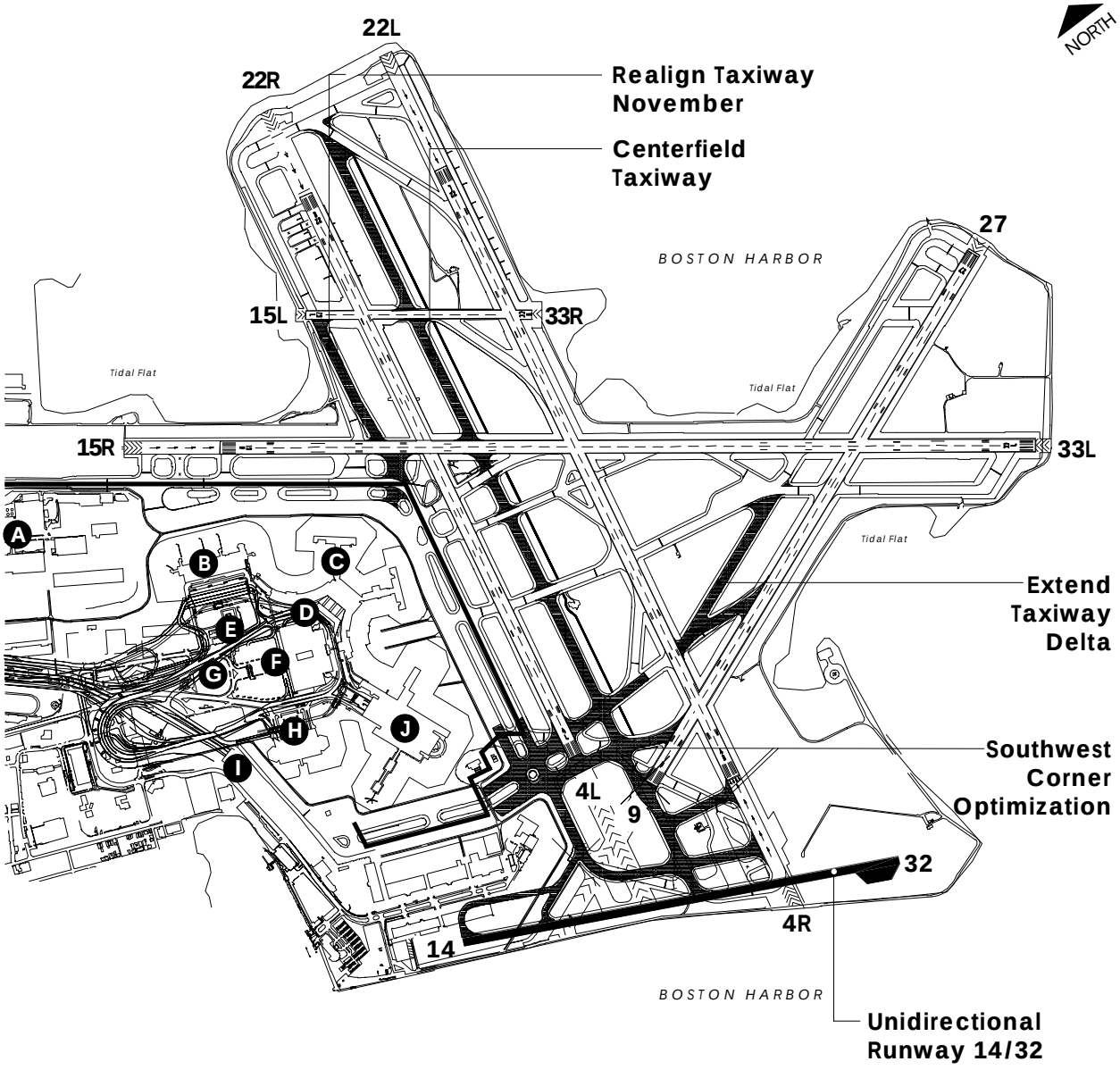
All other airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations.

A summary of other Massport projects follows (See Figure 7.3-1 for the project location.). For additional information, please refer to the *Logan Airport 1998 Annual Update*[3] and the *1999 ESPR*.[4]

7.3.1 Logan Modernization Projects

Logan Modernization is a Massport capital investment program currently underway to address current and future passenger activities and facilities. Logan Modernization consists of projects that will modernize the terminal areas and other landside facilities to address problems of terminal overcrowding, roadway congestion and inadequate parking. Implementation of Massport's proposed terminal projects as described below will enable Logan to provide modern, efficient service to its passengers.

3 *Logan Airport 1998 Annual Update,* prepared for Massport by Vanasse Hangen Brustlin, Inc. October 15, 1999.
4 *Logan Airport 1999 Environmental Status and Planning Report*, prepared for Massport by Vanasse Hangen Brustlin, Inc. December 15, 2000



A. Jet Fuel Storage and Distribution Facility*

B. International Gateway

C. United Airlines Terminal C Improvements

D. Central Garage * Modifications

E. Central Heating/Cooling Plant Upgrade

F. West Garage *

G. Replacement Hilton Hotel*

H. Terminal A Replacement

I. CA/T

J. Terminal B Improvements

LEGEND

Proposed Taxiway

Proposed Runway

* Construction Completed (as of November 1999)

Figure 7.3-1

Foreseeable Projects: Airside and Landside

7.3.1.1 West Garage Project, Elevated Walkways and Terminal Roadways

In March 1995, the West Garage Project Final EIR/EA was determined by the Secretary of Environmental Affairs to adequately comply with MEPA. The FAA issued a Finding of No Significant Impact (FONSI). This FONSI considered the impact of past, present, and foreseeable projects.

Phase I of the West Garage Project opened in September 1998. This project consolidated 3,150 parking spaces from remote, at-grade parking lots serving Logan Airport, and offset the loss of spaces to other Logan Airport landside construction projects.

With the West Garage addition in the terminal area parking complex, Logan Airport created a convenient Central Parking Facility to serve the terminal area. Elevated pedestrian walkways link the facility to the four terminals. Walkways with moving sidewalks connect the West Garage to Terminals A and E, including walkways with floor mosaics, which became the largest public art installation in New England. In 1999, the construction of the walkways to Terminals B and C began, with expected completion in 2001. Public art features will also be featured on these walkways.

Massport has evaluated design options for Phase II of the West Garage and has concluded that the most cost effective way to proceed with Phase II is to add three levels of parking to the Central Garage rather than provide the spaces in the location originally planned. A Notice of Project Change (NPC) was filed with the Executive Office of Environmental Affairs, Massachusetts Environmental Policy Act (MEPA) Office on October 31, 2000 describing the proposed changes and associated environmental impacts. The Secretary's Certificate on the NPC, issued December 8, 2000, indicated that no further MEPA review is required.

Terminal roadway improvements will be coordinated with the CA/T and Logan Modernization projects to incorporate the airport roadway system into the regional highway system and to improve vehicle capacity and access to the terminals. The roadway improvements have been designed. Construction has commenced and is expected to be completed in 2002.

7.3.1.2 International Gateway/Federal Inspection Services

The International Gateway Project is being built in response to the continued growth in international activity by both US and foreign flag carriers at Logan Airport. As New England's principal international gateway, Logan Airport and Terminal E are critical links for the City's and region's economy to an increasingly global marketplace. A state-of-the-art, high-efficiency facility will enlarge Logan Airport's congested Federal Inspection Services (FIS) facility, the meeter/greeter lobby, and the ticketing area, and ultimately maximize passenger convenience and reduce processing times. The FIS facility will be located south of the existing Terminal E. Additionally, to reduce curb and roadway congestion at the terminal, this project also includes a new double-decked roadway system for arrivals and departures.

The Final EIR/EA for the International Gateway Project was determined to adequately comply with MEPA in December 1996. The FAA issued a FONSI under NEPA. This FONSI considered the impact of past, present, and foreseeable projects.

Construction of Phase I of the International Gateway Project began in 1998, with an anticipated completion in 2003. Phase II, a new West Concourse, which will add three gates to handle international activity, is anticipated to commence sometime after 2003.

The Central Cooling and Heating plant is being rehabilitated to support both the existing facility requirements and the Logan Airport Modernization projects. These heating and cooling upgrades will be constructed in phases. The project will support the new FIS facilities and include the replacement of cooling towers and other facilities to provide adequate service, airport wide. Construction began in 1998 and is expected to be completed in 2001.

7.3.1.3 Airport Intermodal Transit Connector

The Airport Intermodal Transit Connector (AITC) project is part of an interagency effort undertaken by Massport and the MBTA. The proposed AITC will provide a user-friendly transit alternative for air passengers and other users of Logan Airport such as employees and meeters/greeters. The AITC will be a "dual-route," enhanced bus service that will directly connect Logan Airport with South Station (the red route) via the Ted Williams Tunnel and the South Boston Transitway, and with the MBTA Blue Line (the blue route).

The two-route AITC bus system will expand the intermodal reach of Logan Airport. It will represent a new public transportation route between Logan Airport and South Station, and will improve intermodal links between Logan Airport and the MBTA Red Line, the commuter rail, and the intercity rail (Amtrak). The new Airport Station will provide an improved connection to the AITC Blue line; it also may become a stop on the MBTA's proposed Circumferential Transit service. The AITC will create an alternative option for a one-seat ride from both the Financial District and the South Boston Seaport District to the Logan Airport terminals.

Both routes of the AITC are expected to be fully operational by 2003 with timing dependent upon completion of the MBTA's South Boston Piers Transitway Project and the new MBTA Blue Line Airport Station. The AITC is currently on the Massachusetts Transportation Improvement Program (TIP), making it eligible for Federal funding. Massport is working with the MBTA to procure new buses for the AITC and to address other issues regarding operations, maintenance, scheduling, and program requirements.

Logan DART

In the interim until the AITC is operational, a new Massport sponsored shuttle service began operation on November 15, 2000. The service is named the Logan DART and operates Sunday through Friday from 6 AM to 8 PM. There are two stops at South Station; at Gate 25 and outside

on Summer Street. The service uses the Ted Williams Tunnel to travel between South Station and Logan Airport, with buses leaving every 15 minutes. The vehicle stops at all terminals at Logan Airport. The fare is $5 each way with discounted fares for Logan Airport employees and Logan Employee Transportation Management Association (TMA) members.

7.3.1.4 Terminal A Replacement

Massport is currently working with Delta Air Lines to implement the replacement of Terminal A with a contemporary terminal facility. The replacement terminal is designed to enable Delta Air Lines to process current and forecasted passenger throughput with a high degree of passenger amenity, safety, and efficiency. The facility consists of a main terminal located on the airport roadway with ticket and baggage services. This is linked via a pedestrian tunnel to a satellite concourse located along Harborside Drive. The satellite concourse has been designed to serve as a noise buffer between Logan Airport and the adjacent Jeffries Point neighborhood. The project design incorporates sustainable design and construction principles to minimize overall impact on the human and natural environment.

On December 8, 1999, an Environmental Notification Form (ENF) that describes the Terminal A Replacement Project was filed with MEPA. On January 7, 2000, the Secretary of Environmental Affairs issued a scope for the preparation of a Draft Environmental Impact Report (EIR). On May 31, 2000, a Draft EIR/Environmental Assessment (EA) was filed with MEPA and the Federal Aviation Administration (FAA). FAA issued a FONSI on September 13, 2000. This FONSI considered the impact of past, present, and foreseeable projects. A Final EIR was filed with MEPA on October 2, 2000, and on November 16, 2000 the EOEA Secretary approved the project with a finding that the Final EIR was adequate. No further environmental review is required.

7.3.1.5 Jet Fuel Storage Facility

A replacement Jet Fuel Storage Facility for the five existing, separately owned and operated facilities in the North Cargo Area was completed in October 1999. The new storage facility is now consolidated and upgraded from the former system and is managed by one entity. On-airport storage capacity is increased to support the types and numbers of planes expected to use Logan Airport. Consolidation allows Massport to strengthen environmental controls such as leak detection and spill containment and to improve safety equipment and management.

The Secretary of Environmental Affairs determined that the Final EIR for the jet fuel facility adequately complies with MEPA in May 1996. No further environmental review was required. The FAA determined the project to be categorically excluded under NEPA.

7.3.1.6 Jet Fuel Distribution System

A new underground Jet Fuel Distribution System around the airport's terminal areas also was completed in October 1999. The new system includes connections between existing and new individual terminal hydrant systems and an emergency fuel shut-off. The system

supplies jet fuel by a hydrant system to most aircraft gates. The Jet Fuel Distribution System has been designed and constructed to meet future fueling needs in accordance with industry engineering and environmental standards.

An ENF was filed with MEPA in January 1994. Notices of Project Change were filed in June 1995 and February 1996 which required no further review. The FAA determined the project to be categorically excluded under NEPA.

7.3.2 Other Terminal Area Improvement Projects

In addition to the Logan Modernization projects, Massport also planned or is anticipating a range of landside projects that will improve airport service areas, tenant facilities and airport maintenance programs, as described below.

7.3.2.1 Replacement Hilton Hotel

Groundbreaking for the Hilton Hotel took place in December 1997, and the hotel opened in Fall 1999. The site for the hotel is located on an 8.1-acre parcel in the central terminal area of Logan Airport, adjacent to the West Garage. The existing Ramada Hotel was demolished in 2000 to make way for the improved Main Airport Roadway.

Following the submission of an ENF in May 1996, the Massachusetts Executive Office of Environmental Affairs (EOEA) issued a decision in July 1996 granting a waiver from the preparation of an EIR. The FAA determined that the project was categorically excluded from the requirement for formal Environmental Assessment. In April 1997, the project proponent filed a Notice of Project Change to reflect a reduced building height and slightly increased building size. In May 1997, EOEA issued a Certificate requiring no further environmental review. The project was not subject to NEPA.

7.3.2.2 US Airways Terminal B Consolidation

As described in the *1997 and 1998 Annual Update*, US Airways is consolidating its mainline, Metro Jet, commuter, and Shuttle (formerly at Terminal A) operations in one location. To accommodate these operations, Terminal B's Pier B was modified. This project included the construction of a two-level addition totaling 65,000 square feet at the south end of Terminal B, Pier B, providing additional holdrooms, concession areas, baggage handling, and airside operations space. These improvements will allow US Airways to operate more efficiently and will improve passenger service. Construction of the US Airways Terminal B Consolidation Project began in 1999 and is expected to be completed by 2002. The FAA determined the project to be categorically excluded under NEPA.

7.3.2.3 United Airlines Terminal C, Pier B Improvements

United Airlines is consolidating its services and facilities from different terminals to Terminal C, Pier B. An ENF was submitted to the Secretary of Environmental Affairs in April 1998 and a Certificate requiring no Environmental Impact Report was issued in May

1998. The FAA determined the project to be categorically excluded under NEPA. Construction of the project began in early 1999 and will be completed in 2001.

7.3.2.4 American Airlines Terminal B, Pier A Improvements/ Massport Satellite FIS Facility

Massport and American Airlines are proceeding with improvements to Terminal B, Pier A, to better accommodate current passenger demands and anticipated future passenger growth. American Airlines proposes to consolidate all of its Boston operations, including its existing domestic and international operations, into one location. American plans to do this by renovating the existing Pier A of Terminal B to provide improved circulation, ticket space, baggage handling, concessions, and other amenities. To accommodate more efficiently the growing international market, Massport proposes to construct a new satellite FIS facility at the southeast end of Terminal B, Pier A.

On May 31, 2000, a joint Massport / American Airlines ENF was filed with MEPA. On June 7, 2000, the Secretary of Environmental Affairs issued a Certificate on the ENF requiring an EIR. On August 24, 2000, the FAA determined the projects to be categorically excluded under NEPA. The projects meet the General Conformity requirements of the Clean Air Act, as amended.[5] Massport and American Airlines are now proceeding with the preparation of a Draft EIR for these projects.

7.3.3 Other Service Area Projects

Massport is engaged in on-going strategic planning to explore ideas for more efficient use of limited land resources within the airport service areas. The four airport service areas at Logan are the North Service Area / North Cargo Area, Southwest Service Area, Bird Island Flats / South Cargo Area, and Governors Island. Service area activities include but are not limited to the following: freight / air cargo operations, aircraft maintenance, food preparation, and airfield and facilities maintenance. Table 7.3-1 provides a brief description of projects and planning concepts in the service areas, both Massport-sponsored and tenant-sponsored, that have evolved since the submission of the *Logan Airport 1998 Annual Update* and *the Airside Improvements Planning Project Draft EIR/EIS*. More detailed project descriptions follow.

7.3.3.1 ParkEx Relocation

According to a 1991 Memorandum of Understanding between Massport, MassHighway, the City of Boston, and Bremen Street Trust (owners of the ParkEX parking facility), the 1,377-space ParkEX facility was to be moved from its current 12-acre, off-airport location on Bremen Street to an 11-acre site that is currently used for rental car parking in the Southwest Service Area (SWSA) of Logan Airport.

The East Boston Three-Way Land Transfer ENF and EIR that were submitted to MEPA in Spring and Fall 2000, included a description of the relocation of ParkEX facility to the

5 Letter from John Silva, Manager, Environmental Programs, Federal Aviation Administration, New England Region, to Ken Hietbrink, American Airlines, and Betty Desrosiers, Massport. Dated August 24, 2000.

Table 7.3-1
Status of Airport Service Areas Projects and Planning Concepts

Massport Projects and Planning Concepts	**Status of Planning, Design and Construction[1]**
North Service Area/North Cargo Area – Uses include aircraft parking, cargo facilities, hangars, ground service equipment (GSE), employee parking, flight kitchens, construction staging and navigational equipment.	
Jet Fuel Storage Facility A replacement storage facility to consolidate, upgrade and increase capacity of the existing fuel farms.	Complete.
Jet Fuel Distribution System A new underground system to deliver jet fuel directly to most aircraft gates will meet future fueling needs in accordance with engineering and environmental standards.	Complete.
Replacement Cargo Buildings Replacement of aging and undersized cargo buildings, and of cargo facilities demolished due to CA/T roadway work will be required.	This concept is in the preliminary planning stages.
Replacement Hangar Facilities Replacement hangar facilities due to CA/T roadway work will be required.	This concept is in the preliminary planning stages.
Southwest Service Area – Serves as the airport ground transportation hub (car rental, taxi/bus/limousine pool, commercial parking).	
Consolidated Rental Car Facility Consolidated, structured rental car facility is being considered.	This concept is in the preliminary planning stages.
ParkEx-Transaction (formerly Park 'N Fly) Buy-Out Alternative.	Land Transfer Project underway.
Bird Island Flats/South Cargo Area – Uses include replacement cargo facilities, parking, and potential commercial development.	
Cargo Building 63 Cargo building located along Harborside Drive over a portion of the Ted Williams Tunnel.	Complete.
Water Shuttle Dock Improvements Dock to be expanded to accommodate the demand of additional vessels and to comply with handicapped accessibility requirements.	Construction will begin in summer 2001.
Tenant Improvement Projects	
United Airlines Ground Service Equipment Building Existing facility being demolished to make way for CA/T roadway work. Construction began on the new 17,000 square foot GSE facility in the North Cargo Area adjacent to the United Hangar in 1998.	Complete.
US Postal Service Facility Relocated USPS facility to meet future shipping needs. A new location has not yet been identified.	This concept is in the preliminary planning stages.

1 Status as of Winter 2001

SWSA, along with its environmental impact assessment. After the filing of the ENF and EIR, Massport, ParkEX, and the CA/T Project concluded that an alternative land transfer ("Buy Out Alternative") offered important environmental and operational advantages. The Buy Out Alternative involves the purchase of the Bremen Street lot by Massport, the transfer of this parcel to MassHighway to allow for the construction of a park, and the transfer of the Robie Industrial Parcel to Massport. No transfer of existing airport land is involved. The 1,377 parking spaces from the Bremen Street lot will be transferred to Logan Airport. The Buy Out Alternative better facilitates CA/T Project construction of the Route 1A interchange highway improvements than under the approved East Boston Three-Way Land Transfer. A Notice of Project Change (NPC) describing the Buyout Alternative was filed with MEPA on October 31, 2000 and EOEA determined that no further environmental review was required. Transfer of the Bremen Street lot and the Robie Industrial Parcel pursuant to the Buy Out Alternative was completed in January, 2001.

7.3.3.2 Robie Industrial Parcel

The Robie Industrial parcel, owned by Massport, is located adjacent to the North Cargo Area of the airport. The 6.9 acre parcel, a former airport industrial park, is currently used for airport parking and as a construction staging area for CA/T project construction. A replacement cargo building is proposed on the parcel.

7.3.3.3 Replacement Cargo Buildings

The demolition of air cargo buildings 12 and 13 to accommodate the CA/T roadways will sharply reduce Logan Airport's air cargo space in the North Cargo Area. In the North Cargo Area alone, more than 150,000 square feet of cargo building space is being demolished to accommodate the CA/T roadways. Replacement on-airport cargo facilities are needed in order to meet existing needs of the air cargo industry operating at Logan Airport.

7.3.3.4 Consolidated Car Rental Facility

Massport is evaluating the feasibility of consolidating rental car operations in the SWSA to accommodate all car rental operations. Storage and maintenance of portions of the rental car company fleets are currently dispersed throughout the service areas and at off-airport locations. A consolidated car rental facility would reduce the number of on-airport, shuttle bus trips that currently run between the individual car rental lots and the terminals. Rental car consolidation is a growing national trend at major commercial airports for its land use conservation, and reduced roadway impacts.

7.3.3.5 Water Shuttle Dock Improvements

Massport will be expanding the existing on-airport water shuttle dock to accommodate the growing demand for additional vessels and to comply with handicapped accessibility requirements. The project is not subject to MEPA or FAA NEPA review. Construction is anticipated to begin in 2001.

7.3.4 Tenant Improvements

Massport leases airport land and building space to a variety of public and private tenants who require proximity to the airport. Government offices include the Immigration and Naturalization Service (INS), the Department of Agriculture, and the FAA. Private tenants include cargo companies, flight kitchens, car rental agencies, and airlines. These tenants have the right to occupy, use and improve their leased areas, subject to and in accordance with their lease terms and all relevant federal and state regulations.

Tenant improvement activities involve a variety of projects including minor leasehold improvements such as non-structural alterations and minor cosmetic work, equipment installation, building additions and tenant relocations, as well as major capital investments by airlines to improve terminal facilities.

The majority of the tenant improvement projects are generally limited to renovation, repair, furnishing, or equipping existing building space. Tenant projects that are of a scope or character that meet any MEPA or NEPA threshold for environmental review proceed through the appropriate environmental review process.

Major tenant projects currently being evaluated, planned, or constructed in the service areas include the United Airlines Ground Service Equipment Building, replacement hangar facilities, and the USPS facility. Below are brief descriptions of each.

7.3.4.1 United Airlines Ground Service Equipment Building

The existing United Airlines ground service equipment (GSE) building was demolished for the CA/T project. Construction began in the fall of 1998 on a 17,000 square foot replacement facility in the North Cargo Area adjacent to the existing United Airlines Hangar. The building was completed and operational in late 1999.

7.3.4.2 United States Postal Service Facility

The United States Postal Service (USPS) Logan Airport Mail Center in the South Cargo Area provides the USPS with direct airside access to air transportation carriers. However, this facility is inadequate to accommodate future USPS shipping needs and must be replaced with a new facility that can provide continued, secure airside access. Although the USPS does not own or operate a fleet of aircraft, it does lease aircraft to accommodate both airmail and express package shipments. In addition, all major US carriers under contract with the USPS provide belly capacity to carry US mail under contract with the USPS. The major carriers provide both aircraft capacity and line-haul transportation. The line-haul function is on the apron where the airlines "tugs" mail to/from their aircraft to the air mail facility. The line-haul/tug operation therefore requires secure airside access. The North Cargo Area/North Service Area is one location under consideration for the replacement facility.

7.3.5 Airport Edge Buffer Projects

Massport's goal is to enhance the public edges of Logan Airport with attractive architecture and landscape improvements. Massport has committed up to $15 million to the planning, future construction, and maintenance of the Logan Airport Edge Buffers. These buffers include properties located in various areas generally along Logan Airport's perimeter boundary. (See Table 7.3-2).

The buffers will be designed in consultation with Logan Airport's neighbors and others through an open community planning process. To discuss East Boston open space planning, Massport also participates in meetings with other state and city agencies including MassHighway, the CA/T Project, the MBTA, the City of Boston's Environment Department, and the Boston Redevelopment Authority. The project is not subject to NEPA.

Table 7.3-2
Edge Buffer Projects

Edge Buffer	Status
Bayswater Embankment Buffer	In early 1998 through the Spring of 2000, Massport began a community planning process to develop a landscape beautification and streetscape improvement program for the Bayswater Embankment. In July 2000, construction began with expected completion in 2001.
Navy Fuel Pier Buffer	Massport is helping the Jeffries Point neighborhood facilitate the Army Corps of Engineers' (ACOE) remediation of this site, the former Navy Fuel Pier. The Jeffries Point Neighborhood Association is regularly briefed on the project's progress. ACOE expects to announce an appropriate remediation plan for the contaminated soil by Spring 2001. The schedule and scope of any remediation plan will help Massport and the neighbors develop an appropriate design and construction schedule. Massport intends to initiate a landscape design consultant selection process in early 2001.
SWSA Buffer	In the Spring of 1999, Massport selected a consultant team to lead the design process for the SWSA landscape buffer. Design of the SWSA buffer will be timed to coincide with other development in the SWSA (i.e. relocation of ParkEX). Massport described the SWSA Buffer and presented preliminary concept plans in the East Boston Three-Way Land Transfer ENF and EIR filing. In 2001, Massport has started a community planning process to design the SWSA Edge Buffer concurrent with the site's future development.
North Service Area Buffer	In January 1997, Massport selected a landscape architect/planning firm to lead the design process for the NSA Buffer. The team developed schematic designs with input from the neighbors. Due to neighborhood members' concerns over the possibility of increased public access near their homes, this project, at the request of the neighborhood, was put on temporary hold until further notice.

7.3.6 Other Airfield/Airside Improvement Projects

7.3.6.1 Blast Fence Removal

Recent accidents involving blast fences at airports across the US have highlighted the need to remove airfield barriers and raised awareness of this nationwide safety problem. The National Transportation Safety Board (NTSB), in a September 19, 2000 letter to Massport,

stated that the Blast Fence at the end of Runway 22R "constitutes a safety hazard and should be removed." In response, Massport has proposed the removal of the Blast Fence that was originally constructed in 1976. Subsequent to construction of the fence, the FAA developed safety regulations and policies that designate specific surfaces and areas around runways that must be maintained free of obstructions to maximize aviation safety. A detailed analysis of the Blast Fence found that it penetrates seven of nine applicable FAA safety surfaces and areas.

On November 30, 2000, Massport voluntarily filed an ENF to facilitate review by the adjacent communities and environmental agencies prior to removal of the fence. In February 2001, EOEA determined that no further environmental review was required. It is expected that the fence will be unbolted from its footings in sections and the dismantled wood pieces will be immediately removed from the airfield.

7.3.6.3 Runway 33L Safety End Improvements

The project involves constructing a safety area at the end of Runway 33L to accommodate aircraft overruns or overshoots in an emergency situation. Preliminary options are being discussed and evaluated with the FAA. Environmental documents will be filed once project concepts and alternatives are better defined. Since the project alternative analysis is not yet complete, the project is not reasonably foreseeable.

7.3.7 Other Major Projects

In addition to the Massport and tenant-related projects previously described, the following major projects will also occur on the airport, and are considered in the evaluation of cumulative impacts.

7.3.7.1 CA/T Project

The CA/T Project will link the Massachusetts Turnpike (I-90) to Logan by way of a four-lane tunnel beneath Boston Harbor. The Ted Williams Tunnel is complete and was opened to traffic in December 1995. In addition to the tunnel, the following three CA/T Project components involve construction on the airport:

- Contract C07D2, involving connections of the Ted Williams Tunnel to the main airport circulation roadway system that is now substantially complete;
- Contract C08A1, involving connections of the main airport circulation roadway system to Route 1A, and;
- Contract C07C1, involving construction of toll facilities.

Massport has worked closely with the MassHighway and the Massachusetts Turnpike Authority (MTA) to coordinate airport activities during the implementation of the CA/T Project in order to ensure efficient and uninterrupted operations. Construction of the airport-related components of the CA/T Project is estimated to be completed in 2002. The

CA/T Project has completed its own extensive MEPA/NEPA environmental review with the issuance of a Certificate and a Record of Decision (ROD).

7.3.7.2 Massachusetts Bay Transportation Authority (MBTA) Blue Line Modernization Program

The MBTA Blue Line Modernization Program includes improved station safety, cleanliness, lighting, barrier-free access to all Blue Line stations and lengthening of station platforms to accommodate six-car trains.

The MBTA is developing a new Logan Airport Station to be located about 400 feet north of the existing Logan Airport Station. Massport is consulting with the MBTA on the project's design and operational elements. The new Logan Airport Station will include modern passenger amenities such as wide escalators, oversized elevators, and real-time flight information displays in the station lobby. It will also provide a convenient at-grade connection to the neighborhood, AITC Blue Route and Logan Airport, and may become a stop on the MBTA's proposed Circumferential Transit (Urban Ring) service. There is no Federal FAA jurisdiction over this action.

7.3.8 Other Projects In East Boston

Other off-airport projects are expected to occur in East Boston in the foreseeable future as described below. These projects are still in the early stages of planning and design. They have not been subject to detailed quantitative and cumulative construction period impact analyses and no specific construction period has been established. While these projects might overlap in time with the construction of the Airside Project Improvements, they do not overlap geographically with the airside construction. Mitigation measures employed for the Airside Project are designed to avoid or minimize construction impacts off the airport and therefore, no cumulative construction impacts are anticipated as a result of these other East Boston projects.

7.3.8.1 Maverick Station

MBTA is updating the Maverick Station as part of the Blue Line Modernization program. The project is currently in preliminary design with construction anticipated in 2004.

7.3.8.2 Redevelopment of Massport Piers 1 and 5 and the Massport Shipyard

Redevelopment of Massport's Piers 1 and 5 and shipyard are still in the early planning phases. The plan for redevelopment of Pier 1 anticipates residential development, while Pier 5 is expected to be an expansion parcel for the adjacent marina. It is anticipated that the shipyard will be repositioned to decrease its impact on the adjacent community. Planning is in the preliminary concept stages.

7.4 Long-term Cumulative Effects

This section discusses the long-term cumulative effects of the proposed airside alternatives in the context of aircraft operations, and therefore focuses on a discussion of noise and air quality impacts. Other impacted resources discussed in the previous chapters, such as biotic communities, water quality and soils are associated only with this project and are limited to the confines of the airfield. Because these impacts are geographically isolated from other projects, they do not contribute to long-term cumulative impacts. The proposed Airside Project is consistent with local land use plans and will not result in the division or disruption of established communities, since all construction would occur on the airport.

The mitigation measures proposed for the Airside Project improvements minimize long-term adverse impacts. Therefore no long-term adverse cumulative impacts result from the implementation of the Airside Project improvements identified within the context of the Airside Project. Temporary construction impacts do result from the project and the potential for cumulative construction impacts has been considered. A discussion of the short-term cumulative impacts associated with the construction of the Airside Project improvements and other past, present, and reasonably foreseeable projects is presented in Section 7.5.

7.4.1 Noise

Ambient noise levels at Logan are dominated by noise from aircraft operations. A review of the environmental documentation for the Logan Modernization and CA/T projects was conducted to assess the potential for cumulative noise impacts.

The noise analysis conducted for the International Gateway evaluated impacts that might result from a change in the spatial arrangements for aircraft/vehicle operations at Terminal E. This analysis found that there are no impacts due to aircraft in-flight noise, since the project does not affect the projected volumes of air passengers, and thus, the number of flights (landings and takeoffs) at Logan. There were also no impacts due to ground noise at any of the community receptor sites analyzed in any year or scenario as a result of the International Gateway. When compared to the No-Build Alternative, the International Gateway would result in differences in noise levels of less than 0.7 decibels (dB) at all of the community sites for the 2010 future analysis. The FAA considers increases in day-night average sound level (DNL) over noise sensitive land uses of 1.5 A-weighted decibels (dBA) or greater to be the threshold of significant noise impacts in areas above 65 dBA, measured in DNL.

The cumulative noise analysis conducted for the Terminal A Replacement Project also determined that there were no significant noise impacts associated with improvements at Terminal A. [6]

6 Terminal A Replacement Project, Federal Environmental Assessment, May 31, 2000.

Noise analysis conducted for the CA/T Project in the East Boston/Logan Airport area found no impact based on the Federal Highway Administration (FHWA) noise criteria at 12 of the 13 receptor sites evaluated. A minor noise impact from the CA/T Project at the East Boston Memorial Stadium Park was identified in the CA/T Project Final Supplemental Environmental Impact Report (FSEIR).[7] The current design of the project in this area however, does not require mitigation.

Given the fact that there are only minor impacts in discrete areas associated with any of the other concurrent projects at Logan, there are no material cumulative noise impacts created by the combination of these projects with the proposed Airside Project improvements.

Aircraft operations are the determining factor in evaluating noise impacts associated with airport operations. By examining the effect of all aircraft operations, including in-flight as well as ground taxiing noise, the assessment of noise impacts conducted for the Airside Project is cumulative in its approach. Cumulative noise metrics used in the Airside Project Draft EIS/EIR analysis included DNL and Time Above (TA) specified threshold sound levels. DNL noise exposure contours are a graphical representation of how cumulative noise from Logan's aircraft operations is distributed over the surrounding area on an average day of a given year.

Implementation of the Preferred Alternative (Alternative 1A) was shown to reduce delay and provide Air Traffic Control (ATC) with a greater ability to meet the Preferential Runway Advisory System (PRAS) goals. The Preferred Alternatives also reduce ground noise by reducing taxiing queues. The results of the noise impact assessment indicate that for all future fleets and scenarios, the Preferred Alternative provides a significant reduction in the most severely affected populations in East Boston, Winthrop and Revere that are within the 70 and 75 dB noise contours. They result in a slightly larger population within the 65 dB DNL in Chelsea due to a greater use of Runway 33L in accordance with PRAS goals. This impact will be mitigated by sound insulating affected residences within the 65 dB contour. (See Section 6.2 for a detailed discussion of noise assessment results.)

7.4.2 Air Quality

The air quality assessment conducted for the Airside Project addressed the cumulative impacts associated with all airport-related sources of air emissions at Logan, including aircraft, ground service vehicles, fuel facilities, and on-and off-airport motor vehicles. The same passenger levels developed in support of the *1994/1995 GEIR*, the *1996, 1997* and *1998 Annual Updates*, and the *1999 Environmental Status and Planning Report*, air quality analyses (29 million passengers in 1999 and 37.5 million passengers in 2010 (2015)) formed the basis for the Airside Project assessment.[8] Similarly, on- and off-airport motor vehicle traffic data were the same for both studies. In this way, the air quality impacts associated with the

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7 *Final Supplemental Environmental Impact Report (FSEIR)*, Massachusetts Department of Public Works, November 1990.

8 Massport has reviewed its previous planning forecasts, and regional and national aviation developments, and has adopted a new long-term forecast for when annual air passengers are expected to reach 37.5 million, now anticipated to be the 2015-planning horizon. The *1999 ESPR* and subsequent EDRs no longer evaluate the 2010 analysis year but will analyze the environmental effects of Logan Airport accommodating 37.5 million annual air passengers. All evaluations are based on passenger levels and therefore cumulative assessments remain consistent.

Airside Project alternatives were evaluated as part of the long-range development plan for Logan, and were not assessed independently as a separate component. This approach therefore assessed cumulative air quality and odor impacts associated with all landside and airside projects at Logan.

To completely assess cumulative air quality impacts, both emission inventories and dispersion modeling of existing and future year conditions were undertaken (see Sections 5.4 and 6.4 for a detailed discussion of the air quality modeling and assessment). The purpose of this assessment was twofold: (1) to compare the results to regulatory standards or criteria, and (2) to compare the impacts from the Preferred Alternative to the No Action Alternative.

The results of the emission inventories and dispersion modeling indicate that:

- There are no predicted violations of any federal and state standards or guidelines under any future scenarios or alternatives; and

- Due to improved airfield operating efficiency and reduced delay, the overall air quality impacts associated with the Preferred Alternative are beneficial or will remain imperceptible, when compared to the No Action Alternative.

- Air quality emissions associated with motor vehicles are the same for all Airside Project alternatives, including the No Action Alternative.

A comparison of the air quality impacts from the Airside Project to other past, present, and reasonably foreseeable projects is presented in Table 7.4-1. Each of the individual projects (Airside Project, West Garage, International Gateway, Jet Fuel Storage and Distribution Facilities Central Artery, AITC, and Terminal A Replacement), result in air quality improvements or, in the case of the Replacement Hilton Hotel, minor, imperceptible changes in air quality. Therefore, there are no cumulative air quality impacts associated with these projects.

The Terminal B, Pier A / Satellite FIS Facility improvements proposed by American Airlines and Massport are undergoing appropriate MEPA / NEPA review. Because the project itself will not induce change in the number of motor vehicles, aircraft, or support equipment, no additional emissions from these sources will be created as a result of the Terminal B, Pier A / Satellite FIS Facility. Furthermore, because the project will result in greater operating efficiency and less congestion on both the airside and the landside, emissions for the aforesaid mobile sources likely will decrease. In addition, gates will be fitted with provisions for electricity and pre-conditioned air, thereby reducing emissions from aircraft auxiliary power units.

Table 7.4-1
Cumulative Air Quality - Year 2010 (Emissions in kg/day)

	Comparison of Action minus No Action Alternatives Emissions		
	VOC	**NOx**	**CO**
Airside - 2010 45M High[8]	**-234**	**-201**	**-1,307**
Other Projects			
West Garage[1]	-11	-5	-61
International Gateway[2]	-22	-278	-82
Jet Fuel Storage[3]	-7.7	-10.4	0.0
Replacement Hilton Hotel[4]	n/a	n/a	n/a
Central Artery[5]	n/a	-91	-5,836
AITC[6]	-3	-6	-20
Terminal A Replacement[7]	-42	-201	-1,307
Subtotal Other Projects	-86	-591	-7,306

1 Final Environmental Impact Report, *West Garage Project*, Boston-Logan International Airport, January 31, 1996. (Includes Motor Vehicle Emissions only).

2 Final Environmental Impact Report and Environmental Assessment, *International Gateway*, Boston-Logan International Airport, October 15, 1996. (Based on 45 million passenger conditions and includes aircraft, auxiliary power units, and ground service vehicles.)

3 Final Environment Impact Report, *Jet Fuel Storage Facility*, Boston-Logan International Airport, April 16, 1996. (Includes Jet Fuel Storage Facility Emissions only.)

4 Environmental Notification Form, *Replacement Hilton Hotel*, Logan Airport, May 15, 1996. A waiver for the preparation of an Environmental Impact Report was granted by MEPA in July 1996. The Replacement Hilton Hotel will generate approximately 260 more trips per day than the existing hotel. The increase in emissions due to these new trips represents less than one percent of total airport traffic and is not considered an impact.

5 Final Environmental Impact Report, Central Artery (I-93)/Tunnel (I-90) Project, November 1990.

6 Environmental Assessment, Airport Intermodal Transit Connector. Boston-Logan International Airport, January 1998.

7 Terminal A Replacement Project, Federal Environmental Assessment, May 31, 2000.

8 Logan Airside Project Draft EIS/EIR scenario reflects the Preferred Alternative and includes all emission sources. 45M High scenario used to provide a consistent comparison to the International Gateway Project that used a 45M High scenario is the basis for the air quality analysis.

The results of the air quality impact analysis indicate that the total emissions caused by any of the Airside Project alternatives are below all applicable emission levels (under 40 CFR s.93.153 (b)) that would trigger the requirement for a conformity determination. The Airside Project is presumed to conform with Section 176(c) of the Clean Air Act with regards to the State Implementation Plan (SIP). This conclusion was reached because the Preferred Alternative is shown to result in a net reduction in future year emissions when compared to the No Action Alternative condition and therefore conforms to the SIP. This benefit is largely attributable to improved airfield efficiency with the proposed improvements. Atmospheric dispersion modeling conducted in conjunction with this analysis also shows that the proposed Airside Project will not cause, nor contribute to, violations of the National Ambient Air Quality Standard (NAAQS) for carbon monoxide (CO), ozone (O_3) or any other EPA-criteria air pollutant. Because emissions are reduced, the Preferred Alternative produces air quality benefits when compared to the No Action Alternative. There are no air quality impacts associated with the Airside Project, and consequently the project does not result in cumulative air quality impacts.

7.5 Construction Impacts and Coordination with Concurrent Major Projects

The cumulative construction impact analyses presented in this Airside Supplemental DEIS / FEIR considers each project impact added to the same kind of impact from other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Reasonably foreseeable future projects include other planned and developed activities in the affected area, which overlap in time and space and therefore could produce cumulative impacts.

Construction period impacts are generally temporary and of lesser magnitude than long-term impacts. The cumulative construction impacts are not anticipated to be significant due to mitigation programs that will reduce any construction period impacts. (See Section 6.9 for a discussion of construction mitigation.)

7.5.1 Construction Impacts from the Logan Project Improvements and Other Actions

As previously described in Section 6.9, the Airside Project is expected to result in local area impacts during the construction period, which is expected to begin in the spring of 2003 and extend on a phased basis through the Fall of 2007. As illustrated in Figure 7.5 -1, a number of other projects by Massport and other public and private entities are expected to be under construction concurrently with the Airside Project improvements.

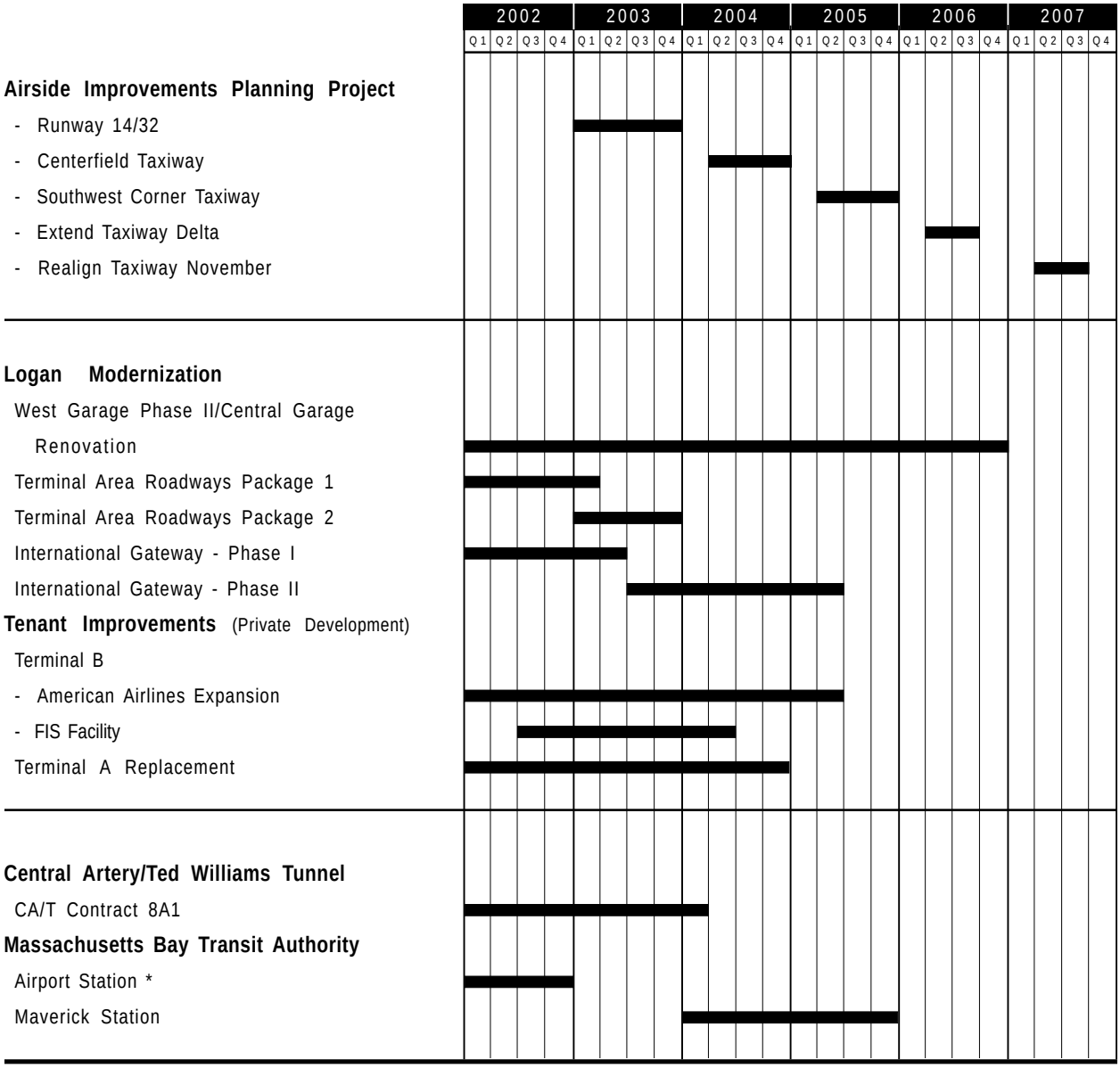
The cumulative construction impact analysis for the Airside Project builds upon a similar analysis conducted for the International Gateway project.[9] It provides a reasonable basis upon which to evaluate the construction impacts of the Airside Project Preferred Alternative together with those of other projects, as summarized in the following sections.

7.5.1.1 Construction Traffic

Construction-related vehicle (trucks and other heavy equipment) trips will occur on Logan roadways during construction of the Airside Project and other major on-going projects. Construction of the Preferred Alternative for the Airside Project is estimated to average about 56 daily round-trip truck trips in a given quarter, with a peak period of 92 daily round-trip truck trips occurring during the 2004 construction season.

The combination of the Airside Project improvements with the other concurrent projects during the 2003 to 2007 construction period will generate daily round trip truck trips of approximately 364 per day during the peak calendar quarter. The peak cumulative construction traffic occurs the first quarter of 2003, mostly as a result of concurrent CA / T construction on the airport. Truck traffic associated with construction drops off significantly after 2004 as CA / T construction on the airport is completed. Table 7.5-1 compares the cumulative truck trips associated with the Airside Project with the construction truck trips of all other major concurrent projects. By 2007, all construction truck traffic is expected to be generated by the Airside Project.

9 *Boston-Logan International Airport - International Gateway Draft EIS/EA* prepared for the Massachusetts Port Authority and the Federal Aviation Administration by Jason M. Cortell and Associates, Inc. March 29, 1996.



***To be constructed as part of CA/T Contract 8A1**

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Figure 7.5-1
Construction Schedule Including Concurrent Projects

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Table 7.5-1
Average Cumulative Daily Truck Round Trips Per Quarter

Year/Quarter	Other Concurrent On-airport Projects	Preferred Alternative	Total
2003 / 1st Quarter	303	61	364
2003 / 2nd Quarter	174	61	235
2003 / 3rd Quarter	150	61	211
2003 / 4th Quarter	172	61	233
2004 / 1st Quarter	161	---	161
2004 / 2nd Quarter	156	92	248
2004 / 3rd Quarter	151	92	243
2004 / 4th Quarter	162	92	254
2005 / 1st Quarter	85	---	85
2005 / 2nd Quarter	81	18	99
2005 / 3rd Quarter	72	18	90
2005 / 4th Quarter	72	18	90
2006 / 1st Quarter	72	---	72
2006 / 2nd Quarter	72	47	119
2006 / 3rd Quarter	66	47	113
2006 / 4th Quarter	66	---	54
2007 / 1st Quarter	54	---	0
2007 / 2nd Quarter	0	56	56
2007 / 3rd Quarter	0	56	56
2007/ 4th Quarter	0	---	0

Note: Other concurrent on-airport projects include the terminal area roadways, CA/T Project Contract 8A1, International Gateway, West Garage Phase II, Terminal B improvements and replacement of Terminal A. See Figure 7.5-1 for Project Construction Schedule.

7.5.1.2 Construction Workers

Construction of proposed Runway 14/32 and the taxiway improvements under the Airside Project would be similar to highway construction projects and is not labor intensive. As many as 50 to 75 people could be working on the Airside Project construction at any one time. On average, it is estimated that 15 to 20 workers would be on-site during a typical shift. This is not a significant addition to the estimated average of 240 workers expected daily during the concurrent International Gateway, terminal area roadways, and CA/T Project construction. By comparison, an average of 15,000 non-construction employees work at Logan on a daily basis.

While some of the construction workers may come from the nearby communities, the market for construction employees is regional. Prohibition of on-site construction worker parking will mean far fewer vehicle trips. Workers are expected to commute to and from the site by using public transportation or high occupancy vehicles (HOVs) such as shuttles or buses. Under Massport's construction period mitigation program, construction workers commuting will be subject to a contractually-required transportation management plan.

7.5.1.3 Construction Air Quality

An emission inventory of construction-related air emissions has been conducted for the Logan Airside projects and presented in Section 6.9.4.2. The purpose of this inventory is to identify and quantify the sources of emissions and measure their relative impacts. This is done by comparing these emission levels to the appropriate Clean Air Act Section 176(c) *de minimis* levels.

This inventory was developed using the EPA models NONROAD (draft) and MOBILE5a_H, with appropriate input provided by the Massachusetts Department of Environmental Protection (DEP). The following site-specific information was used in this analysis: the type of construction equipment and vehicles, usage factors, vehicle trips and mileage, and construction phasing. National data were used for engine horsepower and loading factors, fuel types, and emission factors. The activity levels (hours per year) and emissions associated with each equipment type are contained in Appendix J.

Standard dust-suppression measures, such as the ongoing application of water spray at all Logan construction sites, will be implemented for the Airside Project as well as all other concurrent Massport construction projects. Given the distance between the project site and other land uses off-airport, these measures should minimize cumulative dust impacts on the surrounding communities. There will be no burning of construction debris at any Logan project site. Similar construction measures are in place for the CA/T Project construction, along with a well-developed mechanism of community consultation to manage CA/T Project impacts.

Additional PM_{10} (particulate matter) emissions may occur during the construction period of the foreseeable actions; however, no violation of the PM_{10} standard is expected, given the low levels experienced historically in the vicinity of Logan. The reported 1998 PM_{10} readings at DEP's Bremen Street (East Boston) monitoring location most likely reflect the considerable ongoing construction in the area by Massport and MassHighway, as well as

new Ted Williams Tunnel traffic. In 1998, the second maximum 24-hour PM_{10} value for this site was 48 $\mu g/m^3$, well below the standard of 150 $\mu g/m^3$. In addition, the monitoring data show a downward trend over the past eight years.[10]

As reported in Section 6.9.4.2 and shown in Table 6.9.4.2-1, emissions associated with airside construction projects are well below the levels of the general conformity regulations. Construction emissions are thus presumed to conform with Section 176(c) of the CAA. In addition, Massport is committed to participating in the Massachusetts Clean Air Construction Initiative[11] that would further reduce emissions below the *de minimis* thresholds by use of catalysts and filters with construction equipment. Therefore the construction air emissions when added to emissions of other past, present and reasonably foreseeable projects are not significant. There are no NAAQS violations.

7.5.1.4 Construction Noise

The cumulative noise impacts of concern during construction are generally those caused by equipment operating on site and truck trips to and from the site.

The cumulative construction noise analysis considered the potential noise impact from the construction of the proposed Airside Project improvements and concurrent construction projects at Logan Airport on the closest noise-sensitive areas to the construction zone. Concurrent projects are expected to include the terminal area roadways, International Gateway, and CA/T contract, C08A1. This analysis built upon the cumulative construction noise analysis presented in the Final EIR/EA for the International Gateway (adjusted to reflect current construction schedules) the Replacement Terminal A Draft EIR,[12] and incorporated the results of the construction noise analysis developed for the Airside Project as presented in Section 6.9.

The location of the community noise receptors for the construction noise analysis for the concurrent projects analyzed in the International Gateway EIR/EA reflect the fact that these projects are located within the terminal area of Logan. Construction noise impacts therefore were computed for three representative locations in Jeffries Point (the Jeffries Point Yacht Club, and residences on Maverick Street and in McCormack Square), the East Boston Memorial Stadium Park and a residence on Coleridge Street in Harborview, all in East Boston. The Airside Project improvements construction noise analysis reflects the fact that construction would occur on the airfield. In addition to locations in Jeffries Point (Jeffries Point Yacht Club and Sumner Street near Lamson) and Harborview (Coleridge Street residence), representative locations considered in the Airside Project construction noise analysis included two in Winthrop (Somerset and Johnson, and Loring Road near Court), two in the Bayswater section of East Boston (East Boston Yacht Club and at Bayswater and Shawsheen Streets), and one in South Boston (Farragut Road at Second). Predictions of average daily equivalent (Leq) cumulative noise levels were made for the three sites that were previously analyzed in the International Gateway EIR/EA, as well as

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10 *1997 Air Quality Report*, Commonwealth of Massachusetts, Department of Environmental Protection.
11 The goal of the Clean Air Construction Initiative (CACI) is to reduce the emissions associated with construction equipment.
12 Replacement Terminal A Draft EIR, Delta Airlines, October 15, 2000.

in the Airside Project Draft EIR/EIS. Additional information on construction noise was presented in the Replacement Terminal A EA/Draft EIR. This is presented in Table 7.5-2.

The results of the construction noise analysis indicate that the cumulative construction noise at all three sites is less than the ambient noise level, which is dominated by the noise from aircraft operations. The increase in noise levels over the ambient noise level as a result of the construction of the Airside Project improvements and the other concurrent construction projects ranges from 0 decibels to 2.1 decibels. According to the Federal Highway Administration (FHWA) noise criteria, increases of less than 5 dBA are categorized as "no impact."

The Supplemental DEIS/FEIR analysis shows that the Airside Project, in addition to the other Massport and private development projects, will have no noise impacts cumulatively, using the FHWA criteria. The routing of construction-related traffic onto designated haul routes in non-residential areas, as required by Massport, also addresses concerns about noise from construction truck traffic. This conclusion is supported by the fact that Massport has received no construction noise complaints over the past two years of combined Logan Modernization and CA/T Project construction.

7.5.1.5 Other Construction Issues

Construction excavate will be managed at all Logan construction sites in accordance with the provisions of the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000) if contaminant threshold levels are triggered**.** Depending on the level of contaminants, if any, and its suitability for reuse, excavated soil will either be disposed of or recycled at an approved off-site facility. Soil tracking protocols will be implemented from the point of excavation to the designated disposal area. There will be no borrow pits at any airport construction site.

Massport has developed a dewatering and discharge plan for all airport construction projects that provides for treatment and management of contaminated groundwater associated with dewatering activities, a quality assurance program for all dewatering activities, and for needed regulatory submittals for stormwater discharges during construction. Appropriate controls will be used throughout the construction period to ensure that excavation, staging, and demolition activities do not introduce sediment, contaminated water, or construction debris into the groundwater or storm drain system. Where applicable, a general National Pollution Discharge Elimination System (NPDES) permit for construction activities will be incorporated into the construction plans, specifications, and contract of each Logan project.

Massport will implement its construction period mitigation program as generally described in Section 6.7, and continue to refine, adjust and apply that program during construction of the Airside Project in order to minimize potential noise, air and traffic impacts on the nearby East Boston community. Comprehensive environmental monitoring and implementation of necessary mitigation measures will ensure that construction impacts of the Airside Project, in combination with other past, present and proposed projects, are not significant.

Table 7.5-2
Cumulative Construction Noise - Average Daily Equivalent (Leq) In Decibels

		2003				2004				2005				2006				2007			
Receptor	**Activity**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
C	International Gateway	41.0	34.0																		
(E in International Gateway EIR)	West Garage & Roads	40.0	34.0	33.0	28.0																
	CA/T Contract C8A1	42.0	40.0	38.0	36.0	29.0															
Coleridge Street,	**Total Other Projects**	45.8	41.8	39.2	36.6	29.0															
East Boston	**Airside All Projects**	51.4	51.0	52.5	51.0		58.4	59.0	55.8			46.7	46.7		51.7	48.4			55.6	55.3	
	Total Construction	52.5	51.5	52.7	51.2	29.0	58.4	59.0	55.8			46.7	46.7		51.7	48.4			55.6	55.3	
	Ambient	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
	Total with Ambient	66.7	66.6	66.7	66.6	66.5	67.1	67.2	66.9	66.5	66.5	66.5	66.5	66.5	66.6	66.6	66.5	66.5	66.8	66.8	66.5
A	International Gateway	39.0	32.0																		
(Near receptor B in International Gateway EIR)	West Garage & Roads	50.0	45.0	44.0	39.0																
	CA/T Contract C8A1	44.0	42.0	40.0	38.0	30.0															
Sumner near	**Total Other Projects**	51.2	46.9	45.5	41.5	30.0															
Lamson,	**Airside All Projects**	55.9	55.5	57.0	55.5		53.1	53.8	50.6			46.2	46.2		47.7	44.9			46.6	46.4	
East Boston	**Total Construction**	57.2	56.1	57.3	55.7		53.1	53.8	50.6			46.2	46.2		47.7	44.9			46.6	46.4	
	Ambient	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
	Total with Ambient	61.3	60.9	61.4	60.8	59.2	60.2	60.3	59.8	59.2	59.2	59.4	59.4	59.2	59.5	59.4	59.2	59.2	59.4	59.4	59.2
14	International Gateway	45.0	38.0																		
(A in International Gateway EIR)	West Garage & Roads	50.0	45.0	44.0	40.0																
	CA/T Contract C8A1	42.0	41.0	39.0	37.0	29.0															
	Terminal A	63.0	63.0	63.0	65.0	61.0	61.0	61.0	61.0												
Jeffries Point	**Total Other Projects**	63.3	63.1	63.1	65.0	61.0	61.0	61.0	61.0												
	Airside All Projects	57.9	57.4	58.9	57.5		53.2	53.8	50.6			44.0	44.0		43.2	43.1			45.5	45.2	
	Total Construction	64.4	64.1	64.5	65.7	61.0	61.7	61.8	61.4			44.0	44.0		43.2	43.1			45.5	45.2	
	Ambient	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
	Total with Ambient	70.3	70.2	70.3	70.7	69.6	69.7	69.8	69.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0

8 Preferred Alternative and Mitigation

Key Points

This Chapter summarizes the principal findings from the relevant analyses presented in the Airside Improvements Planning Project Draft Environmental Impact Statement/Environmental Impact Report (Airside Project Draft EIS/EIR) and this Supplemental Draft EIS/Final EIR (Supplemental DEIS/FEIR) and the basis for the selection of the Preferred Alternative. Chapter 8 also presents Massport's and FAA's proposed mitigation program. The Executive Office of Environmental Affairs (EOEA) May 7, 1999 Certificate required Massport to commit to a number of "concrete mitigation measures … that will maintain or reduce the existing envelope of cumulative environmental impacts from airport operations." Specific measures identified by the Secretary are addressed in this Chapter, as well as, Massport's mitigation commitments for project related impacts, which are set out in Section 8.7, Proposed Section 61 Findings.

- Massport selected Alternative 1A (which includes all actions except Peak Period Pricing) as the Preferred Alternative because it will provide significant delay reduction benefits through measures that will also provide certain environmental benefits. The environmental impacts that will result from the Preferred Alternative will be mitigated. The taxiway improvement concepts will also improve airfield safety and efficiency. Additionally, delay reductions are achieved without imposing the economic costs on regional carriers and small communities that are associated with Alternative 1, which includes Peak Period Pricing.

- The operational analysis indicates the following about the Preferred Alternative:

  - A unidirectional Runway 14/32 produces significant delay reduction benefits under all future forecast scenarios, as well as under current activity levels.

  - Greater use of regional transportation options, such as regional airports and high speed rail, provides a benefit by accommodating a greater share of the region's intercity travel demand. However, regional transportation options do not eliminate the principal cause of delays at Logan, i.e., the lack of a third available runway during northwest wind conditions.

  - The Taxiway Improvements, and most importantly the addition of the Centerfield Taxiway, contribute to delay reduction across all future forecast scenarios. In addition, the taxiway improvements will enhance safety and reduce

the potential for runway incursions and wingtip conflicts, while simplifying the taxiway layout and reducing congestion.

- Reducing approach minimums on runways 15R, 22L, 27 and 33L will provide delay reduction and safety enhancement benefits by increasing runway availability in Instrument Flight Rules (IFR) weather.

- The current and projected near-term hourly demand profile and level of aircraft operations at Logan, which are consistent with 29M Low Fleet conditions, do not support implementation of Peak Period Pricing. In the 29M Low Fleet scenario, Peak Period Pricing is not an effective delay reduction tool because airline overscheduling does not significantly contribute to Logan delays in these conditions. It produces only minimal delay reduction in Low Fleet conditions, while imposing costs on certain regional carriers and New England communities that depend on Logan for air service. An appropriate Peak Period Monitoring System will allow Massport to identify conditions when airline overscheduling could come into effect and to take timely remedial action.

- If Runway 14/32 had been available for use in 1998, total delays would have been reduced by 32 percent. Delays in Visual Flight Rules (VFR) conditions would have been reduced by 69 percent and delays during northwest wind conditions would have been reduced by nearly 90 percent.

- The environmental analysis indicates the following:

  - The Preferred Alternative provides flexibility in runway selection and hence a greater opportunity to achieve Preferential Runway Advisory System (PRAS) long-term and short-term noise goals. With unidirectional Runway 14/32 in place, the opportunity to achieve long-term PRAS goals nearly doubles for all fleet scenarios compared to the No Action Alternative.

  - Consistent with improved PRAS achievement, the Preferred Alternative reduces the population exposed to day-night sound levels (DNL) greater than or equal to 70 dB. The trade-off for reducing populations exposed to the highest noise levels is an increase in the number of people located within the 65 to 70 dB DNL contour. Residential sound insulation will be provided to mitigate this impact, to the extent that federal funding is available.

  - Regardless of the forecast activity scenarios, without Runway 14/32 noise for the most severely affected populations will substantially worsen over time. Runway 14/32 provides a unique opportunity to reduce the number of people subjected to the highest noise impacts.

  - In addition to reducing noise exposure at the highest DNL levels, the Preferred Alternative allows for a more balanced geographic distribution of jet operations. Under the 37.5M High scenario, the Preferred Alternative results in 41 percent of jets utilizing runways affecting communities north and south of the airport,

compared to 91 percent for the No Action Alternative. Conversely, the percentage of jets flying over water increases significantly from 6 percent in the No Action Alternative to 30 percent with the Preferred Alternative.

- ❑ Runway 14/32 and the Taxiway Improvements significantly reduce ground noise impacts for communities most affected by ground taxi noise.
- ❑ The Preferred Alternative provides air quality benefits, when compared to the No Action Alternative, by reducing aircraft delays.
- ❑ The Preferred Alternative has been reviewed in accordance with the Federal Executive Order 12898 and the applicable US DOT Order. After taking into account mitigation measures, the Preferred Alternative will not result in a disproportionate impact to minority and/or low-income populations.
- ❑ No impacts to wetlands will result from the construction of Runway 14/32 or the Taxiway Improvements.
- ❑ No long-term impacts on water quality will result from Runway 14/32 or the Taxiway Improvements.
- ❑ Construction of the Centerfield Taxiway and Taxiway Delta will alter portions of grassland that serve as a habitat for the state-listed endangered upland sandpiper. The Massachusetts Natural Heritage and Endangered Species Program (NHESP) issued draft permit conditions to Massport that will be used to develop a mitigation plan to address this impact.
- ❑ The Preferred Alternative will not incorporate land from a Section 4(f) resource. In addition, neither proposed sound insulation activities nor mitigation will affect the normal activity or aesthetic value of any public park, refuge, or historic site.
- ❑ All short-term construction impacts can and will be mitigated.

■ The project-specific mitigation program addresses all potential adverse environmental impacts associated with the Preferred Alternative:

- ❑ Runway 14/32 will be designed, constructed and at the request of Massport be operated by the FAA to handle only over-water operations (i.e., unidirectional use). Massport will light, mark and instrument the runway to reflect non-use of Runway 32 for departures and non-use of Runway 14 for arrivals. As a further reinforcement of the unidirectional restriction, Massport will construct only a parallel taxiway on the 14 end to accommodate over-water departures.
- ❑ To the extent that federal funding is provided, the proposed sound insulation program will include all residences newly included within the Preferred Alternative's 65 dB DNL contour when compared to the No Action 65 dB DNL contour for the 29M Low Fleet scenario. Furthermore, Massport and the FAA will continue to sound insulate eligible residences through the current 2-year sound

insulation program as presented in the *Logan Airport 1999 Environmental Status and Planning Report*.[1]

- ❑ Relocation assistance will be provided to eligible tenants of Building 60.
- ❑ The potential loss of upland sandpiper habitat will be mitigated by enhancing off-site habitat, altering airfield mowing procedures, and implementing an on-airfield reconnaissance program.
- ❑ During the construction period, an extensive array of traffic, water quality, air quality and noise mitigation measures will be employed to mitigate temporary construction impacts.

Since the publication of the Airside Project Draft EIS/EIR, Massport has developed certain additional mitigation commitments including:

- A PRAS Monitoring System designed to gather data and report on the actual achievement of PRAS. The objective of this system is to enhance the attainment of the PRAS goals and provide a broader platform for disclosure of the monitoring results.
- A Peak Period Monitoring System to determine when airline overscheduling becomes a significant contributor to delays.
- A Peak Period Pricing exemption program that will reduce the expected degree of service disruption to eligible New England communities, without undermining the Program's delay reduction benefits.
- Steps to be taken by Massport, in cooperation with other state transportation agencies, to ensure that the Worcester, Manchester and T.F. Green Airports operate jointly with Logan Airport as the key elements in an efficient and environmentally balanced regional air transportation network.
- While not related to Airside Project impacts, Massport will continue discussions with air carriers with t he goal of reducing the use of hushkitted Stage 3 aircraft at Logan.

1 *The Logan Airport 1999 Environmental Status and Planning Report*, prepared for Massport by Vanasse Hangen Brustlin, Inc., October 15, 2000

8.1 Introduction

The Airside Project is intended to reduce current and projected levels of aircraft delay and enhance operational safety at Logan. A range of improvement concepts to accomplish these objectives was evaluated in the Airside Project Draft EIS/EIR and a comparative analysis was conducted from both an operational and environmental perspective.

The proposed improvement concepts include:

- Construction of a unidirectional Runway 14/32;
- Construction of a Centerfield Taxiway;
- Extension of Taxiway Delta;
- Realignment of Taxiway November;
- Optimization of taxiways in the southwest corner of the airfield;
- Reduction in approach minimums on Runways 22L, 27, 15R, and 33L; and
- Peak Period Pricing.

The analytical framework for assessing these concepts was structured to provide a comprehensive assessment of alternative packages as shown in Table 8.1-1.

Table 8.1-1
Logan Airside Project improvements Alternative Packages

	Alternative 1	Alternative 1A	Alternative 2	Alternative 3	Alternative 4
	All Actions	All Actions Except Peak Period Pricing	All Actions Except Runway 14/32	No Build	
Improvement Concept		**PREFERRED ALTERNATIVE**			**NO ACTION ALTERNATIVE**
Runway 14/32	■	■			
Taxiways:					
Centerfield	■	■	■		
Extend Delta	■	■	■		
Realign November	■	■	■		
South West Corner Optimization	■	■	■		
Operational:					
Reduced Minimums	■	■	■	■	
Peak Period Pricing	■		■	■	

The comparative benefits and impacts of the different alternatives were fully described in Chapters 4, 6, and 8 of the Airside Project Draft EIS/EIR. After careful review in the Airside Project Draft EIS/EIR of the extent and causes of delays at Logan and the results of each Alternative's comparative benefits, Alternative 1A was selected as the Preferred Alternative because:

- It significantly reduces the current level of delay and delay for all future scenarios without imposing the economic costs associated with Peak Period Pricing on regional carriers and the communities they serve.

- By reducing delays, it achieves certain environmental benefits that include improved air quality and a reduction of noise for the most severely impacted communities, while causing minimal environmental impacts, all of which will be mitigated.

This chapter presents a summary of the benefits and impacts of the Preferred Alternative, compares these results to the consequences of doing nothing (No Action Alternative), and summarizes the Airside Project mitigation and permitting requirements.

8.2 Preferred Alternative

The analysis in the Airside Project Draft EIS/EIR provided the analytical context for the selection of Alternative 1A as the Preferred Alternative for reducing current and projected levels of aircraft delay and enhancing operational safety at Logan. The Preferred Alternative achieves significant delay reduction and safety benefits under all future forecast scenarios, reducing total annual delays by 27 to 31 percent and VFR runway delays by 48 to 56 percent when compared to the No Action Alternative. Implementation of the Preferred Alternative will allow Massport to increase the operational efficiency and safety of the airfield, reduce existing delay, and accommodate the expected future growth in aviation activity that is vital to the regional economy.

By improving airside operating conditions and reducing the amount of time aircraft are delayed in the air or on the ground, the Preferred Alternative reduces the environmental impact of aircraft operations. This alternative will result in improved air quality over No Action conditions, an increase in the number of aircraft operations on over–water flight paths, a greater ability to meet PRAS noise goals, and reduced noise impacts for the most severely affected populations in East Boston, Revere and Winthrop. With the construction, environmental and sound insulation mitigation proposed by Massport, the short-term and long-term environmental impacts associated with the Preferred Alternative will be mitigated.

The Preferred Alternative, Alternative 1A, consists of the following improvements:

Unidirectional Runway 14/32

A new 5,000-foot unidirectional runway will be constructed along the southwestern edge of the airport. The Runway 14/32 layout will be designed by Massport and operated by the FAA only as a unidirectional runway. All arrivals will occur over Boston Harbor to the Runway 32 approach end and all departures will occur from the Runway 14 end and head out over the harbor. Unidirectional Runway 14/32 addresses the principal cause of delay at Logan – the substantial drop in capacity that occurs when moderate to strong northwest/southeast winds force the airport to operate with fewer than three runways – by providing a second effective parallel runway in the northwest/southeast orientation. In calm winds, availability of another three-runway configuration that includes unidirectional Runway 14/32, would also provide the FAA with greater flexibility to shift operations away from Runways 4L/22R and 4R/22L and increase the number of operations over the water. This would allow for a more equitable distribution of operations consistent with the PRAS noise abatement goals, and provide relief to noise-affected communities to the north and south of the Airport. Construction of the unidirectional runway is estimated to take approximately one year, and would begin after the receipt of all necessary federal and state approvals.

Centerfield Taxiway

A 9,300-foot taxiway will be constructed between Runways 4L/22R and 4R/22L. The Centerfield Taxiway will: (1) reduce taxiway congestion, thereby enhancing the general safety of airside operations; and (2) facilitate more efficient movement of aircraft between terminal areas and runways during takeoff and landing procedures, thereby reducing delays, ground noise and air emissions.

Other Taxiway Improvements

Taxiway crossings and ground taxiing movements will be improved to enhance airfield safety and operating efficiencies by:

- Reconfiguring the Southwest Corner Taxiway System to streamline taxiway flow in a very complex area for ground operations. The taxiway reconfiguration would improve access in the areas of runway ends 9, 4L and 4R, and several of the surrounding taxiways by isolating the lines of traffic flow from each other.

- Extend Taxiway Delta to Runway 4R/22L by constructing an additional 2,000 feet of taxiway between Runway 33L and Runway 4R.

- Realign Taxiway November between Runway 15L/33R and Runway 33L/15R and eliminate Taxiway Tango. The realignment would also change the location of the intersection with Taxiways Alpha and Kilo by removing the intersection after the curve to simplify the crossing of these taxiways.

Operational Improvements

The proposed action will reduce the approach minimums on Runways 22L and 27 to ILS Category I values and on Runways 15R and 33L to ILS Category III values, consistent with the capabilities of the existing and planned navigational equipment. Implementation of reduced minimums is solely within the FAA's jurisdiction.

Peak Period Pricing is not included in the Preferred Alternative because airline over-scheduling is not currently a problem at Logan. Further, the delay reduction benefits associated with Peak Period Pricing come at a cost to passengers, communities and the air carriers. If airline overscheduling becomes a significant contributor to Logan delays in the future, Massport recognizes the benefits of Peak Period Pricing and will implement an appropriate program at that time. Chapter 4 of this document describes the Peak Period Monitoring System designed by Massport to determine when delays due to overscheduling are severe enough that a peak period pricing program would be appropriate. The commitment to initiate and maintain the Peak Period Monitoring System is a specific project mitigation measure.

Table 8.4-1
Summary of Preferred Alternative by Construction Elements

Construction Element	Construction Cost Estimate[3] ($ millions)	Estimated Construction Period (Days[1])
Unidirectional Runway 14/32	$33	300
Centerfield Taxiway	$20	See Note 2
Southwest Taxiway System Reconfiguration	$14	240
Taxiway Delta Extension	$6	180
November Taxiway Realignment	$3	180
Total	$76	Phased over ± 5 years

1 Days are consecutive calendar days, inclusive of Saturdays and Sundays. Does not include winter construction shut down period.
2 Construction of the northern segment of Centerfield Taxiway is estimated to take 180 days; construction of the southern segment Centerfield Taxiway is estimated to take 210 days. There is some overlap of the two construction periods.
3 Costs are for construction only and exclude mitigation costs.

8.3 Summary of Delay Reduction Benefits

The FAA's and US DOT's current and historic delay statistics confirm that Logan Airport is unable to accommodate existing demand levels without incurring significant levels of delay. As demand continues to grow, airfield congestion and delays at Logan will worsen if effective measures for dealing with increased demand are not implemented.

An evaluation of the No Action Alternative illustrates the consequences of doing nothing:

- If no actions are taken, Logan's annual runway and taxiway delays will increase from 142,000 hours in 1998 to as much as 363,000 hours in the 37.5M High Fleet scenario.

- If no airfield improvements are made, the ability to improve PRAS goals will diminish over time. As demand increases, dependence on the north/south operation of the airport is projected to grow to nearly 90 percent.

While Massport cannot entirely eliminate delays at Logan, an evaluation of the Airside Project Alternatives indicates that the Preferred Alternative is an effective measure for reducing current delay, increasing operational efficiency and enhancing safety. Under the 29M Low Fleet scenario, which is most similar to current conditions at Logan, the Preferred Alternative reduces total annual delay (runway and taxiway) by 27 percent, or 46,100 hours. Unidirectional Runway 14/32 produces a consistent and significant delay reduction benefit under all future fleet scenarios, without imposing a disproportionate economic burden on regional carriers.

Runway 14/32 reduces annual delay primarily by reducing delays on days when moderate to strong northwest or southeast winds prevent air traffic controllers from using existing high capacity runway configurations. If Runway 14/32 had been available in 1998, delays would have been reduced by nearly 90 percent in northwest wind conditions.

While the level of taxiway delays at Logan is not as high as those delays associated with runway constraints, taxiway delays impede airfield efficiency, increase ground noise and increase air emissions. The airfield delay analysis indicates that taxiway improvements will provide substantial delay reduction and reduce the risk of runway incursions. While the taxiway improvements provide the greatest reduction in taxiway delays, the addition of unidirectional Runway 14/32 also contributes to taxiway delay savings by permitting a shift in runway usage patterns that allows the use of more efficient taxiway configurations.

The taxiway improvements, and most importantly the Centerfield Taxiway, contribute to delay reduction across all future forecast scenarios. The delay reduction hours attributable to the taxiway improvements in the 29M Low Fleet scenario are approximately 21,900 hours.

8.4 Summary of Environmental Impacts

The Airside Project Draft EIS/EIR presented a comprehensive analysis of environmental issues in response to the federal and state scoping documents. This section of the Supplemental DEIS/FEIR presents a summary of the results of the environmental analysis for the Preferred Alternative as compared to the No Action Alternative under future fleet scenarios.

8.4.1 Air Quality

There are no negative air quality impacts associated with the Preferred Alternative. When compared to the No Action Alternative, the Preferred Alternative provides air quality benefits. The Preferred Alternative is expected to generate lower amounts of total carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compounds (VOCs), odor-causing hydrocarbons, and PM_{10} emissions than the No Action Alternative. The results of the dispersion modeling analysis shows that the Preferred Alternative is expected to result in no violations of the National Ambient Air Quality Standards (NAAQS). This pattern is the same for all future fleet scenarios and is largely attributable to delay reductions in airside operations associated with the Preferred Alternative.

8.4.2 Noise

The Preferred Alternative provides for increased flexibility in runway selection. This leads to a more equitable distribution of noise impacts and a greater ability to meet PRAS noise abatement goals than the No Action Alternative. If the Preferred Alternative is implemented, achievement of the annual PRAS goals is expected to nearly double for all fleet scenarios. The delay modeling also shows that the Preferred Alternative produces similar results for all future scenarios for the short-term dwell (one day) and persistence (three-day) PRAS goals.

The ability of Runway 14/32 to increase the opportunity to better meet PRAS runway-use goals is also reflected in the area-wide cumulative noise exposure contours for in-flight noise and estimates of the number of people residing within those contours. The Preferred Alternative provides a substantial reduction in population exposed to day-night sound levels (DNL) greater than or equal to 70 dB. For future fleet scenarios, the reductions are significant, ranging from 70 to 81 percent for DNLs greater than or equal to 75 dB, and 39 to 43 percent for values of 70 dB or greater.

In addition to reducing noise exposure at the highest DNL levels, the Preferred Alternative allows for a more balanced geographic distribution of jet operations. Under the 37.5M High scenario, the Preferred Alternative results in 41 percent of jets utilizing runways affecting communities north and south of the airport, compared to 91 percent for the No Action Alternative. Conversely, the percentage of jets flying over water increases significantly from 6 percent in the No Action Alternative to 30 percent with the Preferred Alternative.

For both the Preferred Alternative and the No Action Alternative, the average changes in population within the 65 dB DNL contour are small. The population within the 65 dB DNL increases in Chelsea (by 244 people) and, to a lesser degree, in portions of East Boston (by 139 people) and South Boston - west of D Street (by 32 people), when compared to the No Action Alternative under the 29M Low Fleet scenario. These population increases result from increased use of Runways 15R/33L and Runway 27 departures, consistent with the PRAS runway use goals.

The analysis of ground taxi operations indicates that the noise from ground operations is significantly less than the noise from in-flight operations**.** The Preferred Alternative would, however, produce a significant reduction in ground taxi noise for communities located to the northeast of the airport (the Bayswater section of East Boston and the Court Road section of Winthrop), with smaller reductions at Jeffries Point.

8.5 Summary of Mitigation for the Preferred Alternative

This section presents a summary of the environmental and construction impacts associated with implementation of the Preferred Alternative and presents proposed measures to mitigate these impacts, where applicable. For this Supplemental DEIS/FEIR, the preliminary mitigation plan presented in the Airside Project Draft EIS/EIR is repeated, and the additional mitigation measures are presented. The project-specific and other mitigation commitments include:

- Project-Specific Mitigation measures are as follows:
  - **Reinforce Unidirectional Restriction** for Runway 14/32 operations.
  - **Sound Insulation Program** for those eligible residences located within the 65 dB DNL contour (29M Low Fleet). These areas include portions of Chelsea, East Boston and South Boston. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.
  - **Airport Tenant Relocation Assistance.** The only relocation required for construction of Runway 14/32 involves the tenants of Building 60 in the South Cargo Area. Massport will provide relocation assistance as required under applicable law to mitigate impacts.
  - **Upland Sandpiper Habitat Enhancement Plan** including: Alteration of existing airfield grassland mowing procedures to encourage the use of non-construction areas; implementation of a pre-construction and an on-going pre-mowing upland sandpiper reconnaissance program; and restoration of off-site habitat.
  - **Construction Mitigation** including Massport's required Construction Mitigation Program, and adherence by Massport and construction contractors to the Clean Air Construction Initiatives.

- Other Mitigation Commitments include the following:

  - **PRAS Monitoring and Reporting.** Massport is committed to more frequent and comprehensive PRAS monitoring and public reporting.
  - **Peak Period Monitoring Program.** Massport is proposing an airline schedule monitoring system, and is committed to implementing Peak Period Pricing if airline overscheduling emerges as a source of future delays.
  - **PRAS Nighttime Over-Water Preference Routing.** Massport will encourage the FAA to continue the practice of initiating over-water routing preferences as soon after 11:00 PM as practicable.
  - **Seek to Reduce Use of Hushkitted Aircraft at Logan.** Massport will continue to work with air carriers to encourage the use of full Part 36 (Stage 3) new technology aircraft.
  - **Regional Transportation Steps.** Massport supports the regionalization of New England's transportation network and continues to work with aviation transportation agencies including the FAA, the Massachusetts Aeronautics Commission (MAC), other New England State Aviation Directors, and the regional airports, to ensure the efficient use of the region's transportation infrastructure. Massport, along with the FAA and the regional airport directors, will conduct the *New England Airports System Study*. This study will evaluate the potential for international, charter, and cargo services at each of the regional airports; evaluate capacity issues at each of the regional airports; and consider the development of high occupancy vehicle/ground transportation and rail alternatives to improve access to the regional airports.

8.5.1 Project Specific Mitigation

The following section outlines the project specific mitigation proposed as a component of the Airside Improvements Planning Project. Project specific mitigation measures are described according to the affected environmental categories of noise, air quality, land use/socioeconomic, air quality, vegetation and wetlands, wildlife, water resources and soils. An extensive series of construction-related mitigation measures are presented in detail in Section 8.5.2. In addition, Massport has proposed other mitigation measures, that, while not specifically related to the Airside Project, would be implemented concurrently with the Preferred Alternative. These other measures are discussed in Section 8.5.3.

8.5.1.1 Unidirectional Commitment

The Runway 14/32 component of the Preferred Alternative has been conceived and proposed by Massport to accommodate unidirectional operations only. As a unidirectional runway, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach end and all departures would initiate from the Runway 14 end heading out over Boston Harbor. One of the issues raised in the May 7, 1999 EOEA Certificate and addressed during the SDEIS Panel process was a review of how the commitment to this unidirectional operational limitation for proposed Runway 14/32

could be reinforced. This section repeats a discussion of this issue before the Panel and constitutes a confirmation of Massport's commitment in this area.

Reinforcement of the unidirectional limitation occurs on three different levels. The first level centers on operational considerations. Massport will construct, mark and light Runway 14/32 to accommodate unidirectional operations only. In addition, the Hyatt Conference Center (174 feet high) is located within 1,300 feet of the west end of proposed Runway 14/32 and thereby obstructs the pertinent approach requirement, precluding arrivals from the west to the 14 approach end (see 14 CFR Part 77.25(d)). Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the 32 end. Without such facilities, aircraft would be required to use the Runway to taxi to the 32 end in order to position for takeoff in a westerly direction. Such a requirement would limit significantly the delay reduction benefits associated with utilizing Runway 14/32 for 32 departures.

The second level of reinforcement for the unidirectional limitation on Runway 14/32 is the environmental permit process itself. Approval under both federal and state environmental review processes is sought for a unidirectional runway only. Furthermore, the unidirectional limitation is being designated in the federal and state environmental review documents as a mitigation measure. This designation is supported by the goals of: (i) maximizing over water operations, thereby limiting operational impacts over residential areas, and (ii) allowing better attainment of Preferential Runway Advisory System (PRAS) goals. The unidirectional limitation as a Project mitigation element will be included as one of Massport's findings under M.G.L. Section 61 and is anticipated to be an element of both the federal Record of Decision and the certificate of the Massachusetts Secretary of Environmental Affairs, thus providing a further level of reinforcement of this limitation.

The first two levels of reinforcement discussed above entail physical restraints and governmental determinations within the jurisdiction of both the Federal Aviation Administration (to be addressed in the federal Record of Decision) and the Massachusetts Executive Office of Environmental Affairs (through the Secretary's Certificate on the Final EIR). A third level of reinforcement would provide an additional, representative governmental body and/or appropriate representative community groups, with contractual rights to enforce the unidirectional limitation. Massport reaffirms its willingness to enter into an appropriate contractual agreement with another governmental unit and/or representative community group. This agreement would (i) reiterate the unidirectional restrictions outlined above (e.g., limited markings and lighting, and no taxiway to accommodate takeoffs from the 32 end), (ii) allow Runway 14/32 to be constructed and operated as a unidirectional runway only, and (iii) provide such entity or group(s) with standing and a contractual mechanism to enforce the unidirectional commitment.

8.5.1.2 Noise

The Preferred Alternative includes construction of unidirectional Runaway 14/32, which provides flexibility in runway selection, and hence a greater ability to achieve PRAS goals. In order to maximize over-water operations and achieve the other PRAS-related benefits of Runway 14/32, it has been designed and will be permitted for unidirectional use only, i.e., it will only accommodate over-water arrivals and departures.

By allowing better achievement of PRAS goals, implementation of the Preferred Alternative significantly reduces the most severely noise-impacted populations within the 70 and 75 dB DNL contours in East Boston, Winthrop and Revere. However, by increasing utilization of Runway 15/33 to levels more consistent with PRAS goals, the Preferred Alternative will also increase the affected population within the future 65 dB DNL contours compared to the No Action Alternative and to 1998 conditions. Massport proposes to mitigate these impacts by providing sound insulation to affected residences in Chelsea, East Boston and South Boston that fall within the 65 dB DNL contour for the Preferred Alternative as defined by the 29M Low Fleet scenario. The estimated number of dwelling units listed in Table 8.5-1 reflects the total number of dwelling units that will be sound insulated as a result of the Preferred Alternative 29M Low DNL contour. For the project-eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. The number of residences to be included within the noise mitigation program will be determined based on a more detailed block-by-block analysis to be performed during implementation.

Table 8.5-1
Proposed Sound Insulation Mitigation

Community	Estimated Number of Dwelling Units
Chelsea	1,100 to 1,200
East Boston	150 to 200
South Boston	25 to 50
Approximate Total	**1,275 to 1,450**

In summer 2000, Massport submitted a new sound insulation program based on the 1998 65 dB DNL contour with terrain-adjusted exposure levels to the FAA New England Regional Office. The FAA approved the new sound insulation contour for a two-year period. This sound insulation program is funded and is underway.

8.5.1.3 Land Use/Socioeconomic

Implementation of the Preferred Alternative is restricted to activities and purposes compatible with normal airport operations and existing land use plans. Construction of the runway and taxiway improvements will occur on the existing airfield.

Construction of unidirectional Runway 14/32 requires the demolition of Buildings 60 and 61 in the South Cargo Area. The tenant of Building 61 (the U.S. Postal Service) has plans to vacate the building, independent of the Airside Project. Therefore demolition of this building would not require relocation assistance. The leases for Building 60 extend beyond the proposed 2003 construction start of the Preferred Alternative. Therefore, relocation assistance for eligible tenants of Building 60 will be provided in accordance with applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and specifically Part 24 of 49 CFR and M.G.L. Chapter 79A and implementing regulations. Relocation assistance measures may include relocation advisory services and payments for moving and relocation costs, as applicable. Relocation resources would be available to all eligible business relocatees without discrimination.

8.5.1.4 Air Quality

The emissions inventory for carbon monoxide (CO), oxides of nitrogen (NOx), and volatile organic compounds (VOC) indicates that the Preferred Alternative is expected to generate the least amount of emissions of all Alternatives evaluated, including the No Action Alternative. The dispersion modeling results for the Preferred Alternative indicate that predicted levels of CO, NO_2 and PM_{10} are expected to be well within air quality standards and guidelines, under all future fleet scenarios analyzed. Therefore there are no negative air quality impacts associated with implementation of the Preferred Alternative. Rather, the Preferred Alternative provides an air quality benefit when compared to the No Action Alternative. This outcome is attributable to the delay reduction benefits associated with the Preferred Alternative.

To comply with the Clean Air Act Amendments of 1990 (CAAA), the FAA must determine if the proposed action is consistent with the State Implementation Plan (SIP) for ozone, since Logan is located in a non-attainment area for this pollutant. FAA procedures for compliance with General Conformity regulations mandated by Section 176(c) of the CAAA require that the FAA compare the emissions resulting from the Preferred Alternative against those emissions that would have occurred under the No Action Alternative.

Based on the analyses of NOx and VOCs (see Tables 6.4-5 and 6.4-6, respectively), FAA has determined that for all future conditions analyzed, the Preferred Alternative's net annual emissions (Preferred Alternative emissions minus No Action emissions) will be less than the applicable NOx and VOC emission levels in 40 CFR 93.153(b). In addition, FAA analysis of these levels shows that the Preferred Alternative would not be "regionally significant" because it would not account for 10 percent of the total emissions

inventories for NOx or VOC in the Boston ozone non-attainment area. Accordingly, FAA has determined that further analysis of the Preferred Alternative under Section 176(c) of the CAAA is not needed and that the implementation of the Preferred Alternative is presumed to conform to the SIP.

For NEPA purposes, FAA must also assess the air quality impacts of project alternatives. Dispersion modeling for the Preferred Alternative and the No Action Alternative shows that the proposed project would not exceed any National Ambient Air Quality Standards (NAAQS). Accordingly, FAA has determined that the Preferred Alternative would not cause significant air quality impacts.

8.5.1.5 Vegetation and Wetlands

All construction associated with the Preferred Alternative is confined to upland portions of the airfield. There will be no loss of wetlands as a result of the implementation of the Preferred Alternative. During construction, sediment and erosion controls will be implemented within the 100-foot buffer zone of the coastal bank. All areas disturbed by construction will be stabilized with vegetation common to the airfield once re-grading is completed.

8.5.1.6 Wildlife

Construction of the Centerfield Taxiway and the Taxiway Delta extension will result in the conversion of approximately 37 acres of grassland to paved surface thereby eliminating this area as habitat for the state-listed endangered upland sandpiper. Massport is working with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) to develop a mitigation plan that will address this impact. The mitigation plan comprises the following elements:

- Off-site habitat enhancement.
- Alteration of existing airfield grassland mowing procedures prior to the spring arrival of the upland sandpiper to encourage occupation of other areas of the airfield rather than the construction area.
- Implementation of a pre-construction and an ongoing pre-mowing upland sandpiper reconnaissance program to ensure that no individual birds remain in the areas being mowed.

Enhancement of bird habitat at Logan is not feasible due to the significant potential of increased aviation hazards. As part of the Conservation and Management Permit process under the Massachusetts Endangered Species Act (MESA), Massport has worked closely with the NHESP to develop a comprehensive onsite and offsite mitigation program to provide a “net benefit to the local population” of upland sandpipers. The offsite mitigation is expected to involve Massport funding of a grassland restoration / habitat enhancement program at Camp Edwards on Cape Cod. Under this program, Massport would provide funds to the Massachusetts National Guard (MNG) for the restoration of the former upland sandpiper habitat. A Memorandum of Understanding (MOU) is under

discussion among Massport, MNG and NHESP to ensure effective implementation of the program.

8.5.1.7 Water Resources

Construction of the runway and taxiways will result in a slight increase (3.8 percent) in peak runoff to tidal waters. Peak discharges will be minimized through the use of grassed swales and infiltration of runoff. No long-term impacts to water quality are anticipated. The existing stormwater drainage system will be reconfigured slightly to accommodate runoff from the runway and taxiway improvements. A low-flow water quality treatment structure may be incorporated into the existing system to handle the first flush runoff from portions of the airfield, if feasible. Sediment and erosion controls will be installed and maintained during all portions of construction to minimize adverse impacts. Construction will be phased to minimize the extent of bare soil at any one time. All new runway and taxiway construction within areas subject to DEP's Stormwater Management Policy will be consistent with applicable policies and performance standards.

8.5.1.8 Soils

Disposal of soils excavated for runway and taxiway construction will be regulated under the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000) and further reviewed for consistency with Massport's Soil Management Plan developed for the Logan Modernization projects.

8.5.2 Construction Mitigation

An extensive array of construction period mitigation measures is proposed for the Airside Project improvements that comprise the Preferred Alternative. Measures that specifically address safety, traffic, air quality, and noise will be written into the contract documents and specifications governing the contractors and subcontractors constructing the improvements. As in the Logan Modernization Program and other major construction projects at the airport, Massport will employ a team of on-site resident engineers and inspectors to monitor the contractors' compliance with mitigation measures.

Safety is of paramount concern since major construction will be occurring in proximity to operating runways and taxiways. All construction activity will be governed by the requirements of FAA AC 150/5370-2C *Operational Safety on Airports During Construction*.

Construction mitigation measures in a number of categories are described below.

8.5.2.1 Construction Traffic Operations

- Construction vehicles will be required to use State highways or Logan roadways, including the Ted Williams Tunnel, except when seeking access to local businesses. A clause to this effect will be inserted in all construction contracts relating to the Airside Project improvements.

- Truck routes for Logan projects that minimize impacts on the local communities are well established. Construction vehicles would be restricted from using Neptune Road, Maverick Street, and Porter Street in East Boston. Designated truck routes will be specified in all construction contracts.

- Construction employee parking spaces will not be permitted on the construction site nor will provisions be made for them elsewhere on-airport with the exception of a small number of spaces for supervisory personnel. It is expected that construction workers will access the airport via public transportation or via shuttle buses from off-airport parking areas.

- Police details will be employed at appropriate locations on the airport to manage traffic and ensure public safety.

8.5.2.2 Construction Air Quality

- As part of Massport's continued commitment to reduce impacts to the environment, Massport will require contractors to retrofit their heavy construction equipment with advanced pollution control devices during construction in accordance with DEP's Clean Air Construction Initiative. Contractor-owned equipment such as front-end loaders, backhoes, cranes and excavators will be retrofitted with oxidation catalysts. This device filters out and breaks down hydrocarbons, particulate matter and carbon dioxide associated with diesel emissions.

- During the construction process a regular program of street sweeping will minimize dust from construction vehicle movements on airport roads.

- Fugitive dust also will be controlled with water spray as needed during demolition and construction; no chemical soil stabilizers will be used.

- All trucks hauling demolition materials and excavate from the site will be covered and their wheels will be washed prior to leaving the construction site.

8.5.2.3 Construction Noise

General construction noise will be limited using techniques such as:

- Use of: (1) concrete crushers or pavement saws for building demolition or similar construction activity; (2) local power grid to reduce the use of generators, to the extent practicable and feasible.

- Attaching: (1) intake and exhaust mufflers, shields, or shrouds; (2) noise-deadening material to inside of hoppers, conveyor transfer points, or chutes.

- Maintaining equipment to ensure peak performance.

- Limiting (1) the numbers and duration of equipment idling on the site; (2) the use of annunciators or public address systems; (3) the use of air or gasoline-driven hand tools.

- Configuring, to the extent feasible, the construction site in a manner that keeps loud equipment and activities as far as possible from noise-sensitive locations.

When construction is scheduled during the nighttime hours and near community sensitive areas (e.g., East Boston and Winthrop) the following noise mitigation measures will be employed:

- The use of backup alarms for all pieces of equipment will be prohibited, to the extent appropriate. The contractors will be required to provide additional laborers to assure that equipment backup safely and comply with OSHA regulations.

- Trucks delivering bituminous concrete or other materials will be prohibited from slamming their tailgates to clean out truck beds after dumping.

- During paving operations, contractors will be required to turn off their vibratory compactors prior to exiting off of the newly placed pavement and onto the old existing pavement.

- Further noise control options will be evaluated during the ongoing project design to define their effectiveness and feasibility. Appropriate operational specifications and performance standards will be incorporated into the construction contract documents.

8.5.2.4 General Project Construction Mitigation

All construction activity associated with the Preferred Alternative will be governed by FAA Advisory Circular 150/5370-2C, Operation Safety on Airports During Construction. In addition, Massport has developed a number of mandatory construction mitigation procedures for all construction contractors. Massport will be responsible for overseeing all activities related to the Airside Project improvements including the following management practices:

- Full coordination with the CA/T Project, and with all relevant agencies including the FAA, MBTA, Massachusetts Turnpike Authority, Massachusetts DEP, Massachusetts Coastal Zone Management (CZM), Massachusetts Water Resources Authority (MWRA), City of Boston, Boston Water and Sewer Commission (BWSC), and utility companies, as appropriate.

- Preparation of detailed pre-construction plans for traffic maintenance, construction specifications for contractors, and coordinated scheduling of all construction activities (as well as the other measures noted in the ground transportation section above).

8.5.3 Environmental Justice

The Preferred Alternative has been reviewed in accordance with the Federal Executive Order 12898 and the applicable US DOT Order. After taking into account mitigation measures, the Preferred Alternative will not result in a disproportionate adverse impact to minority and/or low-income populations.

- There is no disproportionate high and adverse impact caused by the Preferred Alternative. Adverse noise impacts of the Preferred Alternative are not predominately borne by a minority or low-income population. Only 21 percent of the population within the 65 dB DNL contour is minority, compared Suffolk County, which is 38 percent minority. Less than 2 percent of the population within the 65 dB DNL contour has a household income less than 150 percent of poverty level.

- The additional area within the Preferred Alternative 65 dB DNL contour under the 29M Low Fleet scenario includes a predominantly Hispanic neighborhood in Chelsea which is predicted to experience an increase of 0.6 dB DNL or less. Under FAA's standards, this change is not a significant adverse impact. Nonetheless, mitigation of the increased noise exposure will be provided to the affected community in the form of residential sound insulation.

8.5.4 Other Mitigation Measures

Since the publication of the Airside Project Draft EIS/EIR, Massport has developed proposals for other mitigation measures including:

- PRAS Monitoring and Reporting
- Peak Period Monitoring Program
- Ongoing Discussion with Air Carriers to Reduce Use of Hushkitted Aircraft at Logan
- Regional Transportation Steps

8.5.4.1 PRAS Monitoring and Reporting

The forecast levels of PRAS achievement that are reflected in the Airside Project analysis show continuous improvement from current levels. The analysis presented in Chapter 4 of this Supplemental DEIS/FEIR clearly demonstrates the improvement in PRAS achievement that has taken place since its inception in the early 1980s, and especially since 1996, when the FAA began using the modified version of PRAS. Because Massport is committed to further improvement in PRAS achievement, it has designed protocols for monitoring and reporting PRAS performance. Chapter 4 describes the proposed PRAS Monitoring System and report distribution. In summary, the Massport Quarterly Noise Reports will include a number of new reports and the distribution list will be expanded to include all interested parties. In addition, the annual reports on runway utilization, dwell and persistence will also be included in the ESPR and its Environmental Data Reports (EDR). Over the longer-term, Massport will work with the FAA to design additional reports, which could help enhance the attainment of PRAS.

8.5.4.2 Peak Period Monitoring System and Peak Period Pricing Exemption Program

As part of this Supplemental DEIS/FEIR, Massport completed several analyses that allowed for a more complete understanding of Peak Period Pricing. (These analyses are described in Chapter 4 of this document.) The product of two of these analyses is reflected in Massport's mitigation plan. First, Massport recognizes the delay reduction benefits associated with Peak Period Pricing in an environment characterized by airline overscheduling and is committed to an ongoing program designed to regularly monitor peak period airline schedules. In Chapter 4, Massport identifies a criterion that would initiate of a phased administrative and regulatory process leading to the implementation of a Peak Period Pricing program. Massport's monitoring program, described in Chapter 4, will provide the appropriate mechanism for identifying the point at which the triggering criterion occurs.

Should Peak Period Pricing be invoked, Massport and others are concerned about the detrimental effects such a program could have on New England communities that rely on air service to Logan Airport for access to the national aviation system. As mitigation against the potential economic costs of Peak Period Pricing, Massport has evaluated an exemption program for eligible New England communities. The illustrative program provides a Peak Period surcharge exemption for two roundtrips per day in each eligible market. Consideration will also be given to operational factors, such as the use of the 2,557-foot Runway 15L/33R, that may justify exemptions without jeopardizing the delay reduction benefits of Peak Period Pricing. These exemptions will be included as part of a Peak Period Pricing regulatory proposal and will be subject to public comment and review along with the other elements of the Peak Period Pricing proposal, as required under the Commonwealth's Administrative Procedures Act.

8.5.4.3 Hushkitted Aircraft

As air carriers and cargo operators phased out their remaining Stage 2 aircraft (gross weight > 75,000 pounds), some opted to retrofit their older Stage 2 aircraft with "hushkits", designed to reduce noise levels to meet the Part 36 Stage 3 noise limits. Others replaced their Stage 3 aircraft with quieter, new Stage 3 technology aircraft, resulting in more significant noise abatement benefits. Operators at Logan Airport have done both. Substituting quieter, new Stage 3 technology results in more significant noise reduction benefits.

The reduction in noise exposure that will be experienced as fleet changes continue depends heavily on how many hushkitted aircraft remain in operation over the next few years. One especially promising sign, however, has been the recent fleet conversions by the US Airways and Delta Shuttles. Massport has worked to encourage each carrier to update its fleet from hushkitted Stage 3 Boeing 727-200 aircraft to Stage 3, new-technology aircraft. Subsequent to those discussions, both carriers announced fleet renewal programs. US Airways Shuttle now operates quieter Airbus 320 aircraft and the Delta Shuttle flies Stage 3 Boeing 737-800s. While not related to Preferred Alternative

impacts, Massport will continue to encourage air carriers to reduce the use of hushkitted Stage 3 aircraft at Logan.

8.5.4.5 Regional Transportation Steps

Massport is engaged in promoting increased utilization of regional airports and other travel modes to provide relief to Logan Airport. As an independent authority that owns and operates Logan and Hanscom Field, as well as the Tobin Bridge and many properties in the Port of Boston, and has operational responsibility for Worcester Regional Airport, Massport is just one of many agencies that influence regional transportation policy. With regard to aviation, Massport's primary responsibilities are the provision, operation and maintenance of airport infrastructure at Logan and Hanscom Field, and the operation of Worcester Regional Airport.

Massport and FAA are committed to cooperative transportation planning and are actively working with a broad array of transportation agencies and concerned parties to ensure an integrated, multi-modal regional transportation network. Massport has undertaken several initiatives to advance the role of regional airports in accommodating a greater share of the region's air travel demand. Massport is also an active participant in several interagency transportation planning forums pertaining to alternative intercity travel modes. Massport will also participate in the planned *New England Airports System Study*. Chapter 2 provides a detailed description of Massport's regional transportation efforts and initiatives.

8.5.5 Feasibility Study on NOx Emissions Reduction

The EOEA May 7, 1999 Certificate on the Airside Draft EIS/EIR requested that Massport undertake a feasibility study of implementing measures to reduce NOx emissions at Logan. This study was reported on in the *1999 Logan Airport Environmental Status and Planning Report* (filed in December 2000). A final report recommending NOx emissions reduction strategies will be presented to MEPA by the end of March 2001.

8.6 Permits

The following agency reviews, permits, approvals, and notices may be required for the implementation of the Preferred Alternative (Table 8.6-1).

Table 8.6-1
Project Permits and Approvals[1]

Agency Name	Permit or Action
Project Permits and Approvals	
Federal Aviation Administration	■ Airport Layout Plan (ALP) approval ■ National Environmental Policy Act (NEPA), Record of Decision ■ Airspace Analysis and Determination ■ Notice of Proposed Landing Area Construction or Alteration (14CFR, Part 171)
Massachusetts Executive Office of Environmental Affairs	■ Massachusetts Environmental Policy Act (MEPA) Certification
Massachusetts Coastal Zone Management	■ Federal Consistency Review
Massachusetts Historical Commission	■ Section 106 Review[2]
Commonwealth of Massachusetts, Department of Environmental Protection	■ Air Quality Certification ■ Water Quality Certification
U.S. Fish and Wildlife Service	■ Endangered Species Coordination
Construction Related Permits or Approvals	
Environmental Protection Agency	■ National Pollution Discharge Elimination System, Stormwater Discharge (Construction Activity)
Massachusetts Department of Environmental Protection, Division of Air Quality; Massachusetts Department of Labor and Industries; and US Environmental Protection Agency	■ Notice Concerning Commencement of Construction or Demolition
Massachusetts Natural Heritage and Endangered Species Program	■ Conservation and Management Permit
City of Boston, Conservation Commission	■ Order of Conditions

1 Not all these permits or approvals may be required.

2 The Massachusetts Historical Commission has concurred that the Preferred Alternative will have no adverse effect on significant historic properties. See Appendix H for the MHC letter to the FAA, dated December 21, 1999

8.7 Proposed Section 61 Findings

The following section outlines a draft Section 61 Finding for the Airside Improvements Planning Project.

DRAFT RESOLUTION AND VOTE OF MASSPORT BOARD IN COMPLIANCE WITH M.G.L. C.30, SECTION 61

WHEREAS, the Authority has been engaged in long-term planning activities to ensure that flight operations at Boston-Logan International Airport ("Logan") are conducted as safely and efficiently as possible in terms of on-time performance and in a manner consistent with established environmental impact policies and goals, and

WHEREAS, in the context of this planning process the Authority has identified a range of alternatives for achieving these results, including specific improvements to the airfield component of Logan, and

WHEREAS, pursuant to the National Environmental Policy Act ("NEPA") and Massachusetts Environmental Policy Act ("MEPA") and related regulations and other requirements, the Authority has been engaged in an environmental review process to examine a number of aspects of the various alternatives under review, including without limitation, purpose and need, analysis of the current and projected flight delay problem, role of the regional airport system and other transportation alternatives in meeting current and forecast passenger demand, affected environment, environmental consequences, environmental justice, and environmental mitigation, and

WHEREAS, the environmental review process under MEPA commenced with the filing of an Environmental Notification Form ("ENF") on July 31, 1995 which was the subject of a formal scoping process, including a public scoping session on September 23, 1995, which process in turn led to the issuance of a Certificate by the Secretary of the Executive Office of Environmental Affairs ("EOEA") defining the scope of the Airside Project Draft Environmental Impact Report ("Draft EIR"), and

WHEREAS, the Airside Project Draft EIR was filed on February 1, 1999, which document included the designation of a Preferred Alternative consisting of the following components: unidirectional Runway 14/32; Centerfield Taxiway; extension of Taxiway Delta; realignment of Taxiway November; improvements to the southwest corner taxiway system; and reduction in approach minimums on Runways 22L, 27, 15R and 33L (which component is an initiative of the Federal Aviation Administration), and

WHEREAS, the Draft EIR was the subject of an extended public comment period, including public hearings on Wednesday, April 7, 1999 at the State Transportation

Building in Boston and Thursday, April 8, 1999 at the Holiday Inn in East Boston, which resulted in the issuance of a certificate from the Secretary of EOEA dated May 7, 1999, in which said Secretary determined that the Draft EIR adequately and properly complied with MEPA and with its implementing regulations and specified certain additional analytic work, including additional mitigation measures and responses to substantive comments, to be included in the Final Environmental Impact Report ("Final EIR"), and

WHEREAS, the Authority filed the Final EIR on [March 15], 2001 and on [DATE] the Secretary of EOEA issued a certificate determining…[TO BE INSERTED]...;

NOW THEREFORE BE IT RESOLVED AND VOTED:

A. The Authority hereby finds that: (a) the environmental impacts associated with the Airside Improvements Project, EOEA No. 10458, and selection and implementation of the Preferred Alternative, are properly and adequately described and evaluated in the ENF, Draft EIR and Final EIR and the description of such environmental impacts set forth in said documents is adopted as a specific finding herein, and (b) by implementing the mitigation measures set forth in the Final EIR (and summarized in this resolution), as authorized and directed by this resolution, all feasible means and measures will be taken to avoid or minimize the description of any environmental impacts as determined by this resolution.

B. The Authority hereby further finds and determines that the improvements constituting the Preferred Alternative as set forth in the Draft EIR and Final EIR will enhance the operation of Logan by improving safety conditions and on-time performance of aircraft and will provide related environmental benefits.

C. The Authority hereby makes the additional findings set forth below in accordance with M.G.L. c.30, Section 61:

IMPLEMENTATION OF MITIGATION MEASURES

The Authority hereby adopts the following environmental mitigation, which measures are set forth in Chapter 8 and other applicable provisions of the Final EIR, and hereby authorizes and directs the Executive Director to implement such measures.

1.0 Runway 14/32 Unidirectional Limitation

Runway 14/32 will be operated as a unidirectional runway to accommodate over-water flight operations only, i.e., arrival operations in an east-to -west direction to the

Runway 32 approach end and departure operations from a west-to-east direction from the Runway 14 departure end. Construction specifications will require that lighting, marking and instrumentation components of Runway 14/32 be done consistent with the above-described unidirectional limitations. No parallel or other type of taxiway facility will be constructed to allow departures from an east-to-west direction from the 32 end. The Authority will, if requested, enter into an appropriate contract with an appropriate governmental body and/or representative community group(s) to provide rights to enforce the intended unidirectional restriction of Runway 14/32.

2.0 Regional Transportation Policy - Regional Airport Network

The Authority is engaged in promoting increased utilization of regional airports and other travel modes to provide relief to Logan Airport. As an independent authority that owns and operates Logan and Hanscom Field, as well as the Tobin Bridge and many properties in the Port of Boston, and has operational responsibility for Worcester Regional Airport, the Authority is just one of many agencies that influence regional transportation policy. With regard to aviation, the Authority's primary responsibilities are the provision, operation and maintenance of airport infrastructure at Logan and Hanscom Field, and the operation of Worcester Regional Airport.

The Authority supports a regional transportation policy to improve the efficient use of the region's transportation infrastructure by expanding use of the regional airports and other transportation modes, where appropriate. To achieve these goals, the Authority is committed to cooperative transportation planning and is actively working with a broad array of transportation agencies and concerned parties to ensure an integrated, multi-modal regional transportation network. The Authority has undertaken several initiatives to advance the role of regional airports in accommodating a greater share of the region's air travel demand. The Authority is also an active participant in several interagency transportation planning forums pertaining to alternative intercity travel modes.

The Authority's efforts in connection with this Regional Transportation Policy will include:

2.1 Worcester Regional Airport

The Authority will continue to exercise operational control over Worcester Regional Airport, continue to work to attract new air service and develop and implement a marketing campaign targeted to travelers and airlines to provide awareness of Worcester Regional Airport and enhance its utilization within its primary service area.

2.2 Cooperative Regional Transportation Planning Initiatives

The Authority will:

- Maintain an aviation information database and distribute quarterly reports that track aviation trends at all of the regional airports to parties interested in promoting regional airport services;

- Compile and issue periodic statistical summaries of passenger levels, aircraft operation counts and airline schedule data at the major New England regional airports;

- Prepare an Annual Report summarizing regional airport trends and service developments;

- Participate in meetings of other regional and state aviation organizations, including the Massachusetts Aeronautics Commission and transportation summit meetings organized by the New England governors;

- Continue to cooperate with the Federal Aviation Administration and directors of other regional airports to undertake and complete a *New England Airports System Study* to evaluate the performance of the regional airports since the completion of the *1995 Regional Airport Air Passenger Service Study*; reevaluate airport market areas and capture rates; evaluate the potential for international, charter and cargo services at the regional airports; evaluate capacity issues at the regional airports; and consider the development of high occupancy vehicle/ground transportation and rail alternatives to improve access to the regional airports;

- Continue to encourage various transportation initiatives (e.g., commuter rail, rail or other links between regional airports) by relevant agencies or other governmental bodies through Transportation Bond Bill or other legislative initiatives that may be required to implement an improved effective regional transportation system;

- Continue to assist in the development of a comprehensive rail plan for New England, including the designation of high rail corridors;

- Continue to support inter-city rail planning through membership in the Metropolitan Planning Organization (MPO).

3.0 Residential Sound Insulation

The construction and operation of Runway 14/32 will significantly reduce the most severely noise-impacted populations within the 70 and 75 dB DNL contours in East Boston, Winthrop and Revere. This reduction results from a distribution of flights more consistent with the Preferential Runway Advisory System (PRAS) goals. However, the change in distribution levels resulting from the availability of Runway 14/32 will also increase the population within the future 65 dB DNL contours in comparison to the No Action alternative and in comparison to 1998 conditions. This increase will be mitigated by providing sound insulation to

affected residences (located in Chelsea, East Boston and South Boston) that fall within the 65 dB DNL contour for the Preferred Alternative as defined in the 1999 29M Low Fleet scenario (see Final EIR, Table 8.5-1). The number of dwelling units that will be sound insulated are within the new airport wide contours reflecting the conditions of the 29M Low Fleet DNL contour and the sound insulation program will be structured to meet FAA funding requirements. Relevant FAA general sound insulation program funding requirements do not provide sound insulation benefits for buildings that do not meet applicable building codes. However, in order to ensure that all residents of buildings who would otherwise be eligible for sound insulation do not lose eligibility because of building code considerations, funds will be provided, through special Project mitigation commitments from the FAA, to allow for building code upgrades to be made on individual homes to the extent that building code upgrades are necessary to allow the sound insulation work to be completed. To further ensure that all eligible residences are included within the sound insulation program, the specific identity of residences will be determined based upon a detailed block-by-block analysis to be performed during implementation.

4.0 Tenant Relocation Assistance

As described in the Draft EIR and Final EIR, the construction of Runway 14/32 will require the demolition of existing Cargo Building 60 and Cargo Building 61. The current tenant, pursuant to plans independent of the Airside Improvement Project, will vacate Building 61. In connection with its acquisition of Building 60 the Authority will provide relocation assistance to building tenants as required by applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Part 24 of 49 CFR and M.G.L. Chapter 79A and implementing regulations. Relocation resources will be made available to all eligible business relocatees without discrimination.

5.0 Vegetation and Wetlands

All construction associated with the Preferred Alternative is confined to upland portions of the Logan airfield. There will be no loss of wetlands as a result of the implementation of the Preferred Alternative. During construction, sediment and erosion controls will be implemented within the 100-foot buffer zone of the coastal bank. All areas disturbed by construction will be stabilized with vegetation common to the airfield once re-grading is completed.

6.0 Wildlife

Construction of the Centerfield Taxiway and the Taxiway Delta extension will result in the conversion of approximately 37 acres of grassland to paved surface, thereby eliminating this area as habitat for the upland sandpiper. In coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP), the

Authority will develop a mitigation plan to address this impact and that will comprise the following elements:

- Alteration of existing airfield grassland mowing procedures prior to the spring arrival of the upland sandpiper to encourage occupation of other areas of the airfield rather than the construction area.

- Implementation of a pre-construction and an on-going pre-mowing upland sandpiper reconnaissance program to ensure that no individual birds remain in the area.

- Off-site habitat enhancement.

Enhancement of bird habitat at Logan is not feasible due to the significant potential of increased aviation hazards. As part of the Conservation and Management Permit process under the Massachusetts Endangered Species Act (MESA), the Authority in coordination with the NHESP will develop a comprehensive onsite and offsite mitigation program to provide a "net benefit to the local population" of upland sandpipers. The offsite mitigation is expected to involve funding from the Authority for a grassland restoration/habitat enhancement program at Camp Edwards on Cape Cod. Under this program, the Authority will provide funds to the Massachusetts National Guard (MNG) for restoration of the former upland sandpiper habitat. A Memorandum of Understanding (MOU) between the Authority and MNG to ensure effective implementation of the program is anticipated. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented.

7.0 Water Resources

Construction of the Runway 14/32 and Taxiway components of the Preferred Alternative will result in a slight increase (3.8 percent) in peak runoff to tidal waters. Peak discharges will be minimized through the use of grassed swales and infiltration of runoff. No long-term impacts to water quality are anticipated. The existing stormwater drainage system will be reconfigured slightly to accommodate runoff from the runway and taxiway improvements. A low-flow water quality treatment structure will be incorporated into the existing system to handle the first flush runoff from portions of the airfield, if feasible. Sediment and erosion controls will be installed and maintained during all portions of construction to minimize adverse impacts. Construction will be phased to minimize the extent of bare soil at any one time. All new runway and taxiway construction within areas subject to DEP's Stormwater Management Policy will be consistent with applicable policies and performance standards.

8.0 Soils

Disposal of soils excavated for runway and taxiway construction will be completed in compliance with the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, and will be conducted in a manner consistent with the Authority's Soil Management Plan developed for the Logan modernization projects.

9.0 General Construction Mitigation

Appropriate measures to enhance safety and mitigate traffic, air quality, and noise impacts will be incorporated into the contract documents and specifications governing the activities of contractors and subcontractors constructing all construction elements of the Preferred Alternative.

All construction activity associated with the Preferred Alternative will comply with FAA Advisory Circular 150/5370-2C, Operation Safety on Airports During Construction. In addition, the Authority will utilize a number of mandatory construction mitigation procedures for all construction contractors. The Authority will employ a team of on-site resident engineers and inspectors to monitor all construction activities related to the Preferred Alternative, including the following management practices:

- Full coordination with the CA/T Project, and with all relevant agencies including the FAA, MBTA, Massachusetts Turnpike Authority, Massachusetts DEP, Massachusetts Coastal Zone Management (CZM), Massachusetts Water Resources Authority (MWRA), City of Boston, Boston Water and Sewer Commission (BWSC), and utility companies, as appropriate.

- Preparation of detailed pre-construction plans for traffic maintenance, construction specifications for contractors, and coordinated scheduling of all construction activities (as well as the other measures noted in the ground transportation sections above).

Construction mitigation measures in a number of categories are described below.

9.1 Construction Traffic Operations

- Construction vehicles will be required to use State highways or Logan roadways, including the Ted Williams Tunnel, except when seeking access to local businesses. A clause to this effect will be inserted in all construction contracts relating to the construction components of the Preferred Alternative.

- Truck routes for Logan projects that minimize impacts on the local communities will be established. Construction vehicles would be restricted from using Neptune Road, Maverick Street, and Porter Street in East Boston. Designated truck routes will be specified in all construction contracts.

- Construction employee parking spaces will not be permitted on the construction site nor will provisions be made for them elsewhere on-airport with the exception of a small number of spaces for supervisory personnel. It is

expected that construction workers will access the airport via public transportation or via shuttle buses from off-airport parking areas.

- Police details will be employed at appropriate locations on the airport to manage traffic and ensure public safety.

9.2 Construction Air Quality

- The Authority will require contractors to retrofit their heavy construction equipment with advanced pollution control devices during construction in accordance with DEP's Clean Air Construction Initiative. Contractor-owned equipment such as front-end loaders, backhoes, cranes and excavators will be retrofitted with oxidation catalysts. This device filters out and breaks down hydrocarbons, particulate matter and carbon dioxide associated with diesel emissions.

- During the construction process a regular program of street sweeping will minimize dust from construction vehicle movements on airport roads.

- Fugitive dust also will be controlled with water spray as needed during demolition and construction; no chemical soil stabilizers will be used.

- All trucks hauling demolition materials and excavate from the site will be covered and their wheels will be washed prior to leaving the construction site.

9.3 Construction Noise

General construction noise will be limited using techniques such as:

- Use of: (1) concrete crushers or pavement saws for building demolition or similar construction activity; (2) local power grid to reduce the use of generators, to the extent practicable and feasible.

- Attaching (1) intake and exhaust mufflers, shields, or shrouds; (2) noise-deadening material to inside of hoppers, conveyor transfer points, or chutes.

- Maintaining equipment to ensure peak performance.

- Limiting (1) the numbers and duration of equipment idling on the site; (2) the use of annunciators or public address system; (3) the use of air or gasoline-driven hand tools.

- Configuring, to the extent feasible, the construction site in a manner that keeps loud equipment and activities as far as possible from noise-sensitive locations.

When construction is scheduled during the nighttime hours and near community sensitive areas (e.g., East Boston and Winthrop) the following noise mitigation measures will be employed.

- The use of backup alarms for all pieces of equipment will be prohibited, to the extent appropriate. The Contractor will be required to provide additional laborers to assure that equipment backup safely and comply with OSHA regulations.

- Trucks delivering bituminous concrete or other materials will be prohibited from slamming their tailgates to clean out truck beds after dumping.

- During paving operations, the contractors will be required to turn off their vibratory compactors prior to exiting off the newly place pavement and onto the old existing pavement.

Further noise control options will be evaluated during the ongoing project design to define their effectiveness and feasibility. Appropriate operational specifications and performance standards will be incorporated into the construction contract documents.

10.0 Preferential Runway Advisory System (PRAS) Monitoring and Reporting

The Authority will develop and implement a PRAS Monitoring System and will implement a new distribution system for reports. The Massport Quarterly Noise Reports will be expanded to include a number of new reports, and the distribution list will be expanded to include interested parties, including the Logan Citizens Advisory Committee. In addition, the annual reports on runway utilization, dwell and persistence will also be included as part of the Environmental Status and Planning Report (ESPR) (formerly GEIR) filings made with the Executive Office of Environmental Affairs. Over the longer-term, the Authority will work with the FAA to design additional reports that could help enhance the attainment of PRAS.

11.0 Peak Period Monitoring System and Exemption Program

The Authority will establish and maintain a monitoring system that will; (i) provide advance indication of when airline overscheduling is likely to become a significant contributing factor to aircraft arrival and departure delays at Logan, and (ii) identify the portion of the day during which an overscheduling condition would likely occur. As initially conceived, the key components of this system will be as follows:

- Projections of Logan flight activity will be developed on a semi-annual basis. These projections will be prepared 4 to 6 months in advance and will represent estimates of flight levels by hour for the upcoming seasonal schedule period. Projections will be based on the most recent activity levels of Logan, historic seasonality patterns, and advance flight schedules submitted by air carriers to the Official Airline Guide (OAG). The projections will also reflect non-scheduled activity including charter and general aviation.

- Logan's average runway capacity under Visual Flight Rule (VFR) conditions will be evaluated as required.

- Delays due to overscheduling will be quantified though an analysis that simulates the projected flight schedules against Logan's VFR capacity. Delays

will be estimated by hour to permit designation of a specific peak period when overscheduling conditions are likely to cause significant delays.

When projected delays due to air carrier overscheduling are estimated to reach or exceed an average level of 15 minutes per flight (which standard is based on FAA criteria) over a period of three or more consecutive hours in a day, the Authority will take the following curative actions:

Phase 1: Voluntary Schedule Adjustments. The Authority will meet individually with air carriers that exhibit significant levels of flight activity during the identified peak period. These carriers will be informed that Peak Period Pricing will be invoked for the relevant period unless flight schedules are reduced below key threshold levels. If voluntary schedule adjustments occur at levels that will avoid the original overscheduling situation, no further action will be necessary.

Phase 2: Regulatory Action. If voluntary schedule adjustments do not eliminate the overscheduling situation, the Authority will take the necessary steps consistent with applicable legal requirements to put into effect a surcharge applied to flights arriving and departing Logan during identified peak hours. A properly structured exemption program, consistent with federal law requirements, will also be put into effect. The purpose of the exemption program is to prevent affected communities from losing access to the national airport system.

The Authority will continue to monitor flight schedules at Logan on a periodic basis and make adjustments to the peak period as warranted by future schedule changes. The Authority will make adjustments to the monitoring system and related action plan as may be appropriate to address any overscheduling situation that may arise.

12.0 Hushkitted Aircraft

As air carriers and cargo operators phased out their remaining Stage 2 aircraft (gross weight >75,000 pounds) in compliance with federal statutory requirements, some opted to retrofit their older Stage 2 aircraft with “hushkits”, designed to reduce noise levels to meet the Part 36 Stage 3 noise limits. Other carriers and operators replaced their Stage 2 aircraft with new technology Stage 3 airplanes. Air carriers and cargo operators at Logan Airport have done both. Substituting new full Stage 3 aircraft results in more significant noise abatement benefits.

The reduction in noise exposure that will be experienced as fleet changes continue depends heavily on how many hushkitted aircraft remain in operation over the next few years. While not related to Airside Project impacts, the Authority will continue to work with air carriers to encourage the use of full Stage 3 aircraft in place of hushkitted equipment.

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Executive Office of Public Safety

*Joseph F. Lalli
Acting Commissioner
Massachusetts Department of Public Safety
One Ashburton Place
Boston, MA 02108

*Winthrop Farwell
Commissioner
Massachusetts Department of Public Safety
One Ashburton Place
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Executive Office of Transportation and Construction

*Kevin J. Sullivan
Secretary
Executive Office of Transportation and Construction
10 Park Plaza, Room 3170
Boston, MA 02116

*James Cope
Director of Environmental Policy
Executive Office of Transportation and Construction
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Robert DiAdamo
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Central Transportation Planning Staff

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*Ann McGahan
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Massachusetts Aeronautics Commission

*Sherman Saltmarsh Jr.
Chairman
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10 Park Plaza, Room 6620
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Massachusetts Bay Transportation Authority

*Robert Prince
General Manager
Mass. Bay Transportation Authority
10 Park Plaza, Room 3910
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Andrew P. Brennan
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Mass. Bay Transportation Authority
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Massachusetts Highway Department

*Matthew J. Amorello
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Massachusetts Highway Department
10 Park Plaza, Room 3510
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*Patrick Moynihan
Director
Central Artery/Tunnel Project
Massachusetts Highway Department
One South Station
Boston, MA 02110

*Ronald Kilhan
Environmental Permits Manager
Central Artery/Tunnel Project
Massachusetts Highway Department
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Kevin Walsh
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Massachusetts Highway Department
10 Park Plaza, Room 4260
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Massachusetts Historical Commission

*Judith McDonough
Executive Director
Massachusetts Historical Commission
State Archives Building
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Boston, MA 02125

Massachusetts Turnpike Authority

*Chairman
Massachusetts Turnpike Authority
10 Park Plaza, Room 4160
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*Michael Lewis
Director
Central Artery/Tunnel Project
Massachusetts Turnpike Authority
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*Robert Ruzzo
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Metropolitan Planning Organization

*Luisa Paiewonsky
Executive Secretary, Boston MPO
c/o Bureau of Transportation Planning & Development
Executive Office of Transportation and Construction
10 Park Plaza, Room 2150
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Massachusetts Water Resources Authority

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Mass. Water Resources Authority
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100 First Avenue
Charlestown, MA 02129

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East Boston, MA 02128-2909

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One Harborside Drive
East Boston, MA 02128-2909

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One Harborside Drive
East Boston, MA 02128-2909

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One Harborside Drive
East Boston, MA 02128-2909

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Administration
Massachusetts Port Authority
One Harborside Drive
East Boston, MA 02128-2909

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Board Member
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One Harborside Drive
East Boston, MA 02128-2909

Metropolitan Area Planning Council

*Lauren Adair
Metropolitan Area Planning Council
60 Temple Place, F16
Boston, MA 02111

David Soule
Executive Director
Metropolitan Area Planning Council
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Regional Transportation Offices

Connecticut

Rick Lamport
Airport Manager
Tweed-New Haven Airport
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*Kevin Lynch
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2800 Berlin Turnpike
Newington, CT 06111

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Connecticut DOT
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*Ronald L. Roy
Maine DOT
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Augusta, ME 04333-0016

Jeffrey Schultes
Airport Manager
Portland Airport
1001 Westbrook Street
Portland, ME 04102

Bob Zieglaar
Airport Manager
Bangor Airport
287 Godfrey Boulevard
Bangor, ME 04401

Massachusetts

Robert Mallard
Massachusetts Aeronautics Commission
10 Park Plaza, Suite 6620
Boston, MA 02116

*Alvin S. Topham
Chairman
Nantucket Planning and Economic Development Commission
1 East Chestnut Street
Nantucket, MA 02554

*Ms. Katherine Stronjy, Chairman
Barnstable Municipal Airport
Boardman-Polando Field
480 Barnstable Road – 2nd Floor
Hyannis, MA 02601

Eric Waldron
Airport Manager
Worcester Airport
375 Airport Drive
Worcester, MA 01610

New Hampshire

*Jack Ferns
New Hampshire DOT
65 Airport Road
Concord, NH 03001-5298

Kevin Dillon
Airport Director
Manchester Airport
One Airport Road – Suite 300
Manchester, NH 03103-3395

Rhode Island

Michael Cheston, A.A.E.
Executive Director
Rhode Island Airport Corporation
2000 Post Road
Warwick, RI 02886

Wayne Schuster
T.F. Green Airport
Rhode Island Airport Corporation
2000 Post Road
Warwick, RI 02886

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Vermont

*J.J. Hamilton
Airport Manager
Burlington Airport
1200 Airport Drive, #1
Burlington, VT 05403

Rich Turner
Aviation Program Manager
State of Vermont, Agency of Transportation
National Life Building
Drawer 33
Montpelier, VT 05633-5001

Community Representatives

Airside Review Committee (ARC) Members

Dovi Abbey
4 Humboldt Avenue
Roxbury MA 02119

Paul Ballantine
100 Boatswain Way
Chelsea, MA 02150

Claudia Clifford
475 Harland Street
Milton, MA 02186

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South Boston, MA 02127

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Boston, MA 02201

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Hingham MA 02043

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Cambridge, MA 02139

Jerome Falbo
80 Jefferson Street
Winthrop, MA 02152

Ron Fama
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Weymouth MA 02189

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Charlestown, MA 02129

Alex Geourntas
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One City Hall Plaza, 5th Floor
Boston, MA 02201

Joseph Gulino
25 Apple Hill Road
Melrose, MA 02176

Arthur Hartett
262 West Third Street
South Boston, MA 02127-1339

Carl Kimmich
ALPA
23 Swan Street
Pawcatuck, CT 06379

Jim Klocke
Greater Boston Chamber of Commerce
One Beacon Street
Boston, MA 02108-3114

Sandra Kunz
Braintree Representative
89 Hollingsworth Avenue
Braintree, MA 02184

Steve Lathrop
14 Western Avenue
Hull, MA 02045-1102

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Jamaica Plain / Runway 27 Coalition, Inc.
18 Greenough Avenue
Jamaica Plain, MA 02130

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108 Connell Street
Quincy, MA 02129

John Mahoney
Malden Representative
11 Nanapashemet Avenue
Malden, MA 02149

Wayne Matewsky
Everett Representative
86 Lewis Street
Everett, MA 02149

*Debbie McHatton
Beachmont / Revere Representative
89 Leverett Avenue
Beachmont, MA 02151

*Glenn Morse
Continental Airlines
38 New Hampshire Avenue
Massapequa, NY 11758

*Ray Murphy
Palmer & Dodge
One Beacon Street
Boston, MA 02108

*Rol Murrow
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33 Holly Drive
Storrs, CT 06268-22065

*John O'Brien
Cape Cod Economic Development Council
Barnstable Municipal Airport
480 Barnstable Road
Hyannis, MA 02601

Daniel Dray
Administrator
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John O'Brien
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535 Herndon Parkway
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Daryl Pomicter
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136 Myrtle Street
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*William Reynolds
Business Express Airlines, Inc.
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Dorchester, MA 02124

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14 Wyatt Street
Somerville, MA 02143-3950

Ron Taylor
41 Baldwin Street
Charlestown, MA 02129-1706

*Christie Wrigley
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93 Highland Avenue
Somerville, MA 02143

*Gail Visentin
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British Airways
Boston-Logan International Airport
East Boston, MA 02128

Kurt Walter
South End / Cambridge Representative
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Cambridge, MA 02140

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*Richard Wehby
West Roxbury Representative
447 Weld Street
West Roxbury, MA 02132

*Larry Zabar
New England Council
98 North Washington Street
Boston, MA 0211

Massport Citizen Advisory Commit tee (CAC)

*Hank Botte
33 Szwaliwoods Road
Melrose, MA 02176

*Thomas Connolly
South Boston Representative
77 Farragut Road
South Boston, MA 02127

*Mary Davis
9272 Cascade Street
Detroit, MI 48204-1714

*Robert Fornier
111 Ridgewood Road
Milton, MA 02186

*Arthur Hartnett
262 West 3rd Street
South Boston, MA 02127

Blossom Hoag
Friends of Belle Isle Marsh
177 Webster Street
East Boston, MA 02128

*Joseph Hubbard
39 Hobart Avenue
Braintree, MA 02184

*Rita Hurley
15 McKane Street
Dorchester, MA 02122

*Paul Katzeff
Hull Board of Selectmen
Hull, MA 02045

*Joseph McDermott
15 Rosaria Street
Dorchester, MA 02122

Brian Miller
109 O Street
South Boston, MA 02127

Elvira Pixie Palladino
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759 Bennington Street
East Boston, MA 02128

*Kathy Santiano
15 Washington Square
Beachmont, MA 02151

*Allison Stieber
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*Ron Taylor
41 Baldwin Street
Charlestown, MA 02129

Mona Thaler
22 Cushing Road
Brookline, MA 02445

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Municipalities

Barnstable

Community / Interest Groups

Christine Dolen
Commissioner Chairman
Barnstable County Commissioners
3195 Main Street
Barnstable, MA 02630

Daniel Dray
Administrator
Cape Cod Economic Development Council
3225 Main Street
Barnstable, MA 02630

Herbert Olsen
Commission Chairman
Cape Cod Commission
3225 Main Street
Barnstable, MA 02630

Boston

Elected Officials

Mayor's Office

*Honorable Thomas M. Menino, Mayor
City of Boston
One City Hall Square
Boston, MA 02201

Mr. Anthony Petrucelli
Mayor's Office of Neighborhood Services,
Room 708
1 City Hall Square
Boston, MA 02201

City Council

*Daniel F. Conley
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Maureen E. Feeney
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Michael F. Flaherty
District Councilor
Boston City Council
Boston City Hall
Boston, MA 02201

*Maura A. Hennigan
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Brian J. Honan
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

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*James M. Kelly
President
Boston City Council
Boston, City Hall
Boston, MA 02201

*Peggy Davis-Mullen
Councilor-At-Large
Boston City Council
Boston, City Hall
Boston, MA 02201

*Stephen J. Murphy
Councilor-At-Large
Boston City Council
Boston, City Hall
Boston, MA 02201

*Francis M. Roache
Councilor-at-Large
Boston City Council
Boston, City Hall
Boston, MA 02201

*Michael Ross
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Paul J. Scapicchio
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Charles Turner
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

*Charles C. Yancey
District Councilor
Boston City Council
Boston, City Hall
Boston, MA 02201

Municipal Agencies

Boston Air Pollution Control Commission

Bryan Glascock
Director
Boston Air Pollution Control Commission
One City Hall Square, Room 805
Boston, MA 02210

Boston Conservation Commission

Richard McGuinness
Executive Secretary
Boston Conservation Commission
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Boston, MA 02201

Boston Environmental Department

Antonia Pollak
Director
Boston Environmental Department
One City Hall Square, Room 805
Boston, MA 02201

Boston Parks and Recreation Department

*Justine M. Liff
Commissioner
Boston Parks and Recreation Dept.
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Boston, MA 02118

Boston Public Health Commission

John Auerbach
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Boston, MA 02118

Boston Redevelopment Authority

*Mark Maloney
Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

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Director of Special Project Planning
Boston Redevelopment Authority
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Boston Transportation Department

*Andrea d'Amato
Commissioner
Boston Transportation Department
One City Hall Square, Room 721
Boston, MA 02201

Robert D'Amico (ARC)
Boston Transportation Department
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Boston, MA 02201

Boston Water and Sewer Commission

John Lopes
Executive Director
Boston Water and Sewer Commission
425 Summer Street
Boston, MA 02210-1700

*Vincent G. Mannering
Executive Director
Boston Water and Sewer Commission
425 Summer Street
Boston, MA 02210-1700

City Clerk's Office

*Rosaria Salerno
Boston City Clerk
One City Hall Square
Boston, MA 02201

Community/Interest Groups

*Valerie Burns
Director
Boston Nat. Areas Fund, Inc.
59 Temple Place, Room 558
Boston, MA 02111-1307

*Peter Y. Flynn
Vice Chairman
Neighborhood Association of the Back Bay, Inc.
337 Newbury Street
Boston, MA 02115-2710

*Richard Kennelly, Jr.
Conservation Law Foundation
62 Summer Street
Boston, MA 02116

*Ms. Shirley Kressel, President
Alliance of Boston Neighborhoods
Harriet Tubman House
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Boston, MA 02118

*Vivien Li
Executive Director
The Boston Harbor Association
374 Congress Street, Suite 609
Boston, MA 02210-1807

*Jay McCaffrey
Executive Director
Sierra Club
100 Boylston Street, Suite 760
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*Peter Meade
New England Council
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Boston, MA 02199

*Mr. James Miller
MetroPlan Committee Chair
Metropolitan Area Planning Council
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Boston, MA 02111

*Sandra C. Steele, President
Beacon Hill Civic Association, Inc.
74 Joy Street
Boston, MA 02114

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Bolton

*Nancy W. Reed
Director
Advocates for a Strong Economy w/Resp. Trans.
(ASERT)
Randall Road
Bolton, MA 01740

Cambridge

Municipal Agencies

City Clerk

*D. Margaret Drury
City Clerk
Office of the City Clerk
City of Cambridge
City Hall – 795 Massachusetts Avenue
Cambridge, MA 02139

City Manager

*Robert W. Healy
City Manager
City of Cambridge
Cambridge, MA 02139

Charlestown

Community/Interest Groups

*Carol Bratley
President
Charlestown Business Association
3 Pleasant Street Ct.
Charlestown, MA 02129

*Ms. Margaret Bradley, President
Charlestown Business Association
55 Park Street
Charlestown, MA 02129

*Mr. Dan Haska
c/o Charlestown Preservation Society
P.O. Box 201
Charlestown, MA 02129

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Chelsea

Elected Officials

City Council

*Mr. Roy Avellaneda
Councilor, District 7
500 Broadway
Chelsea, MA 02170

*Rochelle M. Bennett
Councilor
7 Boatswains Way
Chelsea, MA 02150

*Calvin T. Brown
Councilor, District 7
500 Broadway
Chelsea, MA 02150

*Preston G. Galarneau Jr.
Councilor District 8
Chelsea City Council
City Hall – 500 Broadway
Chelsea, MA 02150

*Paul Nowicki
Councilor-At-Large
500 Broadway
Chelsea, MA 02150

Mr. John O'Brien
Councilor at Large
14 Reynolds Avenue
Chelsea, MA 02150

Ms. Marilyn Portnoy
Councilor, District 5
61 Cottage Street
City Hall – 500 Broadway
Chelsea, MA 02150

*Stephen Powers
Councilor, District 3
17 Louis Street
Chelsea, MA 02170

*Richard Repici Jr.
Councilor, District 5
61 Cottage Street
Chelsea, MA 02170

*Arthur J. Richards
Councilor, District 2
21 Jefferson Avenue
Chelsea, MA 02170

*Stanley Troisi
Councilor, District 1
108 Springvale Avenue
Chelsea, MA 02150

*Mike McKonnen Tsegaye
Councilor, District 4
21 County Road
Chelsea, MA 02150

*Juan Vega
Councilor, District 6
Chelsea City Council
500 Broadway
Chelsea, MA 02150

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Municipal Agencies

*Jay Ash, Director
City Manager
Chelsea City Hall
500 Broadway
Chelsea, MA 02150

City Clerk

*Robert Bishop
City Clerk
Chelsea City Hall
500 Broadway
Chelsea, MA 02150

Board of Selectmen

Guy A. Santagate
City Manager
Chelsea City Hall
500 Broadway
Chelsea, MA 02150

Conservation Commission

*John Depriest
Chelsea Conservation Commission
500 Broadway, Room 101
Chelsea, MA 02150

*Charles L. McFarland
Chairman
Chelsea Conservation Commission
Chelsea City Hall
500 Broadway
Chelsea, MA 02150

Community/Interest Groups

*Jeffrey Buck
President
Chelsea Waterfront Association
12 Medford St.
Chelsea, MA 02150

*Michael Falzone, President
Chelsea Rotary
8 Central Avenue
Chelsea, MA 02150

*Edward Marakovitz
Chelsea Human Services Collaborative
300 Broadway
Chelsea, MA 02150

*Bruce Mauch
President
Chelsea Chamber of Commerce
285 Everett Avenue
Chelsea, MA 02150

*Waldert Rivera
Executive Director
Centro Hispano de Chelsea
248 Broadway
Chelsea, MA 02150

*Gladys Vega
Chelsea Greenspace
c/o Chelsea Human Services Collaborative
300 Broadway
Chelsea, MA 02150

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East Boston

Community/Interest Groups

*Lisa Capagrico
East Boston Chamber of Commerce
296 Bennington Street
East Boston, MA 02128

*Debra H. Cave
Chairperson
East Boston Healthy Boston Coalition
106 White Street
East Boston, MA 02128

*Alice Christopher
972 Bennington Street
East Boston, MA 02128

*Philip Freehan, Chairman
Economic Development Council
East Boston Savings Bank
10 Meridian Street
East Boston, MA 02128

*Dean Hashimoto
East Boston Neighborhood Health Center
153 Worcester Road
Newton, MA 02158

*Roberta Horn
65 St. Andrews Road
East Boston, MA 02128

Ida Lamattina, President
Gove Street Citizens Committee
123 Cottage Street
East Boston, MA 02128

*Albert D. Lavoie, Jr.
6 Everett Ct.
East Boston, MA 02128

*Robert Loiacono
East Boston Chamber of Commerce
c/o Welding & Engineering Company
279 Border Street
East Boston, MA 02128

*William Longfield
201 Webster Street
East Boston, MA 02128

*George Loring
Bremen Street Park Site Committee
237 Marion Street
East Boston, MA 02128

*Karen Maddalena, Chairperson
Jeffries Point Neighborhood Association
4 Lamson Street
East Boston, MA 02128

*James Manganello
Executive Director
East Boston Community Information and Referral Center
237 Marion Street
East Boston, MA 02128

*David Migliaccio
c/o Salvy the Florist
Eight Chelsea Street
East Boston, MA 02128

*Gail Miller
Chairperson – Conservation Committee
Friends of Belle Island Marsh
P.O. Box 575
East Boston, MA 02128

*Clark Moulaison, President
East Boston Main Streets
c/o American Ice Cream
226 Sumner Street
East Boston, MA 02128

*Peter Nagle
Mayor's Office of Neighborhood Services
1 City Hall Plaza
Boston, MA 02201

*Joseph Plagenza, President
Land Use Council
46 Saratoga Street
East Boston, MA 02128

*Fran Riley
193 Trenton Street
East Boston, MA 02128

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*Jack Scalcione, Commander
East Boston Veteran's Council
36 Frankfort Street
East Boston, MA 02128

*John Sepulveda
Latin American Planning & Development
c/o NOAH
28 Paris Street
East Boston, MA 02128

*Robert F. Strelitz
East Boston Land Use Advisory Council
1 Brigham Street Apt. 2
Boston, MA 02128

*Vincent R. Tino
95 Faywood Avenue
East Boston, MA 02128

*Robert Verdonk, President
East Boston Savings Bank
10 Meridian Street
East Boston, MA 02128

Bedford

*Mark Siegenthaler
Selectman, Town of Bedford
Hanscom Area Town Selectman
10 Mudge Way
Bedford, MA 01730

Everett

Municipal Agencies

Mayor's Office

*David Ragucci
Everett City Hall
484 Broadway
Everett, MA 02149

Hingham

Municipal Agencies

Office of the Board of Selectman

*Michael P. Holden
Office of the Selectmen
210 Central Street
Hingham, MA 02043-2757

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Hull

Municipal Agencies

Planning Board

*David P. Carlon
Chairman
Town of Hull, Planning Board
225 Atlantic Avenue
Hull, MA 02045

Board of Selectmen

*Regina Burke
Hull Board of Selectman
Hanscom Area Town Selectman
Atlantic Avenue
Hull, MA 02045

*Philip E. Lemnios
Town Manager
Town of Hull, Board of Selectmen
Municipal Building
Hull, MA 02045

Lexington

*Peter Enrich
Town of Lexington
Hanscom Area Town Selectman
Town Hall
1625 Massachusetts Avenue
Lexington, MA 02173

Milton

Elected Officials

Board of Selectmen

*Richard B. Neely
Chairman
Board of Selectmen
Milton Town Hall
525 Canton Avenue
Milton, MA 02186

Municipal Agencies

Town Clerk

*James G. Mullen, Jr.
Town Clerk
Milton Town Hall
525 Canton Avenue
Milton, MA 02186

*Kimberly I. McCarthy
Town of Milton Airport Noise Committee
c/o Murphy, Hesse, Toomey & Lehane
300 Crown Colony Drive, Suite 410
Quincy, MA 02269-9126

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Nantucket

Elected Officials

Board of Selectmen

*Arthur L. Desrocher
Chairman
Town and County of Nantucket
Board of Selectmen – County Commissioners
Town & Country Building
16 Broad Street
Nantucket, MA 02554

Community/Interest Groups

*Maia Gaillard
Executive Director
Nantucket Island Chamber of Commerce
48 Main Street
Nantucket, MA 02554-3595

Orleans

Elected Officials

Board of Selectmen

*Beverly G. Singleton
Chairman
Town of Orleans – Board of Selectmen
19 School Road
Orleans, MA 02653-3699

Provincetown

Municipal Agencies

Board of Selectmen

*Keith A. Bergman
Town Manager
Town of Provincetown
Town Hall – 260 Commercial Street
Provincetown, MA 02657

Airport Commission

*Chairman
Town of Provincetown –Airport Commission
Race Point Road – P.O. Box 657
Provincetown, MA 02657

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City of Quincy

Elected Officials

*James A. Sheets
Mayor
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

City Council

*City Councilor and State Representative
City Council
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

*Peter Kolson
President
City Council
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

Municipal Agencies

City Clerk

*Joseph Shea
City Clerk
Quincy City Hall
1305 Hancock Street
Quincy, MA 02169

Revere

Elected Officials

Mayor

*Robert J. Hass, Jr.
Mayor
Revere City Hall
281 Broadway
Revere, MA 02151

City Council

*Councilor Thomas Ambrosino
Revere City Council
Revere City Hall
281 Broadway
Revere, MA 02151

*Councilor Paul Buonfiglio
City Councilor
70B Milano Avenue
Revere, MA 02151

*Councilor George M. Colella
Revere City Council
Revere City Hall
281 Broadway
Revere, MA 02151

*Councilor Joseph A. Delgrosso
City Councilor
813 Broadway
Revere, MA 02151

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*Councilor Al Fiore
City Councilor
72 Pearl Avenue
Revere, MA 02151

*Councilor Donald H. Goodwin
City Councilor
350 Beach Street
Revere, MA 02151

*Councilor Arthur F. Guinasso
City Councilor
2 Martin Street
Revere, MA 02151

*Councilor Richard Penta
City Councilor
140 Crest Avenue
Revere, MA 02151

*John Perez
City Councilor
2 Ocean Avenue
Revere, MA 02151

*Councilor Denise Salemi
Revere City Council
Revere City Hall
281 Broadway
Revere, MA 02151

*Councilor Leonard Semenza
Revere City Council
Revere City Hall
281 Broadway
Revere, MA 02151

Municipal Agencies

City Clerk

*John Henry
City Clerk
Revere City Hall
281 Broadway
Revere, MA 02151

Planning and Community Development Department

*Frank Stringi
Revere Planning Department
281 Broadway
Revere, MA 02151

Community/Interest Groups

*Mr. John Addonizio
Board Director
Revere Chamber of Commerce
Fleet National Bank
330 Broadway
Revere, MA 02151

*Mr. Laurel Cifuni
Franklin Park Improvement Association
32 Maple Street
Revere, MA 02151

*Mr. Andy DiPeitro
c/o Community Planning and Development
281 Broadway
Revere, MA 02151

*James Furlong
Roughans Point Association
c/o 12 Pierview Street
Revere, MA 02151

*Elaine Hurley
Pines Riverside Association
c/o 21 River Avenue
Revere, MA 02151

*Joseph James
Friends of Rumney Marsh
10 Rice Avenue
Revere, MA 02151

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*Michael Kelleher
Revere Beach Association
681 Revere Beach Boulevard
Revere, MA 02151

*Sheldon Kovitz, President
Point of Pines Beach Association
c/o 53 Delano Avenue
Revere, MA 02151

*Rose LaQuaglia
Oak Island Civic Association
5 Oak Island Road
Revere, MA 02151

*Ben Leone, President
Beachmont Neighborhood Association
96 Bellingham Avenue
Revere, MA 02151

*Laura Leone, Executive Director
Revere Chamber of Commerce
96 Bellingham Avenue
Revere, MA 02151

*John J. Verrengia
CPCA, PC
President, Revere Chamber of Commerce
385 Broadway
Revere, MA 02151

Somerville

Elected Officials

Mayor

*Dorothy Kelly Gay
Mayor
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143

City Clerk

*Arthur B. McCue
City Clerk
City Clerk's Office
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143

Committee on Housing and Community Development

*William A. White, Jr.
Chairman – Committee of Housing & Community Development
City of Somerville – Board of Alderman
16 Browning Road
Somerville, MA 02145

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South Boston

Community/Interest Groups

*Kathleen Kenneally
President
South Boston Residents' Group, Inc.
588 East Third Street
South Boston, MA 02127

*Edward Wallace
Dorchester Heights Association
56 Thomas Park
South Boston, MA 02127

*Lily Berry
Director, West Broadway Task Force
81 Orton Marotta Way, #1076
South Boston, MA 02127

*Mr. John Ciccone
Director of Information
South Boston Information Center
655 East Broadway St.
South Boston, MA 02127

*Lucky Devlin
South Boston Environmental & Health Coalition
718 East Second Street
South Boston, MA 02127

*Fr. James M. DiPerri
Founder
Committee for Relief from Airport Noise
73 Farragut Road
South Boston, MA 02127

*Linda Doran, President
Andrew Square Civic Association
9 Leed Street
South Boston, MA 02127

*Timothy Hayes, Chair
"M" Street Park Association
23 "M" Street
South Boston, MA 02127

*The Seaport Alliance for a Neighborhood Design
c/o Steve Hollinger
50 Melcher Street
Boston, MA 02210

*Michael O'Dwyer
President
South Boston Citizens' Association
P.O. Box 74
South Boston, MA 02127

*Mr. Kenneth Sinkiewicz
Chairman, South Boston Waterfront Committee
911 Broadway
South Boston, MA 02127

*South Boston Environmental Health Watch
c/o South Boston Public Health Initiative
409 West Broadway
South Boston, MA 02127

*Mr. William Spain
President
Castle Island Assoc.
1514 Columbia Road
South Boston, MA 02127

*Gerald Vierbickas
President
South Boston Public Action Committee
1720 Columbia Road
South Boston, MA 02127

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Squantum

Community/Interest Groups

*Frank Buckley
President
Squantum Community Association
136 Standish Road
Squantum, MA 02171

Winthrop

Elected Officials

Board of Selectmen

*Robert V. Driscoll, Jr. (ARC)
Chairman
Board of Selectman
Winthrop Town Hall
One Metcalf Square
Winthrop, MA 02152

*Matthew D. Lanza (ARC)
Board of Selectman
Winthrop Town Hall
One Metcalf Square
Winthrop, MA 02152

*Gerald Ogus
Board of Selectmen
Winthrop Town Hall
One Metcalf Square
Winthrop, MA 02152

Municipal Agencies

Airport Hazards Commission

*Richard Bangs
Town of Winthrop Noise, Air Pollution, and
Airport Hazards Committee
154 Woodside Avenue
Winthrop, MA 02152

*Arthur Flavin, Sr.
Town of Winthrop Noise, Air Pollution, and
Airport Hazards Committee
Wintrop, MA 02152

Planning Board

*Joseph Borane
Planning Board Member
Town of Winthrop
22 Central Street
Winthrop, MA 02152

*Edward Bomarsi
Winthrop Planning Board
Winthrop Town Hall
One Metcalf Square
Winthrop, MA 02152

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*Joseph Dow
Town of Winthrop
Planning Board Member
31 Beal Street
Winthrop, MA 02152

*Mary McGrall
Town of Winthrop
Planning Board Member
186 Bartlett Road
Winthrop, MA 02152

*Davis Proctor, Jr.
Town of Winthrop
Planning Board Member
100 Grovers Avenue
Winthrop, MA 02152

*David Schonback
Town of Winthrop
Planning Board Member
39 Waldemar Avenue
Winthrop, MA 02152

Noise, Air Pollution and Airport Hazards Commission

*Jerome Falbo
Town of Winthrop Noise, Air Pollution and Airport Hazards Comm.
80 Jefferson Street
Winthrop, MA 02152

Conservation Commission

*Mary Kelley
Chairperson
Winthrop Conservation Commission
Winthrop Town Hall
One Metcalf Square
Winthrop, MA 02152

Office of the Board of Selectmen

*Virginia Wilder
Executive Secretary
Board of Selectmen
Winthrop Town Hall
Winthrop, MA 02152

Chamber of Commerce

*Winthrop Chamber of Commerce
207 Hagman Road
Winthrop, MA 02152-0005

Community/Interest Groups

*Richard D. Dimes
Winthrop Hazards Committee
105 Johnson Avenue
Winthrop, MA 02152

*Caroline Fisichella
Winthrop Concerned Citizens' Comm.
99 Johnson Avenue
Winthrop, MA 02152

*Conal Foley, President
Friends of Belle Isle Marsh
97 Lowell Road
Winthrop, MA 02152

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Other Interested Parties

Billerica

*Wendy Peters
Travel Manager
PRI Automation
805 Middlesex Turnpike
Billerica, MA 01821-3986

Boston

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38 Chauncy Street, 3rd Floor
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President
ELLIS Neighborhood Association, Inc.
55 Appleton Street Apt. 1
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*Kenneth P. Brier
Sherburne, Powers, Holland & Knight LLP
One Beacon Street
Boston, MA 02108

*Stephen H. Burrington
General Counsel
Conservation Law Foundation
62 Summer Street
Boston, MA 02110-1016

*Mr. Mark R. Cestari
President
New England USA
52 Eliot Street
Boston, MA 02116

*Mr. S. James Coppersmith
Chairman, Board of Trustees
Emerson College
100 Beacon Street
Boston, MA 02116-1596

*Nader F. Darehshori
Chairman
Massachusetts Business Roundtable
250 Boylston Street
Boston, MA 02116

*Mr. John F. Deacon
Transportation Chair
Sierra Club

Greater Boston Group
3 Joy Street
Boston, MA 02108

*
Mr. Sean Donohue
City Manager
United Airlines
61 Harborside Drive
East Boston, MA 02128

*Mr. Ed Eskandariah
Arnold Fortuna Lawner & Cabot, Inc.
101 Arch Street
Boston, MA 02110

*Shawn P. Ford
V.P. International & Domestic Sales
Old Town Trolley Tours
52 Eliot Street
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Douglas Foy
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General Manager
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One Avenue de Lafayette
Boston, MA 02111

*K. Dun Gifford, President
Comm. for Regional Transportation
15 Hilliard
Cambridge, MA 02138

*John W. Gillespie
Managing Director
Bear, Stearns & Co. Inc.
One Federal Street
Boston, MA 02110

*Neal Glick
Craighead / Glick LLP
227 Dartmouth Street, 3rd Floor
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Goulston & Storrs
400 Atlantic Avenue
Boston, MA 02110-3333

*Gary T. Klencheski
President and CEO
Fitcorp
800 Boylston Street
Prudential Center Suite 2475
Boston, MA 02199

Peter L. Koff
McGowan, Engel, Tucker Garrett & Schultz
125 High Street, Suite 2601
Boston, MA 02110

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President and Chief Executive Officer
Boston Edison
800 Bolyston Street
Boston, MA 02199

*Ray Molinaro
President, Greater Boston Chamber Member
Back Bay Photo Imaging
800 Boylston Street
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Patrick B. Moscaritolo
President and CEO
Boston Convention & Visitors Bureau
Two Copley Place, Suite 105
Boston, MA 02116-6501

*Bill Munck
General Manager
Boston Marriott Copley Place
110 Huntington Avenue
Boston, MA 02116

*Joseph W. Nigro, Jr.
General Agent / Secretary
Building and Construction Trades Council of the
Metropolitan District
645 Morrissey Blvd., Suite 2
Boston, MA 02122-3520

*Mr. Francois L. Nivaud
Managing Director
Boston Harbor Hotel
70 Rowes Wharf
Boston, MA 02110

*Mr. Kevin Phelan
Chairman
Greater Boston Chamber of Commerce
One Beacon Street
Boston, MA 02108

*Mr. Don Reed
President
NYNEX
185 Franklin Street
18th Floor
Boston, MA 02110

*Rob Sargent
Legislative Director
MASSPIRG
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Boston, MA 02111-1350

*Mr. Gary L. Saunders
Chairman & Chief Executive Officer
Saunders Hotel Group
64 Arlington Street
Boston, MA 02116-3912

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*Bill Skoglund
General Manager
Boston Marriott Copley Place
110 Huntington Avenue
Boston, MA 02116

*Terry Wordon
General Manager
Boston Marriott Long Wharf
296 State Street
Boston, MA 02108

*Mr. Arthur O. Stern
Executive Vice President
The Colonial Group, Inc.
One Financial Center
Boston, MA 02111

*Wally Stevens
President
Slade Gorton & Co., Inc.
225 Southampton Street
Boston, MA 02118-2715

*Jodi Sugarman
Save the Harbor Save the Bay
25 West Street, 4th Floor
Boston, MA 02111

*Charles K. Tufts
Tufts Associats
1208 VFW Parkway – Suite 300
Boston, MA 02132

*Mr. William C. Van Fassen
President and Chief Executive Officer
BlueCross BlueShield of Massachusetts
100 Summer Street
Boston, MA 02110-2190

*David C. Weinstein
Chief of Administration and Gov't. Affairs
Fidelity Investments
82 Devonshire Street – F5A
Boston, MA 02109-3614

*Mr. Jon Westling
Boston University
145 Bay State Road
Boston, MA 02215

*Mr. David M. Ziolkowski
Regional Vice President
Hudson Aviation Services, Inc.
100 Cambridge Street - 20th Floor
Boston, MA 02202

Cambridge

*Claire Barrett
Claire Barrett & Associates
700 Massachusetts Avenue
Cambridge, MA 02139

*Tom Connery
Roseland Property Co.
125 Cambridge Park Drive
Cambridge, MA 02140

*Mr. John Gorman, President
Opinion Dynamics Corporation
1030 Massachusetts Avenue
Cambridge, MA 02138-5335

*Mr. Jeff Miller
General Manager
Boston Marriott- Cambridge
Two Cambridge Center
Cambridge, MA 02142

*John T. O'Connor
President
c/o Green Works, Inc.
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Cambridge, MA 02142

*Michael A. Sandman
Sr. Vice President
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126 Charles Street – Suite 2
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Charlestown

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Krolman Corporation
65 Elm Street
Charlestown, MA 02129-2438

Chelsea

*Allen Alpert
Rotary Board
Square Cab Co.
P.O. Box 505214
Chelsea, MA 02150

*Mark Szretto, Chairperson
Commission of Hispanic Affairs
187 Winnismmett Street
Chelsea, MA 02150

Chestnut Hill

*Mr. Fred Treseler
President
TRACS, INC.
79 Manet Road
Chestnut Hill, MA 02167

Concord

*Chester G. Atkins
Director
ADS Ventures, Inc.
1540 Monument Street
Concord, MA 01742-5303

*Gary Clayton
57 Hill Street
Concord, MA 01742

Cummaquid

*Frank Gibson
New England's Economy Depends on Logan
Harbor Point Rd.
Cummaquid, MA 02637

East Boston

*Lucy Ferullo
23 Haynes Street
East Boston, MA 02128

*Patty Sartori, President
East Boston Health Center, Board of Directors
228 Webster Street
East Boston, MA 02128

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Gardner

*Michael F. Ellis
President and CEO
Greater Gardner Chamber of Commerce
210 Main Street
Gardner, MA 01440

Hyannis

Daniel A. Wolf
President
Cape Air / Nantucket Airlines
Barnstable Municipal Airport – North Ramp
Hyannis, MA 02601

*Charles Carrera
Cape Air / Nantucket Airlines
Barnstable Municipal Airport – North Ramp
Hyannis, MA 02601

Jamaica Plain

*Martha
President
The Franklin Park Coalition
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Jamaica Plain, MA 02130

Lincoln

*E. Heidi Roddis
Environmental Policy Specialist
Massachusetts Audubon Society
208 South Great Road
Lincoln, MA 01773

*Sara Mattes
Selectman, Town of Lincoln
Hanscom Area Town Selectman
10 Meadow Dam Road
Todd Pond
Lincoln, MA 01773

Malden

*Louis A. Mandarini Jr.
Business Manager
Construction and General Laborers' Union Local 22
280 Medford Street
Malden, MA 02148

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Executive Director
NAIOP
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Newton, MA 02462

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General Manager
Boston Marriott Newton
Commonwealth Avenue at Route 128 and the
Massachusetts Turnpike
Newton, MA 02466

Peabody

*Terry Worden
General Manager
Peabody Marriott
8A Centennial Drive
Peabody, MA 01960

Provincetown

*Gary Reinhardt
President
Provincetown Business Guild
29 Tremont St.
Provincetown, MA 02657

Rosindale

*William P. Ryan
Business Manager
Int'l. Union of Operating Engineers – Local 4
120 Mount Hope Street
Roslindale, MA 02131

South Boston

*Mona Connolly
South Boston Chamber of Commerce
485 East Broadway
South Boston, MA 02127

*Maryann Crush
Chair, South Boston Betterment Trust
917 East Broadway
South Boston, MA 02127

*Robert Costello
Chairman, St. Vincents' Assoc.
211 West Third Street
South Boston, MA 02127

*Ms. Rosemary Powers
South Boston Main Streets Inc.
463 W. Broadway
South Boston, MA 02127

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Executive Director, South Boston PAL
60 Bolton St.
South Boston, MA 02127

*Paul V. Walsh
Secretary-Treasurer
Principal Executive Officer
Excavating & Building Material Teamsters,
Chauffeurs & Helpers
Local Union 379
29 Farragut Road
South Boston, MA 02127

Waltham

*Howard P. Foley
President
Massachusetts High Technology Council
1601 Trapelo Road
Waltham, MA 02154

Winthrop

*William Hayes
Vice President
North Shore Rec. Center
40 River Road
Winthrop, MA 02152

*Tony Marmo
President
North Shore Recreation Center
40 River Road
Winthrop, MA 01252

* Mr. Thomas J. McCarthy
McCarthy, Allegretto & McCarthy
Attorneys at Law
80 Jefferson Street
Winthrop, MA 02152

Woburn

*Joseph M. Quilty
President
Iron Workers District Council of New England
444 Washington Street
Woburn, MA 01801

*Mr. Robert K. Sheridan
President
The Savings Bank Life Insurance
One Linscott Road
Woburn, MA 01888

Other U S Cities

*Ross B. Capon
National Association of Railroad Passengers
900 Second Street, N.E. – Suite 308
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*Dennis Roberts
Vice President, Technical Director
Government and Technical Affairs
Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, MD 21701-4798

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National Association of State Aviation ERS Officials
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Silver Spring, MD 20910-3349

Jim Muldoon
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*Scott Durgin
Business Express Airlines, Inc.
14 Aviation Avenue
Portsmouth, NH 03801-2833

*Tim Snow
Continental Airlines
1600 Smith Street
Houston, TX 77002

*Leah Raney
Continental Airlines
1600 Smith Street
Houston, TX 77002

*Robert A. Hazel
Vice President, Properties and Facilities
US Airways
2345 Crystal Drive
Arlington, VA 22227

Organizations and Companies

*John Allen
Boston Area Bicycle Coalition
Seven University Park
Waltham, MA 02154

*Barry Andelman
President
Association for Public Transportaiton, Inc.
P.O. Box 1029
Boston, M 02205

*John E. Drew
President
World Trade Center
Boston, MA 02210

*Scott Durgin
Business Exp. Airlines
14 Aviation Avenue
Portsmouth, NH 03801

*John Gould
President and CEO
Associated Industries of Massachusetts
222 Berkeley Street
Boston, MA 02117-0763

*Donald MacIver
Massachusetts Association of Cons. Comm.
10 Juniper Road
Belmont, MA 02178

*Peter Nagle
Revere Journal
327 Broadway
Revere, MA 02151

*Mike Cantalupa
Boston Properties
Eight Arlington Street
Boston, MA 02116

*Richard K. Domas
Hoyle, Tanner & Associates, Inc.
45 Bromfield Street, 10th Floor
Boston, MA 02108

*Patricia Todisco
Greenspace Alliance
Executive Director
36 Bromfield Street, Room 201
Boston, MA 02108

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Private Citizens

Boston

Duane Andrews, RN
85 Appleton Street
Boston, MA 02116

*Mr. John Archibald
40 Union Park
Boston, MA 02118

*Mr. David A. Banta and Caroline E. Coggeshall
158 West Canton Street
Boston, MA 02118

*Mr. David Bartol
15 Dartmouth Place, #3
Boston, MA 02116

*Ms. Claudia Brede
15 Blackwood Street, #4
Boston, MA 02115

*Mr. John Burk
26 Worcester Street
Boston, MA 02118

*Henry Carson
4 Clarendon Street
Boston, MA 02116-6117

*Mr. Barry B. Corden
119 Pembroke Street, #3
Boston, MA 02118

*Peter Cucchiara
60 St. Andrew Rd.
Boston, MA 02128

*Mr. Michael Dukakis
Northeastern University
Departmentof Political Science
303 Meserve Hall
Boston, MA 02115

*Mr. Irv Englander
131 West Concord Street
Boston, MA 02118

*Mr. Brian Gallagher
11 Stedman Street, #1
Boston, MA 02130

*Nina Garfinkle
7 Holyoke Street
Boston, MA (south end)

*S. Kay Gibbs
61 Rutland Street
Boston, MA 02118

*Mr. Sterling Giles
154 West Newton Street
Boston, MA 02118-1203

*Robert and Kathleen Hathaway
220 West Canton Street
Boston, MA 02116-5814

*Ms. Ann Hershfang
Transportation Consultant
64 West Rutland Square
Boston, MA 02118

*Mr. Steve Hollinger
SAND
50 Melcher Street
South Boston, MA 02210

*Mr. John P. Kilroy Jr.
78 Warren Avenue, #202
Boston, MA 02116-6152

*Gordon King
Rackemann Environmental
185 Kneeland Street
Boston, MA 02111

*Nancy Lancellotti
Central Artery/Tunnel Project
185 Kneeland Street
Boston, MA 02111

George McLaughlin
4 Clarendon Street
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*Ron Morgese
65 Breakwater Drive
Boston, MA 02150

*John O'Connor
12 Milford Street
Boston, MA 02118

*Ms. Christine A. O'Toole
3 Greenough Park
Boston, MA 02130

*Mr. Darryl Pomicter
136 Myrtle Street
Boston, MA 02114-4403

*Ms. Melissa Sciter
78 Warren Avenue
Boston, MA 02116

*Ms. Beverly Sky
36 Upton Street
Boston, MA 02118

*John Stewart
34 Rutland Square
Boston, MA 02118

Mr. Vincent R. Tino
95 Faywood Avenue
Boston, MA 02128

*Rebecca Swope
4 Clarendon Street
Boston, MA 02116-6117

*Mark E. Warren
174 Princeton Street
Boston, MA 02128

*Ms. Ellen Winkler
4 Clarendon Street
Boston, MA 02116-6117

*Mr. Robert Wynne
4 Rutland Square
Boston, MA 02118-3105

*Ms. Edwina Yezierski
310 Columbus Avenue
Boston, MA 02116

Cambridge

*Debra Biba and Rob Everts
20 Newell Street
Cambridge, MA 02140

*Mr. Brian Culver
385 Concord Avenue
Cambridge, MA 02138

*Mr. David Foss
c/o Harvard University Press
79 Garden Street
Cambridge, MA 02138-1499

*Dan Lundgren
c/o Lundgren Management Group
15 Everett Street
Cambridge, MA

*Ann Rodney
4 Newport Rd. #5
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77 Massachusetts Avenue, Room I-176
Cambridge, MA 02139

*Nicole Wescott
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Cambridge, MA 02141

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Charlestown

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Navy Yard Neighborhoood Association
5401 Eighth Street
Charlestown, MA 02129

*Peter Looney, Chairman
Charlestown Neighborhood Council
338A Main Street
Charlestown, MA 02129

*Mr. William McCabe
269 Bunker Hill Street
Charlestown, MA 02129

Chelsea

*Ms. Elizabeth A. Aberg
22 Boatswains Way
Chelsea, MA 02150

*Adrean Abrams
47 Gardner St.
Chelsea, MA 02150

*Mr. Peter Alachi
22 Boatswains Way
Chelsea, MA 02150

*Aluise
8 Admirals Way
Chelsea, MA 02150

*William Bailey
12 Breakwater Cove
Chelsea, MA 02150

*Rochelle Bennett
7 Boatswain's Way
Chelsea, MA 02150

*Marlo E. and Joan Benton
10 Forsyth St. Apt # 306
Chelsea, MA 02150

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Chelsea, MA 02150

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8 Ferry St.
Chelsea, MA 02150

*Domenic Bitto
7 Beacon St.
Chelsea, MA 02150

*WR Black
6 Ferry Street
Chelsea, MA 02150

*Joyce Black
Admirals Hill
Chelsea, MA 02150

*Arlene Black
Admiral's Hill
Chelsea, MA 02150

*Joan Bocchino
74 Springvale Ave. Apt. # 16
Chelsea, MA 02150

*W. Bonaparte
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Chelsea, MA 02150

*Louis Borgatti
331 Washington Ave.
Chelsea, MA 02150

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*Grayce Borgatti
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*Mary Bronski
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*Eleanor Brosseau
91 Franklin Ave.
Chelsea, MA 02150

*James Brosseau
60 Commandants Way
Chelsea, MA 02150

*Edmund Brosseau
97 Franklin Ave.
Chelsea, MA 02150

*Dorothy Brosseau
91 Franklin Ave.
Chelsea, MA 02150

*Joann Brosseau
91 Franklin Ave.
Chelsea, MA 02150

*Karen Brown, Trustee
100 Captain's Row Condominium Trust
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

*Rose Buckley
145 Spencer Ave.
Chelsea, MA 02150

*Robert Burke, Jr.
165 Cottage St.
Chelsea, MA 02150

*J. Cadiz
44 Beacon St.
Chelsea, MA 02150

*Marie Caro
50 Boatswains Way Apt. # 204
Chelsea, MA 02150

*Jean Carr
6 Medford Street
Chelsea, MA 02150

*Sherry and Joe Casey
24 Boatswain's Way
Chelsea, MA 02150

*Brigitte Casey
18 Breakwater Drive
Chelsea, MA 02150

*AnnaCastillo
68 Marginal St.
Chelsea, MA 02150

*Paul Chang
50 Boatswain's Way Apt. # 111
Chelsea, MA 02150

*Raymond Charette
21 Boatswains Way
Chelsea, MA 02150

*Ms. Sheila Cherkas, Trustee
100 Commandant's Way Condominium Trust
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

*C. Church
44 Beacon St.
Chelsea, MA 02150

*Pip Cliff
38 Medford Street
Chelsea, MA 02150

*John Clift
38 Medford St.
Chelsea, MA 02150

*Ms. Monika M. Corneille
26 Admiral's Way
Chelsea, MA 02150

*John Cronin
6 Grandview Rd.
Chelsea, MA 02150

*Richard Cuddy
100 Boatswain's Way, Apt. # 303
Chelsea, MA 02150

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14 Breakwater Drive
Chelsea, MA 02150

*Salle DeMarco
200 Revere Beach Parkway
Chelsea, MA 02150

*Michael Denegris
28 Pembroke St.
Chelsea, MA 02150

*Gino DeSimone
100 Boatswains Way Apt. # 405
Chelsea, MA 02150

*Francis Dilworth
4 Ferry St.
Chelsea, MA 02150

*Mr. Louis P. DiSano
43 Breakwater Drive
Chelsea, MA 02150

*Dan Doherty
50 Boatswains Way Apt. # 305
Chelsea, MA 02150

*Francis Doherty
100 Boatswains Way
Chelsea, MA 02150

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Winthrop, MA 02152

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*Kathleen Driscoll
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*Robert Driscoll, Sr.
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Winthrop, MA 02152

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*Teresa Foley
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*Jean Forbes
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Winthrop, MA 02152

*Anthony Ford
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*Charles Fox
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Winthrop, MA 02152

*Paul Frederico
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Winthrop, MA 02152

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*Marcy Lender
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*Ann Norris
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*Janice Nugent
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*Joseph O'Brien
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*Bernadette O'Grady
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*Rosemarie Ottaviano
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*Mario Paolini
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*Renee Pike
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Winthrop, MA 02152

*Joseph Pilse
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*Miriam Pizer
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*Frances Pollina
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*Maureen Powers
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*Victor and Diane Presto
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*Robert Prew
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Bedford

Bedford Public Library
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Bedford, MA 01742

Boston

Boston Public Library
Main Branch
666 Boylston Street
Boston, MA 02117

Boston Public Library
685 Tremont Street
Boston, MA 02118

Braintree

Watson Park Library
85 Quincy Avenue
Braintree, MA 02184

Thayer Public Library
798 Washington Street
Braintree, MA 02184

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Brookline

Brookline Main Library
361 Washington Street
Brookline, MA 02445

Cambridge

Cambridge Public Library
449 Broadway
Cambridge, MA 02138

Charlestown

Boston Public Library
Charlestown Branch
179 Main Street
Charlestown, MA 02129

Chelsea

Chelsea Public Library
569 Broadway
Chelsea, MA 02150

Cohasset

Paul Pratt Memorial Library
160 South Main Street
Cohasset, MA 02025

Concord

Concord Public Library
129 Main Street
Concord, MA 01742

Dedham Public Library

Dedham Public Library
43 Church Street
Dedham, MA 02026

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Boston Public Library
East Boston Branch
276 Meridian Street
East Boston, MA 02128

Boston Public Library
Orient Heights Branch
18 Barnes Avenue
East Boston, MA 02128

Edgartown

Edgartown Free Public Library
58 North Water Street
PO Box 5249
Edgartown, MA 02539

Everett

Parlin Memorial Library
410 Broadway
Everett, MA 02149

Hingham

Hingham Public Library
66 Leavitt Street
Hingham, MA 02043

Hull

Hull Public Library
9 Main Street
Hull, MA 02045

Jamaica Plain

Boston Public Library
Jamaica Plain Branch
12 Sedgwick Street
Jamaica Plain, MA 02130

Lexington

Cary Memorial Library
1874 Massachusetts Avenue
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Lincoln Public Library
Bedford Road
Lincoln, MA 01773

Malden

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Malden, MA 02148

Medford

Medford Public Library
11 High Street
Medford, MA 02155

Melrose

Melrose Public Library
69 West Emerson Street
Melrose, MA 02176

Milton

Milton Public Library
Main Branch
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Milton, MA 02186

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Nahant Public Library
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Quincy, MA 02169

Provincetown

Provincetown Public Library
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Provincetown, MA 02657

Revere

Revere Public Library
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Revere, MA 02151

Roxbury

Boston Public Library
Dudley Branch (Roxbury)
65 Warren Street
Roxbury, MA 02119

Somerville

Somerville Central Library
79 Highland Avenue
Somerville, MA 02143

South Boston

Boston Public Library
South Boston Branch
646 East Broadway
South Boston, MA 02127

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Weymouth, MA 02188

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Acronyms

AC	Advisory Circular
ACHP	Advisory Council on Historic Preservation
ADT	Average daily traffic
ADG	Airplane Design Group
ADSIM	Airfield Delay Simulation Model
AIP	Airport Improvement Program
Airside Project	Logan Airside Improvements Planning Project
AIRS	Aerometric Information Retrieval System
AITC	Airport Intermodal Transit Connector
ALP	Airport Layout Plan
ALPA	Air Line Pilots Association
ALS	Approach Lighting System
ANCA	Airport Noise and Capacity Act
APO	FAA Office of Aviation Policy and Plans
ARC	Airside Review Committee
ARP	Airport Reference Point
ARTS	Automated Radar Terminal System
As	arsenic
ASQP	Airline Service Quality Performance
ATA	Air Transport Association
ATC	Air Traffic Control
ATCR	Air Traffic Consumer Reports
ATCT	air traffic control tower
ATIS	Automatic Terminal Information Service
APUs	Auxiliary Power Units
BMPs	Best Management Practices
BVFR	Basic Visual Flight Rules
BWSC	Boston Water and Sewer Commission
CAA	Clean Air Act
CAC	Community Advisory Committee
CA/T	Central Artery/Tunnel Project
Cd	cadmium
CEP	Capacity Enhancement Plan
CEQ	Council on Environmental Quality

CERL	U.S. Army Construction Engineering Research Laboratory
CFR	Code of Federal Regulations
CM	construction management consulting firm
CMR	Code of Massachusetts Regulations
CNI	Cumulative Noise Index
CO	carbon monoxide
CODAS	FAA's Consolidated Operations and Delay Analysis System
Cr	chromium
CRS	Computerized Reservation Systems
cy	cubic yards
dB	decibel
dBA	A-weighted decibel
DELAYS	(a delay simulation model)
DELAYSIM	(a delay simulation model)
DEP	Department of Environmental Protection
DH	decision height
DNL	Day-Night Sound Level
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/ Environmental Impact Report
EA	Environmental Assessment
EAS	Essential Air Service
EDMS	Emissions and Dispersion Modeling System
EDR	Environmental Data Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EOTC	Executive Office of Transportation and Construction
EPA	Environmental Protection Agency
EPNL	Effective Perceived Noise Level
ESPR	Environmental Status & Planning Report
ETMS	FAA's Enhanced Traffic Management System
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FEIR (Final EIR)	Final Environmental Impact Report
FHWA	Federal Highway Administration
FIS	Federal Inspection Services

FLAPS	Flexible Airport Simulation Model
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FSEIR	Final Supplemental Environmental Impact Report
GA	General Aviation
GEIR	Generic Environmental Impact Report
GIS	Geographic Information System
GSE	ground service equipment
GNTM	Ground Noise Taxi Model
Hg	mercury
HOV	high occupancy vehicle
Hz	hertz
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
INM	Integrated Noise Model
INS	Immigration and Naturalization Service
LDA	Landing Distance Available
LDMS	Logan Dispersion Modeling System
Leq	equivalent sound level
LeqN	night equivalent sound level
Lmax	Maximum Sound Level
Logan	Boston-Logan International Airport
LOGIC	Logan Growth and Impact Control
MAC	Massachusetts Aeronautics Commission
MA DEP	Massachusetts Department of Environmental Protection
MAMA	Massachusetts Airport Managers Association
MA NHESP	Massachusetts Natural Heritage & Endangered Species Program
MASHPO	Massachusetts State Historic Preservation Office
MassHighway	Massachusetts Highway Department
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MCP	Massachusetts Contingency Plan (310 CMR 40.0000)
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MGL	Massachusetts General Law
MHC	Massachusetts Historical Commission

MLS	Manual Landing Systems
MNG	Massachusetts National Guard
MPO	Metropolitan Planning Organization
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MTA	Massachusetts Turnpike Authority
MWRA	Massachusetts Water Resources Authority
NAAQS	National Ambient Air Quality Standards
NAVAID	navigational aid
NEC	New England Council
NECIP	Northeast Corridor Improvement Project
NEPA	National Environmental Policy Act
NHESP	Natural Heritage and Endangered Species Program
NHPA	National Historic Preservation Act of 1968
NMS	Noise Monitoring Site
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
NTSB	National Transportation Safety Board
O_3	ozone
O&M	Operations and Maintenance
OAG	Official Airline Guide
OFA	Object Free Area
OFZ	Obstacle Free Zone
OPSNET	FAA Air Traffic Operations Network
PACE	Program for Airfield Capacity Efficiency (1998)
Pb	lead
PCB	polychlorinated biphenyls
PDA	Planned Development Area
PFCs	Passenger Facility Charges
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PM_{10}	particulate matter less than 10 microns in size
PPI	PRAS Performance Index
ppm	parts per million
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
Preferred Alternative	Alternative 1A (includes all actions except Peak Period Pricing)

RCRA	Resource Conservation and Recovery Act
RDSIM	Runway Delay Simulation Model
REIL	Runway End Identifier Lights
ROD	Record of Decision
ROFA	Runway Object Free Area
RON	remain over-night
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RVR	Runway Visual Range
SAR	Strategic Assessment Report
SDEIS	Supplemental Draft Environmental Impact Statement
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement / Final Environmental Impact Report
SID	Standard Instrument Departure
SIMMOD	Simulation Model (FAA)
SIP	State Implementation Plan
SMGCS	Surface Management Guidance & Control System
SO_2	sulfur dioxide
STIP	Statewide Transportation Improvement Program
TA	Time Above (a specified noise level)
TAAM	Total Airspace and Airport Modeler
TERP	Terminal En Route Procedures
TIP	Transportation Improvement Plan
TOFA	Taxiway Object Free Area
TPH	Total Petroleum Hydrocarbons
TRB	Transportation Research Board
TSA	Taxiway Safety Area
TSS	Total suspended solids
USPS	United States Postal Service
VAPS	Visual Approach Procedures
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M	29 million passengers
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M	37.5 million passengers
37.5M High Fleet	37.5 Million annual air passenger High Fleet
37.5M High RJ Fleet	37.5 Million annual air passenger High Regional Jet Fleet

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Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

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➤ A.4 Responses to Comments on SDEIS Panel Questions

Federal Aviation Administration
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February 9, 2001

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Re: Analytic Tasks for Logan Airside Improvement Project Supplemental Draft EIS

Dear Betty and Deborah:

I have enclosed a document entitled "Additional Analysis for the Logan Airside SDEIS" which constitutes a description of the additional analysis that should be incorporated into the Supplemental Draft Environmental Impact Statement ("SDEIS") for the Logan Airside Improvement Project. The SDEIS will be the next formal submission made by FAA in respect to FAA's ongoing review of the Logan Airside Improvement Project under the National Environmental Protection Act and related FAA requirements. (FAA is also the project proponent with respect to certain elements of the Preferred Alternative – i.e., the reduction in approach minimums on runways 22L, 27, 15R and 33L). The enclosed document has been finalized by FAA following discussion of earlier drafts with the SDEIS Panel, described below, and is intended as our directive concerning specific items identified as a result of the SDEIS Panel process that are to be included in the SDEIS.

The SDEIS was required as a result of a determination by Administrator Jane Garvey in January 2000. As part of this determination, Administrator Garvey asked for the formation of a special panel (the "SDEIS Panel") consisting of six members, three of whom would be appointed by Governor Cellucci (Lieutentant Governor Jane Swift, Mr. Richard Egan and Mr. John Butler) and three of whom would be appointed by Mayor Menino (State Representative Byron Rushing,

Ms. Mary Ellen Welsh, and Mr. Raymond Tye). The SDEIS Panel met over a ten month period (March – December 2000). In my judgement, the process was substantive and involved review of analysis produced by Massport and the FAA with respect to the Project EIS process to date, presentations by various technical experts, comments from members of the public attending the SDEIS Panel meetings, and the active participation through numerous insightful inquiries, suggestions and comments from the individual SDEIS Panel members. Both FAA and the SDEIS Panel members also had the benefit of consultation with a special independent expert to the Panel hired by FAA in response to a Panel request. All of this work provided FAA with context for developing the enclosed list of analytic tasks and other materials to be included in the SDEIS. The panel process also assisted in identifying tasks that may be included in a subsequent new Regional Airports System Study.

In addition to providing the analysis and other materials specified in the enclosed document, a copy of the minutes of the various SDEIS Panel meetings as well as a copy of this letter and enclosed document must be a part of the SDEIS submission. We believe that it would be beneficial for SDEIS reviewers to have available to them the record of the SDEIS Panel process and the results of that process which appear in the form of the enclosed list of specific analytic tasks.

On behalf of Administrator Jane Garvey and all of us at FAA who had the benefit of their participation, I want to reiterate our gratitude for the extraordinary dedication and assistance of the individual SDEIS Panel members throughout the process. Their contribution to FAA's deliberations and to the public review process for this Project is evidenced by the substantive content of the list of analytic tasks developed as a result of their input.

Sincerely,

Vincent A. Scarano
Manager
Airports Division

cc: Administrator Jane Garvey
Members of the SDEIS Panel
Mr. James Muldoon
Ms. Suzanne Orenstein

ADDITIONAL ANALYSES FOR THE LOGAN AIRSIDE SUPPLEMENTAL DRAFT EIS

Task	Task Description

1.0 Is a 5,000 ft Runway 14/32 effective given the expected use of regional jets in the future fleet mix? (To be performed by FAA consultant)

1.1 Verify and confirm previous survey of airlines and manufacturers to determine minimum arriving /takeoff distances for regional jet aircraft.

1.2 Research regional jet aircraft usage and runway length requirements at other airports.

1.3 Review forecast mix of regional jet aircraft types at Logan.

1.4 Develop estimate of probable regional jet utilization of a 5,000 ft. Runway 14/32.

2.0 Expand Regionalization analysis contained in Interim Supplemental Draft EIS ("Brown Book")

2.1 Discuss proposed New England Regional Aviation System Study and proposed work scope.

2.2 Update to reflect the current status of traffic and services at the regional airports, Amtrak's Acela service, and ground access projects.

2.3 Add historical context and on-going nature of regionalization efforts.

3.0 Expand analysis of peak period pricing.

3.1 Review changes in airline scheduling activity at Logan and assess how and why the demand profile has flattened over time.

3.1.1 Determine which new airline/markets have contributed to changes in the demand profile.

3.1.2 Assess whether the flattened profile or a more peaked profile is likely to occur in the new future fleet (2015 Modified 37.5M RJ fleet).

3.2 Discuss the design of a Peak Period Pricing program that would impact regional jet scheduling practices at Logan.

3.2.1 Base analysis on modified 2015 Modified 37.5M RJ fleet, using an updated demand profile and a small community exemption program.

3.2.2 Discuss the economic cost of peak period pricing to the consumer.

3.2.3 Discuss the uniqueness of Cape Air and the communities that it serves.

3.3 Identify known, comparable demand management strategies that are in use or have been proposed by other airports.

4.0 What impact does the 2015 Modified 37.5M RJ fleet mix have on delay reduction benefits and environmental impacts?

4.1 Develop 2015 fleet mix and demand profile assuming 37.5M passengers and increased RJ utilization.

4.2 Assess the impacts of the new fleet on delays, runway utilization, noise contours and noise-exposed populations for Alternatives 1, 1A, 2, 3 and 4.

4.3 Assess the impacts of the new fleet on ground noise and air quality for Alternatives 1/1A and 4.

4.4 Perform delay sensitivity analysis using varying RJ utilization factor for Runway 14/32.

5.0 Broaden discussion of national delays to put Logan delays into context.

5.1 Assess Logan's relative national delay ranking if Runway 14/32 was available in 1998.

5.2 Discuss how delays at Logan affect the national air transportation system.

5.3 Discuss measures FAA is pursuing to reduce delays nation-wide.

6.0 Analyze potential wind/weather use restrictions on Runway 14/32 and their impact on delay reduction, runway utilization, and PRAS achievement.

6.1 For the 2015 Modified 37.5M RJ fleet, analyze and compare delay levels and runway utilization patterns for: (1) No Action, (2) Action [a.] As Modeled with PRAS and [b.] with wind/weather restrictions on the usage of Runway 14/32.

6.2 Determine impact of potential restrictions on utilization of Runways 27 and 33 for departures, PRAS achievement, and ability to reduce population exposed to the highest noise levels

7.0 Present enhanced flight track graphics on the same GIS base map used for the Brown Book noise contours, show individual tracks, extend into the South Shore, and show altitudes.

8.0 Incorporate a summary of existing analyses from the Draft EIS for Alternatives 1, 2, and 3 into the SDEIS in addition to the No Action (Alt. 4) and Preferred Alternative (Alt. 1A).

9.0 Analyze the potential for proposed infrastructure improvements (Runway 14/32 and taxiway improvements) and Peak Period Pricing to induce demand for Logan Airport.

10.0 Compare current measured noise levels from monitors in residential neighborhoods to modeled results from the Integrated Noise Model (INM).

11.0 Address the following specific issues for which clarification has been requested:

11.1 Provide data and discussion on predicted change in activity by runway end, including daytime and nighttime distribution.

11.2 Clarify discussion of proposed Centerfield Taxiway and its impact on the number of aircraft queuing on that taxiway and other taxiways waiting to depart.

11.3 Respond to written questions submitted by SDEIS Panel member, Mary Ellen Welch

12.0 Produce a school year/school day 65 dB contour for the Preferred Alternative for the 29M Low fleet. Research school day operating hours in relevant surrounding communities to determine the appropriate hours for the analysis.

SDEIS Panel Minutes

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes
December 4, 2000

I. Participants: All Panelists were present.

II. Discussion

Opening Remarks

- The meeting opened at 4:08 PM. The facilitator noted that this was the final scheduled meeting for the Panel.
- Ms. Orenstein reviewed the agenda and asked for comments on the minutes for the November 13 and 28 meetings. The minutes were finalized and accepted for distribution and posting on the web site. The minutes for this final meeting will be distributed to panelists for comment, and will be finalized after any comments are received.

Overview of Logan Airport's Role in Future Coordinated Regional Airport System

- Mr. Scarano introduced Virginia Buckingham, Executive Director and CEO of Massport, who discussed the vision for Logan Airport's future with the Panel. She noted that Logan's primary focus for the future will be on long-haul and international service. She noted measures Logan is implementing to prepare for that role, including:
  - Renovation of the international Terminal E;
  - Replacement of Terminal A;
  - New west parking garage and elevated walkways to all terminals;
  - Improved ground access, including greater use of HOVs, a fourth remote location for Logan Express in the north for the Rte.1/95/128 area, remote baggage check-in, HOV improvements to Cape Cod, a new Blue Line Station, and Logan Dart service to South Station, which expects to serve 60,000 riders this year.
- Ms. Buckingham discussed Logan's role in promoting a regional airport system, noting that Logan will serve only 30% of the new passengers in the future. She noted that Massport manages two other airports in the region, Worcester and Hanscom, and spoke about plans for improving the success at Worcester. Worcester has the capacity to serve 800,000 passengers. Its highest passenger year was 1989, when it served about 380,000 passengers. In 1999, Worcester served around 50,000 passengers, but with improvements in service, this year it has already served 100,000 fliers. Regarding Hanscom, she noted that it would continue as the region's largest general aviation airport, with some niche commercial service.
- Ms. Buckingham noted that Massport hopes that the new Acela train service will be able to take 40% of Logan's New York shuttle traffic.
- Ms. Buckingham noted that the New England governors were addressing air transportation as part of the second transportation conference coming up next week. Lt. Governor Swift distributed invitations to the summit to all Panelists.

- Question: Mr. Tye asked what percent of Logan's traffic is considered short-haul.
- Answer: About one-third.

- Question: Lt. Governor Swift asked how Ms. Buckingham viewed Massport's role in achieving regional airport growth and multi-modalism.
- Answer: Ms. Buckingham spoke about creating incentives for greater regional airport use and for promoting the growth of other airports in discussions with airlines.

- Question: Lt. Governor Swift asked how Massport was addressing issues of reliability at Worcester Airport.
- Answer: Cancellation levels for Worcester weather have been low. However, there is a perception that Worcester is not reliable, which needs to be corrected. Massport is considering whether technology improvements at Worcester will improve reliability.

- Question: Mr. Tye asked why a new runway is needed if Logan wants to be an international, long-haul airport.
- Answer: Delays in NW winds affect all passengers, and need to be eliminated. Also, Logan will always need smaller planes to feed connecting passengers to the long-haul flights.

- Comment: Ms. Welch noted that a true regional approach should mean fewer small aircraft, and with Acela service and the number of days NW winds are a problem, the new runway is not needed. Ms. Welch noted that FAA and Massport are taking a giant step in working towards true regionalization, but suggested that demand management strategies should be tried and evaluated prior to building a runway.

- Question: Rep. Rushing asked about other types of operations that could be reduced at Logan.
- Answer: Massport is trying to move charter flights to other airports, but is being challenged on the grounds that it would be discriminatory. They are also looking at moving cargo operations, but since about 60% of cargo arrives in passenger planes, Logan will always need some cargo moving capability. Massport is also looking at changes in general aviation facilities that may decrease the desirability of flying into Logan for general aviation, and they are discussing changes in Fed Ex and UPS operations.

- Comment: Ms. Welch asked if anything could be done to improve bottlenecks on Routes 1 and 1A north. She also noted that a new truck route recently funded by state transportation officials would improve truck traffic.

- Ms. Buckingham thanked the Panelists for their work on the SDEIS and noted the need to get a resolution on the runway issue. Mr. Scarano and the Panelists thanked Ms. Buckingham for her presentation.

Review of List of Potential Additional Analyses

The Panel reviewed the revised list of Potential Additional Analyses and made the following suggestions. (*Denotes an item on which significant disagreement was expressed. +Denotes an item on which there was agreement among panelists.)

Item Suggestion

1 -Include info re: New Haven where regional jets are requiring 7000 ft. RW

2 -Add Amtrak, buslines, and highway improvements to second bullet
-Incorporate forecasts and info from master plans for Manchester and T.F. Green
+Update Brown Book Chapter 2 re: regionalization

3 -Analyze 2010 modified 34 million passengers as part of A, bullet 2
-Analyze 2010 fleet for 34 million passengers as part B, bullet 1
+Add uniqueness of Cape Air and communities it serves to B, bullet 3
+For section C, look at all known, comparable, demand management strategies in use or proposed at other airports

4 No suggestions

5 -Restore the deleted task of estimating the cost of total delays, not just Logan-caused delays
-Determine and state Logan's relative rankings nationally among airports for delays if the runway is built. Assumptions, parameters, factors held constant to make this analysis feasible would need to be determined (e.g. assume other airports do not improve). Determine this for each alternative for one year, five years, and ten years out.
-Discuss how delays at Logan affect the national air transportation system, and how delays in the national system affect Logan

6 *Add: PRAS should not be factored into analysis until it is updated

7 No suggestions

8 *Analysis should consider feasibility and changes that would be required to implement change in first come-first serve. (Other view was to drop this item)

9 No suggestions

10 *Determine maximum growth capacity and limitations at Logan, including looking at current growth rate and determining and stating in document the capacity of the airport in operations per year

11 -Change wording to "Compare current measured noise levels..."

12 -In bullet one, consider eliminating the study of the operational capacity of a single runway configuration

13 -Add to bullet 3: "queuing on that taxiway and other taxiways..."
-Discuss whether FAA standards will be waived for the safety areas - bullet 1

14 +Confirm that hours for school-day noise contour are from 7 AM to 4 PM

Additional Item: Reconsider geographic component of EJ analysis.

Mr. Rushing requested that the Panel be provided with the revised list of additional analyses. Ms. Orenstein noted that it would be provided.

Schedule for Moving Forward

- Mr. Egan asked that the schedule for moving forward with the SDEIS be outlined. The following schedule was projected.

Studies	Through mid-February
SDEIS out to public and Panel	First week in March
Public Comment Period	Through April 15
MEPA Certificate	April 22 (seven days after close of public comment)
FEIS	May 30

- The question of whether the Panel should meet at some point to review the draft SDEIS was not resolved. Some felt the disagreements would not be resolved, so it was not necessary to meet. Other felt that meeting might help to narrow some of the disagreements among Panel members. It was left that the Panel might be invited by the FAA to meet and review either the draft or the public comments on the draft, but that it was not certain that this would happen.

Panel Input on Regional Air Study and Other Intermodal Planning Efforts

- Mr. Scarano talked about the new Regional airport study, noting that it would take 12-18 months to complete and would reflect a rapidly changing environment.
- The Panel provided the following suggestions.
  - Recognize the need for on-going, always-making-progress effort.
  - Speculate about unconstrained possibilities, to be as comprehensive and forward thinking as possible.
  - Identify information from the previous plan (1995) that was most useful in predicting and reacting to growth, (e.g. route analysis) and place a priority on updating that information.
  - Consider ground access factors, including Routes 1 and 1A north near airport.

- Include all New England airports, perhaps in two categories of closer in to Boston and a broader range of secondary airports, like Portland, Bradley, New Haven, etc. Pease Airport should definitely be part of the analysis.
- Look at improving train routes throughout New England, not just New York to Boston.
- Factor in how noise abatement projects for all airports and train routes could be used to reduce resistance from neighbors.
- Look at and propose the level of leadership that will be required to do both air and intermodal coordination on an interstate level.
- Look at barriers that will prevent coordination and how to address them.

III. Public Comment

Dan Wolf of Cape Air said that Cape Cod communities want environmental and roadway impacts looked at if air service to the Cape was going to be curtailed through the implementation of Peak Period Pricing. He also asked whether the road system to Logan could accommodate a move toward more high-occupancy aircraft.

John Marcy of Winthrop addressed the Panel about air quality impacts from the airport. He noted that Chapter 6 of the SDEIS should reflect issues with particulate emissions, as noted in the preliminary Winthrop health effects survey.

Anastasia Lyman, Co-chair of the CAC, asked if the noise contours in the SDEIS would be the same as in the Brown Book. The response was that SDEIS would include the 1998 contour base case, with a new 2015 contour. Ms. Lyman also thanked the FAA for opening up the Panel process to the CAC and the public.

IV. Closing Comments

- Mr. Scarano thanked the Panel members for their hard work and said he believed that FAA's expectations were met. He noted that the Panel had accomplished all it was asked to do, and had been very understanding of the need for additional meetings and discussion. He said he was aware that some of the public's expectations may not have been met, but he noted that he was satisfied with the efforts to include the views of the CAC, the EPA, and experts from outside the Massport consultant pool. He noted FAA's response to some of the public comments in the hiring of Jim Muldoon as the independent technical expert, and in the opening of the meeting to observers and their comments. He thanked all involved for their cooperation and contributions. (The outline of Mr. Scarano's comments is attached.)
- Mr. Butler thanked Mr. Scarano and Ms. Orenstein for helping to achieve a balanced discussion process.

V. The meeting adjourned at 6:50 PM.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes
November 28, 2000

I. Participants: All Panelists were present.

II. Discussion

Opening Remarks

- The meeting convene at 4:07 PM.
- Ms. Orenstein noted that this meeting was the second to the last in this Phase of the Panel's work. The final meeting for this Phase is Monday, December 4.
- The agenda for this meeting was reviewed, with the addition of a representative from Winthrop's Health Action Committee to the section on Air Quality.
- Mr. Scarano apologized for the delay in circulating the minutes from November 13. He asked that Panelists review them prior to the next meeting.

Presentation and Discussion of Air Quality Impacts from the Airside Improvements Project

- Mike Kenney from URS, the consultant who conducted the air quality analysis for the Draft EIS, presented an overview of the AQ findings.
  - He explained that his study covered emission levels of criteria pollutants, dispersion modeling of the emissions, and comparisons with the allowable levels. The study found no expected violations and the lowest emission levels with Alternatives 1 and 1A. One factor in the results is that as airport equipment and operations become more efficient, pollutant emissions will be reduced.
- Mr. Tye asked what pollution might one expect without the airside improvements. Mr. Kenney explained that the results would be the same. He further explained in response to a request for clarification from Ms. Welch that while the airport is a proportionally greater contributor of pollutants to those who live next to it, it is still small by comparison with other nearby sources of pollution such as roadways and toll booths.
- Ms. Welch stated that odor and soot are obvious problems for airport abutters, and it was hard to believe that the airport was not raising the levels of those pollutants for its neighbors and that that these pollutants would not increase with increasing operations at the airport. Mr. Kenney noted that for most studies around airports it has been impossible to separate out airport emissions from all other urban air pollution sources. When Ms. Welch asked about the soot study conducted at Logan several years ago, Mr. Kenney noted that it was unable to link soot to specific sources.
- Mr. Egan noted that the proposed improvements at Logan were designed to increase efficiency and that the fewest expected emissions were from Alternative 1/1A, which includes the runway.
- Mr. Brian Dumser, a member of Winthrop's Health Action Committee, presented the findings of a study of Winthrop residents in two Winthrop neighborhoods that varied in their proximity to the airport. The study showed that there were twice as many

diagnosed cases of asthma and respiratory disease in the neighborhood closest to the airport. Mr. Dumser presented the results as the communities effort to begin to understand air quality impacts, noting that further, more rigorous study is needed and may be undertaken by the MA Dept. of Public Health.

- Mr. Egan asked Mr. Dumser if he would welcome measures that would decrease pollution from the airport. Mr. Dumser said he would.
- Mr. Nicosia-Rusin asked whether, if one accepts that there is an increased rate of respiratory disease resulting from higher airport emissions, would it be reasonable to expect the incidence of disease to decline as aircraft pollutants decrease. Mr. Dumser responded that it is unclear what elements of aircraft pollution are tied to disease, and specifically questioned the role of particulate emissions.
- Ms. Meehan asked if Mr. Dumser would agree that if the preferred alternative reduced pollution and there was no induced demand increasing it, that the airside improvements could be desirable in terms of health concerns. Mr. Dumser did not feel that there was sufficient data about any of the projects to state any view conclusively.
- Ms. Welch noted that a health study is needed, citing the proximity of the Court Road neighborhood to the sources of pollution. She noted that better data on the health impacts of the airport on surrounding neighborhoods are needed. Other panelists agreed that health effects data were needed, but some noted that health effects studies should not be tied to the airside improvements project, because it was an issue for the airport as a whole.

<u>Overview and Discussion of Mitigation Proposals in the DEIS</u>

- Deborah Meehan of S, H & E presented an overview of the mitigation proposed in the DEIS. She noted the following proposed elements of the mitigation package.
  - Commitment to unidirectionality as a noise abatement factor,
  - Sound insulation of the impacted area, particularly in Chelsea,
  - Moving the upland sandpiper off-site, including habitat enhancement,
  - Increased PRAS monitoring and reporting,
  - A Peak Period pricing monitoring program,
  - Over-water nighttime preference as part of PRAS,
  - Voluntary reductions in the use of hush-kitted aircraft, and
  - Promotion of regional airports and alternative transportation modes.
- Several Panelists asked questions about the soundproofing program. Mr. Silva explained that accomplishing the soundproofing as part of this project would result in quicker action for the affected homes than if they were part of Logan's on-going program. He also noted that FAA has agreed to bring homes up to code if necessary to accomplish the soundproofing, which is an unusual step. Mr. Egan asked what the average cost of soundproofing would be per house, and Mr. Silva noted it could be about $30,000 each. Mr. Egan noted that the total cost would be over $30 million.
- Other mitigation ideas proposed by the panelists included:
  - Is a "harbor mouth" approach a potential mitigation for RW 14-32 traffic? Also for increased approaches on RW33?

- Could a sharper left turn off RW 22, keeping track over water, help mitigate noise? Feasibility of this? [Mr. Butler noted this would put planes on directly intersecting paths.]
- What RW 14-32 impacts is unidirectionality mitigating?
- Need to reassess PRAS with community. Need to add today's airport procedures to system.
- Are there any schools that should be added within the 65 school year, school day DNL?

- Ms. Welch asked whether PRAS would be reevaluated as part of the Supplemental Analysis or as a mitigation measure. She accepted that this item was part of the mitigation effort.

Outline of Mechanisms for Unidirectionality Commitments

- Richard Littieri of Ropes and Gray described three levels of potential commitments to unidirectionality.
  - *Operational commitments* include the Hyatt Hotel as an obstruction, the striping and lighting of the runway for unidirectional use, the lack of a taxiway for bi-directional use, and establishment of ATC procedures for unidirectionality only.
  - *Administrative or Regulatory commitments* would result from the fact that the project would only be permitted for unidirectional use.
  - *Contractual commitments* could be accomplished by an enforceable contract with the communities or by a negotiated agreement that the current injunction would continue to be in force for all operations other than the unidirectional operations.
- Ms. Welch asked how often Records of Decision have been overturned or violated. FAA responded that the EIS process would have to be repeated if the ROD were changed.
- Mr. Egan asked if all Panelists were satisfied that unidirectionality could be guaranteed. Ms. Welch responded that she has seen other agreements unfulfilled, and was not yet convinced on this issue.
- Lt. Governor Swift asked if commitments on all three levels would help make the communities more confident in the promise of unidirectionality. Ms. Welch noted that the communities would have to consider and discuss that.
- Mr. Rushing asked what impacts are being mitigated by unidirectionality. He suggested that this question be addressed in the Supplemental Analysis.

Review of Revised List of Additional Analysis Items for SDEIS

The Panel reviewed the revised list of potential items for analysis in the SDEIS; this version incorporated the comments from the Panel's discussion at the last meeting.

- Lt. Governor Swift suggested clarifying the section on PPP to incorporate special circumstances for unique communities and airlines.
- Mr. Rushing asked that the list be left open for discussion and additions until the Dec. 4 meeting, as had been previously agreed. Lt. Governor Swift asked for advance notice of any suggested additions so that Panelists could be prepared to address them, given that the Dec. 4 meeting was the last meeting. Panelists agreed to provide advance notice of any proposed items if at all possible.

III. Public Comment

Dan Wolf, President of Cape Air, said that a peak period pricing program would have the biggest impact on the user, Cape Air, with the least impact on delays. He mentioned that it could put 500 people out of work. He concluded that it was not a good technical solution, but that it may be discussed as a political solution for addressing runway opponents concerns. He asked that other avenues be sought for the political purpose.

Blossom Hoag of the Sierra Club asked about how the RW14-32 operations would accommodate missed approaches, given the obstruction of the hotel. She also spoke in favor of improving rail links to the north, and noted her dissatisfaction with the fact that substantive Panel discussions were cut off prematurely.

At the end of the public comment session, Ms. Welch responded that Cape Air is a special situation for the Peak Period Pricing option, and that the CAC feels that there should be exemptions for Cape Air in any PPP proposal.

IV. Planning for Next Meeting

Mr. Scarano suggested that the next meeting be devoted to doing a final review of the List of Items for Additional Analysis in the SDEIS, and also that he would appreciate Panelist input on the proposed Regional Air Study and other regional intermodal transportation initiatives. The Panelists agreed to this agenda. Mr. Scarano also distributed copies of an article from Boston Magazine about the Accela train service.

Mr. Tye asked that as part of the discussion of regionalizing air transportation, Massport present its vision for Logan's future. Ms. Meehan noted that Chapter 2 of the Brown Book presents quite a bit of information about Logan's role in the regional system, but that she would like to hear how that Chapter could be improved. The Panel accepted the idea of a presentation from Massport.

The next meeting will be on December 4, 4:00 to 7:00 PM, at the Volpe Transportation Center, 55 Broadway, Cambridge.

The meeting adjourned at 7:00 PM.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes
November 13, 2000

I. Agenda (See attached)

II. Participation: Mr. Tye was unable to attend.

III. Discussion

Opening Remarks and Review of Agenda and Minutes

- The Panel convened at 3:31 pm.
- Ms. Orenstein said that the major topic of the meeting would be a review of FAA's working draft of additional work for the SDEIS.
- Mr. Scarano noted that a letter from EPA, Ms. Welch's questions, and a letter from Cape Air were distributed to the Panel. He also noted that the Working Draft of areas of potential additional analysis, distributed to the Panel, represent FAA's thinking to date and that the additional analysis doesn't appear to change the schedule for publication of the SDEIS.
- The Panel introduced themselves for the benefit of the public.
- Ms. Orenstein asked for comments to the minutes of 10/10 and 10/12. There were none and the Panel accepted them with the understanding that they would be published on the web site.

Introduction to List of Items for SDEIS Analysis

- Mr. Scarano referred to those additional analysis areas where work had already begun.
  - Mr. Muldoon, consultant to the Panel, updated the Panel on Item 1 of the List of Additional Analyses (analysis of regional jet use of RW 14-32), saying that turbo-prop forecasts were down and regional jet forecasts were up.
  - Mr. Egan clarified that 3 of the 4 Regional Jet aircraft could use the proposed 5,000-foot runway. Mr. Muldoon added that actually all four could technically use it but the commitment was not as certain for the Challenger aircraft.
  - Mr. Hollander of SH&E stated that runway length vs. aircraft use would be assessed. He added that there were benefits even if three of the four aircraft could use the runway. Mr. Butler reiterated this.
  - Ms. Welch said that even if the aircraft were capable, some carriers might decide not to use the runway. She asked if a comparison would be made to other airports, including an analysis of the effect of the hotel as an obstacle. Mr. Butler responded that FAA would consider the appropriate missed approach altitude for Runway 32.
  - Mr. Scarano mentioned that analysis of the runway safety area would reflect Ms. Welch's concerns with landings on Runway 32.
  - Lt. Gov. Swift said that the analysis should look at the impact on safety from the proposed runway.

- Mr. Scarano addressed Item 2, "regionalization", particularly additional work on a separate study to look at other airports and transportation modes and their capability to reduce traffic at Logan. He said that a Scope of Work should be ready by early spring. Lt. Gov. Swift added that this effort needs to be undertaken within the context of regional study work already conducted.
  - Ms. Welch asked if telecommunications would be included. Mr. Scarano responded that it would.
  - Mr. Egan wanted assurance that this additional work would not delay the SDEIS. Mr. Scarano responded that since the regional study might take two years, there was no intent to hold up processing the SDEIS.
  - Lt. Gov. Swift said that the study would have value as a tool for the future.
  - Mr. Welch said it was important to get a regional plan in place prior to completing the SDEIS.
  - Lt. Gov. Swift said that there needs to be a commitment to regional planning as part of the EIS process.
  - Mr. Nicosia-Rusin said that the rationale for the runway is contained within the SDEIS and is not affected by the results of "regionalization".
  - Rep. Rushing requested an analysis of why "regionalization" is not a substitute for the new runway.
- Mr. Hollander began a discussion of Item 3, demand profile. Lt. Gov. Swift suggested it be combined with Item 4, peak-period pricing. There was agreement to combine all demand management sections.
  - Mr. Hollander said that a broader peak-period pricing program over a greater number of hours would be assessed.
  - Ms. Welch wanted to know if LaGuardia and San Francisco proposals to deal with congestion would be addressed. Mr. Hollander responded that they would.
  - Mr. Hollander spoke about price elasticity with relation to demand.
  - Lt. Gov. Swift wanted to know how peak-period pricing would affect other major markets and would like to see a benefit-cost analysis of its impact on consumers.
  - Discussion continued over designing a peak-period price that would be feasible.
- Mr. Hollander continued with Item 5, an assessment of the 2015 Regional Jet fleet and its affect on delay reduction and environmental impact, and Item 6, a broader discussion of delays to include the interface of other airports.
  - Rep. Rushing asked what position Logan would place in delays after a Runway 14-32 was constructed. Mr. Egan and Mr. Butler questioned the value of studying this, explaining that all airports could improve, thereby maintaining the same relative rankings.
  - Ms. Welch said that the cost of delays included all delays and not necessarily those associated with the runway. Mr. Hollander clarified that the delay data was only related to Logan delays, not delays from other airports.
- Regarding Item 7, potential restriction of the use of Runway 14-32, Ms. Welch asked if Runway 15L-33R could be encouraged more.
  - Mr. Hollander, Mr. Scarano, and Mr. Davies of the Tower spoke about the interrelationship of both of the 15-33 runways.

- Regarding Item 8, demand management at other airports, Mr. Hollander discussed LaGuardia and recent efforts for a temporary lottery followed by a more permanent pricing program.
  - Ms. Welch spoke about the need to consider peak-period pricing sequentially--implement it first, then assess its effect. Discussion followed on the degree to which this was already included in the Brown Book.
- Mr. Scarano mentioned Item 9, a better graphics depiction of noise.
- Mr. Hollander went over Item 10, modifying first-come, first-serve air traffic control procedures to see what affect it would have. After some discussion among Panel members, Mr. Rushing argued that if it had a benefit, an explanation of what it would take to implement it should be included.
  - Mr. Scarano added that the measure might not have an effect in delay reduction.
  - Mr. Butler said that safety of the measure would preclude it and objected to including it in the List of Additional Analyses.
  - Mr. Egan felt it could be logically dismissed, once the effect was known, because of its impracticality.
- There was agreement on Item 11, the need to combine the original DEIS with the SDEIS and produce one document. Mr. Silva mentioned that this would make processing simpler by avoiding the need to republish the original DEIS.
- Regarding Item 12, potential induced demand of the proposed improvements, Ms. Welch said it was important to know if the improvements would create new demand.
  - Rep. Rushing said that if additional demand were anticipated it would be important to know the extent that this would have on making a decision to go forward with the Runway now.
  - Mr. Scarano responded that the benefit of the runway in delay reduction would always be present.
- Mr. Hollander addressed Item 13, measured versus modeled noise, saying that recent information comparing the two would be included in the SDEIS.
- Regarding Item 14, the level of operations that would not produce delay benefits, Mr. Egan and others noted the impracticality of achieving this if it were studied. Lt. Gov. Swift recommended that, once a level of operations was determined, we look at when it occurred historically and other benchmarks of activity such as airline prices, etc.
- Regarding Item 15, which includes additional discussion of the centerfield taxiway, there was expression of the need to clarify the runway and centerfield taxiway layout.
- Mr. Rushing mentioned an additional area, the comparison of Environmental Justice populations. Mr. Scarano noted that this was a subject under discussion with EPA. Mr. Silva added that it might be precluded from additional analysis as a result of ongoing discussion.

<u>FAA Response to Questions Raised at the Panel Meeting of 10/12/00 Related to Reductions in Landing Minimums</u>

- Following a 15-minute break, Mr. Davies addressed questions from the 10/12/00 meeting about reductions in minimums. He explained the descent profile to an airport, specific examples for Logan's runways, and the benefits of reduced minimums. The benefits include having the missed approach point closer to the runway and more distant from the community, fewer missed approaches, having runways other than 4R to conduct

approaches in poor visibility, and better compliance with the Preferential Runway Advisory System.

- As part of discussion of Mr. Davies presentation, Mr. Silva explained the history of the FAA agreement with Massport to first do an EIS before reducing minimums. Mr. Nicosia-Rusin added that normally reductions in minimums would require only a Categorical Exclusion (from the need to provide an environmental assessment).
- Ms. Welch addressed community concern with safety as aircraft descend lower.

IV. Observer Comments

- Ms. Anastasia Lyman of the Community Advisory Committee referred to a recent EPA letter on the SDEIS process and discussed induced demand, the cost-of-delay data that needs to be compared with the cost of environmental impact, and a question about the degree of design that has occurred. Mr. Nicosia-Rusin explained that design has not progressed to any substantial detail.
- Mr. Dan Wolf of Cape Air spoke to peak-period pricing. He said that Cape Air does not have the option to go to larger aircraft because of the need to adjust to seasonal demand. He also doubted that peak-period pricing would be effective for very long. Finally, he said that Cape Air presently fills in the holes in runway availability, and is not a factor in Logan delays.
- Dave Kresge of Chelsea did not believe that FAA should be determining whom aircraft would be flying over. He also objected to the delay statistics and no representation on the Panel from Chelsea.

V. Planning for Meeting of November 28, 2000

- Ms. Orenstein went over potential agenda items for the next meeting.
- Mr. Rushing asked if this evening's comments could be integrated into the List of Additional Analyses prior to the next meeting (11/27).
- There was a brief discussion of environmental mitigation. Rep. Rushing reiterated his concern about Environmental Justice and the population comparisons.
- Ms. Orenstein went over the agenda for the next meeting on 11/28/00: air quality, mitigation, unidirectional runway commitment, and a review of a revised list of additional work analysis.

VI. The meeting adjourned at 6:00 PM.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes
October 10, 2000

I. Agenda (See attached)

II. Participants: Mr. Butler was unable to attend.

III. Discussion

Opening Remarks, Review of Minutes, Updates

- Ms. Orenstein opened the meeting at 3:08 p.m., going over the agenda: noise and environmental justice for this meeting and a continuation of Environmental Justice and Preferential Runway Advisory System (PRAS) at the 10/12 meeting (In addition to a trip to the Tower to observe PRAS).
- Mr. Scarano said FAA has been looking into 3 issues: use of Runway 14-32 by the regional jet (RJ) fleet, impact of the RJ s on fleet mix, and the regional airport system.
- Lt. Gov. Swift suggested that FAA begin to revise the Brown Book without waiting for all Panel deliberations to be completed.
- Mr. Scarano said all additional work items, as determined by the FAA, will be presented at the 11/13 meeting.
- Mr. Egan asked how long the process would go after Nov. 13th. Mr. Scarano responded that the Brown Book would be revised in about 3 months, followed by a 45-day comment period on the SDEIS, then at least 30 days before o FEIS and another 30 days to produce a record of decision. Lt. Gov. Swift again suggested that the initial 3-month analytic period might be shortened if FAA directs the consultant to begin some work now.
- Mr. Rushing said he was interested in the format for additional work. He added that he believed there might be agreement on many of the items for additional study. Mr. Scarano said he would make the list available for the Nov.13th meeting.
- In response to a question from Mr. Tye, Mr. Scarano explained that, in addition to the SDEIS, an additional regional systems study will be done. The SDEIS will rely on systems planning work already accomplished. Mr. Scarano also said the SDEIS would go further than the Brown Book in this area.
- Ms. Meehan suggested that we stop making presentations. She needs to know more of what the Panel thinks. Mr. Tye responded that the presentations are part of education. Ms. Orenstein said that additional emphasis would be placed on Panel discussion time.
- Comments on the minutes of the 9/27/00 meeting: Mr. Egan noted Mr. Odoni's response to an observer comment. Mr. Odoni felt he was misquoted.

Noise Questions

- Mr. Miller began a discussion of noise questions which came out of the previous meeting (see agenda and handout). He went over factors affecting average day-night

sound levels (maximum sound level, duration, the number of events, and how many occur between 10pm and 7am). He went over additional metrics: maximum sound level, sound exposure level, equivalent sound level, and time above threshold sound levels. He said that they were used in the EIS.

- In response to what other airports have done to address impacts, Mr. Miller discussed flight corridors, preferential runway use, noise barriers and run-up enclosures, sound insulation of homes, noise abatement departure procedures, and voluntary and mandatory access restrictions.
- In response to the specific noise impacts of the centerfield taxiway, Mr. Miller explained that over-flight noise was dominant but that modest improvements in taxiway noise were achievable by relocating some taxiing aircraft further from the corners of the airport. Ms. Welch noted that Taxiway N would still be used. In response to a question from Lt. Gov. Swift, Mr. Miller explained a worst-propagation scenario that shows noise reduction with the centerfield taxiway. Ms. Welch argued against DNL by stating that averaging events does not relate to what the community experiences. Mr. Nicosia-Rusin explained that presently all aircraft taxiing to the ends of runway 22R and 22L use Taxiway N and approximately ½ of these would be able to use a centerfield taxiway further from the community. Ms Welch said this would enable greater taxiway capacity. Mr. Egan said this issue had already been addressed and that while Ms. Welch might not like the metric Mr. Miller was saying that noise would go down. Ms. Welch brought up that additional capacity would result in additional operations and noise. Mr. Silva explained that the availability of additional taxiway capacity would not likely cause additional operations. The airlines would not schedule additional operations because of the availability of the centerfield taxiway. Discussion continued among panel members on this point.
- Reference the question of simultaneous approaches to Runways 32 and 33, Mr. Miller said it can't be done, but that the noise exposure would be the same regardless. Mr. Silva added that two simultaneous operations would have less exposure than sequential operations.
- Reference the question of specific elements of noise analysis for Runway 14-32, Mr. Miller explained that tracks over the south shore and additional operations from Runway 27 would not exceed FAA's guidelines of significant noise levels. Ms. Welch suggested a different explanation by stating that a 3 dBA increase is a doubling of the sound energy. Mr. Miller agreed that was taken into account in the noise analysis.
- Ms. Welch asked about other studies on the relationship between noise and impact on people, mentioning a study about impact on fetuses. Mr. Miller responded that such health studies have been inconclusive.
- Mr. Miller concluded that at more distant sites such as Hull, none of the alternatives would produce significant noise levels (65 DNL or above).

<u>Observer Comments</u>

- Ms. Lyman asked whether the centerfield taxiway would bring aircraft ground noise closer to Winthrop. Mr. Davis answered not necessarily. Ms. Lyman also asked about increases in noise from increased operations on Runway 33.

- Mr. D'Amico said that the centerfield taxiway would bring aircraft ground noise closer to Winthrop. He also noted that at one time Massport decided not to go ahead with the centerfield taxiway north of Runway 33.

The meeting concluded at 5:58 p.m.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Draft Minutes
September 27, 2000

I. Agenda (See attached)

II. Participants: All panelists were present.

III. Discussion

Opening Remarks, Review of Minutes, Updates

- The meeting opened with a review of the agenda. The facilitator noted that the focus of this meeting would be on concluding the discussions of delays at Logan, and beginning the discussion of environmental impacts.
- Mr. Scarano updated the Panel on several items.
  - He communicated Mr. Egan's questions about accelerating the Panel process to FAA Director, Jane Garvey, and received no indication from her of any need to accelerate the process. He also requested information for the panel about how the national summit on delay relates to the Panel's work, and is awaiting a briefing paper which he will distribute.
  - Mr. Scarano clarified that the summary of comments and responses to the DEIS sections on noise that were distributed to Panel members had not been updated since the Panel began meeting, and therefore should not be expected to include any ideas discussed in Panel meetings.
  - Mr. Scarano distributed copies of letters regarding Shuttle America's proposal to serve Laguardia Airport from Hanscom. He noted that Mr. Rushing had requested copies of these letters, and that he was providing them to all panelists, as required by the groundrules. In the discussion of the topic of these letters, consultation with the State Historic Preservation Office (SHPO), a question arose about the consultation with SHPO on the Airside Improvements Project. John Silva from FAA stated that section 106 coordination was completed as part of the Airside DEIS. Information was provided to the SHPO, including noise contours and identification of historic properties, and the SHPO had found no historic resources were unduly impacted. Mr.Rushing mentioned that Congressman Moakley had requested a review of this finding in a letter to the FAA.
- The minutes for Sept. 6 were reviewed. A typo was corrected, as was a statement of Mr. Scarano regarding a regional airport coordination meeting. Mr. Rushing asked a follow up question to an item in the minutes about Mr. Scarano's attending the Sept. 18 CAC meeting. He asked if there were minutes from that meeting. During Public Comment, Anastasia Lyman, Chair of the CAC, noted that there are minutes that could be made available to the Panel after they are finalized.
- Ms. Welch submitted a list of written questions and concerns from several community groups. She also noted that community members from the town of Winthrop have asked

the Panel to delay finalizing the SDEIS until after completion of a study of health effects from the airport on citizens of several neighborhoods in Winthrop. Mr. Scarano noted that the information about the study could be submitted during the public comment process on the SDEIS. Mr. Egan spoke against the need for the Panel process to be delayed. Mr. Tye noted the need to have as much information as possible for the ROD, and Mr. Rushing noted that if the information would improve the SDEIS, it should be reviewed. The duration and completion date of the study are not known, but will be researched prior to the next meeting.

Congestion at Logan Airport and Potential Remedies: Presentation by Professor Amedeo Odoni.

- Amedeo R. Odoni, T. Wilson Professor of Aeronautics and Astronautics at MIT, provided a briefing to the panelists based on his academic experience, nationally and internationally, evaluating delay and delay reduction at airports. He noted that there is no question that Logan is a seriously congested airport, with about 100,000 hours of delays per year. This level of delay represents about $150,000,000 in costs to airlines and $150,000,000 in costs to travelers. He outlined three potential solutions for the short term: Runway 14/32, peak-period pricing, and improvements in Air Traffic Control (ATC). He agreed with the delay reduction projections for the runway presented by other consultants, but noted that projected delay reduction benefits may be reduced by the switch from turboprops to regional jets. He further explained that for peak-period pricing, a small number of flights could result in a large decrease in delays. For example, a one per cent reduction in flights, could reduce delays by 7%. He noted that demand by non-jets at Logan has been reduced from 1993 to 1998, and that the 1998 demand is flatter over the day. He suggested analyzing the reasons for this change as part of the SDEIS analysis. Regarding ATC improvements, Dr. Odoni felt that their benefit at Logan is minimal – perhaps 5-10% - because of the complex geometry at the airport. He summarized his suggestions for further analysis as follows:
    - Determine if regional jets will use Runway 14/32 in sufficient numbers to achieve projected delay reductions.
    - Define and examine how 14/32 could be used in IFR, in addition to the VFR conditions.
    - Analyze why hourly demand changed between 1993 and 1998 to obtain information that may help design effective demand management.
- Professor Odoni noted that the medium and long-term solution for Logan airport is to develop a coordinated regional airport system because demand will eventually continue to exceed capacity, even with improvements. This will require Logan to make some tough decisions about its most appropriate role in the regional system. He reiterated that the outlook for Logan to improve in delays is bleak, and that the eventual capacity is probably limited to 550,000-580,000 operations. With current operations at 510,000, there is only room for 10% growth, which is much lower than the amount by which unconstrained demand might increase over the next 10-20 years.
- Lt. Governor Swift asked Professor Odoni what he saw as the major constraints to the development of a regional system. He responded that institutional constraints are the most obvious, and that the airports need to feel they have stakes in each others'

success. He further noted that the process of making choices about Logan's specific role in the regional system would also be difficult.

- Mr. Rushing asked what the definition of capacity is at Logan. Mr. Odoni said it is the number of operations per hour that can be accommodated without violating ATC constraints. For Logan this is 120 operations per hour in VFR.
- Mr. Tye asked how many hours of the 100,000 hours of delay are perceived by the consumer. Professor Odoni noted that Logan is perceived as a very unreliable airport by consumers, whether or not they perceive the hours of delay with each flight.
- Mr. Scarano asked whether and to what extent federal and state laws impede collaborative planning among airports. Professor Odoni said they play a large role. For example, recent federal legislation that says only planes with under 71 passenger can be added to Laguardia makes little sense and goes in the opposite direction to what should be happening there.
- Mr. Scarano asked if there are examples of integrated airport systems elsewhere. The response was that London's three airports are operated in a coordinated manner, and that Amsterdam and Brussels are coordinated. The mechanisms for encouraging coordination do not necessarily have to be regulations; price incentives on gates and fees for passenger use of terminals can also be used to create appropriate incentives.
- Mr. Tye asked if Runway 14/32 would restrain the growth of delays at Logan. Professor Odoni said it would under NW wind VFR conditions, and possibly in IFR conditions. The delay reduction will be temporary, because additional demand will fill in, but that increase in demand would occur anyway and would create worse problems without Runway 14/32.
- Ms. Welch asked about the suggestion to use runways 32 and 33 in parallel in IFR conditions. She suggested that the simultaneous approaches would create more noise, especially when planes approach over land rather than the required over-water approach. Professor Odoni noted that the least environmental impacts are from approaches on runways 33 and 32, if the flights adhere to the flight paths.
- Ms. Welch asked why the changes in the fleet mix to include regional jets might reduce delay reduction benefits from the runway, asking if the difference between what the aircraft manufacturers say is sufficient runway length and what pilots feel is sufficient is a factor. Professor Odoni agreed with this reasoning, noting that pilots may reject the 5000 foot runway, as they have objected to Land and Hold Short procedures.

<u>Overview of Noise Impacts from Airside Improvement Project</u> – Bob Miller, HMMH

- Bob Miller of HMMH presented an overview of the analysis conducted for the DEIS of noise impacts from the Airside Improvement Project. He explained the DNL metric and the use of 65 DNL as an FAA guideline of residential land use compatibility. He described current and past noise rules at Logan, and the soundproofing insulation program. He reviewed the noise contours in the DEIS, noting that fewer people will be exposed to the highest level of noise – 75 and 70 DNL – and that there would be a slight increase in noise within the 65 and 60 DNL. He outlined mitigation measures to address these impacts, including noiseproofing and PRAS monitoring to improve the distribution of the noise across neighborhoods.

- Ms. Welch noted that even at levels lower than 65 DNL, the aircraft noise is irritating and distracting. Mr. Miller noted that 65 DNL is the cut-off for federally funded soundproofing, but it does not mean that those at 64 DNL have no impacts. He further mentioned that EPA has identified 55dB as being of concern, and that studies have found that in 55dB areas, 17% of the population experience annoyance.
- Mr. Tye asked at what dB level conversation would need to stop. The response was around 60-65.
- Ms. Welch noted that assumptions about how often planes fly over water are not borne out in practice. She also noted that if 14/32 is built, flights off of runway 27 will triple, and that needs to be factored into the impact assessment.
- Mr. Rushing asked why there are increases projected in exposed populations. Mr. Miller responded that take-offs and landings will be in different geographic areas with the new runway.
- Lt. Governor Swift noted that it would be useful to provide the Panel with a handout explaining what is included in the metric of DNL. She further noted that delays are irritating, just as airplane noise is, and asked if there was information available about the extent of annoyance caused to consumers by delays.

IV. Public Comment

- John Marcy, from Winthrop and a member of Winthrop's AIR Environment-Health Committee, presented the panelists with a copy of a letter to Jane Garvey explaining the upcoming study of health effects from the airport and requesting that the Panel not be concluded prior to the completion of the study.
- Anastasia Lyman, Chair of the CAC, noted the need for community involvement in the Panel's work, offered copies of the minutes of the recent CAC meeting to panelists, and asked that the Panel and public be provided with a copy of the recent Chicago O'Hare air quality study. She further noted that there is a need for new noise rules at Logan.
- Blossom Hoag asked that Ms. Welch's questions be placed on the web site, and that there be more outreach to the public. She further commented that she is surprised at the limited amount of discussion among the Panelists, and that the process seems to consist mostly of lectures by advocates for the runway.
- Steve Lathrop from Hull reminded the Panel that the south shore is affected by airport operations, and that over-the-water flights often affect Hull. He noted that some flights pass over Hull High School at 1500 feet.
- Mr. Pepper-Eisenberg, of Save Our Heritage, spoke in favor of peak-period pricing as an important part of the solution. He referenced Mr. Odoni's support for it, and also noted Mr. Odoni's statements that the runway is a temporary fix. He questioned why the runway is needed if it will be a short-lived solution. (Professor Odoni responded to this question after the meeting. See his note, attached.)
- Gerry Falbo from Winthrop noted that cumulative effects of additional operations did not correspond to the cumulative noise exposure described by Mr. Miller.

V. Scheduling and Planning for Next Meeting

- The Panel agreed to continue the discussion of noise and environmental justice at the next meeting, which was rescheduled to October 10.
- The Panel scheduled several additional meetings to accommodate its workplan. They are:

  October 10, from 3 to 5 PM
  November 13 from 3:30 to 6:00 PM
  December 4, from 4:00 to 7:00 PM
- The October 12 meeting previously scheduled will be held as a reserve date in case the discussion of October 10 is not completed, and would be held with only four panelists present if it did go forward.
- The December 4 meeting will be focussed on Panel review of a proposed outline for the draft SDEIS, and will be the final meeting before the SDEIS is developed.

VI. The meeting adjourned at 7:05 PM.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes
August 22, 2000

I. Agenda (See attached)

- The Panel convened at 11:15 AM

II. Discussion

Opening Remarks, Review of Minutes, Updates

- Suzanne Orenstein, facilitator, opened the meeting with a review of the agenda, noting that the focus for this meeting was on sources of delays and demand management strategies.
- *Minutes:* The final minutes for the July 13 meeting were distributed. The minutes for the July 26 meeting were revised after Mr. Egan commented that Mr. Davies responses to several questions were more emphatic than noted in the draft minutes. His suggested revisions were accepted by the Panelists.
- *Regional Airport Visits.* It was noted that the Panel had completed visits to Providence and Worcester airports, and was scheduled to visit Hanscom and Manchester on August 28. Handouts from the visits were distributed to those Panelists who did not participate. Mr. Scarano mentioned that Pease airport, a large converted military facility, might be another airport for the Panelists to visit, and offered to arrange a tour on request.
- *National Air Traffic Delay Summit.* Several Panelists noted the national news about airport delays. Mr. Egan distributed articles from *The Boston Globe* and *U.S.A. Today.* He also noted reports of the summit on airport delays convened by Secretary of Transportation, Rodney Slater, on August 21. He particularly noted the identification at the summit of seven choke points in the airport system, one of which is Logan Airport. He asked the FAA to inquire whether national actions on delay would necessitate or benefit from an acceleration of the Panel process. Mr. Tye asked the Chair to ask Administrator Garvey for information from the summit that could help the Panel in its deliberations, particularly whether there is a national plan to deal with the delays, including those in Boston. In response to Mr. Egan's suggestion of a need to accelerate the Panel process, Ms. Welch asked that the Chair also request of the FAA a moratorium on expansion at all New England airports until a regional inter-modal transportation plan, with citizen input, was developed.
- *Independent Technical Consultant.* Mr. Scarano introduced Jim Muldoon, who has been hired as FAA's technical consultant to the Panel. Mr. Scarano noted that Jim had worked as General Manager of Aviation Technical Services for the Port Authority of New York and New Jersey. He also noted that Mr. Muldoon's bio and Scope of Services had been provided to the Panelists. The Scope of Services makes clear that while Mr. Muldoon works under FAA direction, he will be available for consultation with various interest groups and Panel members.

- Mr. Egan questioned why eight Panel meetings were mentioned in Mr. Muldoon's Scope of Services. The facilitator noted that there are four meetings scheduled, including today's, and two additional meetings to be scheduled on the draft SDEIS. Mr. Scarano explained the need to build in some flexibility in the contract scope.
- Panelists requested contact information for Mr. Muldoon. He said he would provide it through Mr. Scarano.
- Mr. Tye asked if Mr. Muldoon could help the Panel consider whether peak period pricing and other demand management strategies could offset the need for a runway. Mr. Muldoon responded that he could do so.
- Mr. Rushing asked that all Panelists be apprised of all questions posed by Panelists to Mr. Muldoon. Mr. Muldoon suggested that he forward an e-mail of all questions presented to him to Mr. Scarano, who could then forward the list of questions, and answers when available, to all Panelists.

Presentation on Sources of Delay

- Beverly Jones, of S, H & E, presented an overview of the sources of delays at Logan Airport. She reviewed the various delay tracking systems, including FAA's OPSNET, DOT's Air Travel Consumer Report, and FAA's CODAS system. She highlighted that all of the existing delay tracking systems have serious limitations, in that they do not count several types of delays, like those under 15 minutes, or those resulting from mechanical problems or otherwise under the airlines control. As a result of the limitations on the existing data collection, it is necessary to develop simulation models to estimate delay reduction impacts. Ms. Jones reviewed Logan's national ranking on delays. In 1999, Logan was 4th most delayed in the DOT Consumer Report, and 8th most delayed in the OPSNET data. In 1998, Logan ranked 2nd in the DOT Report, and 7th in the OPSNET. Logan ranks 8th in total passengers and 14th in operations nationwide. Based upon simulation of the 1998 flight schedule and the actual hourly weather observations from that year, Ms. Jones presented estimates of the various sources of delay at Logan. Of the total delay, 43% occurred in VFR (clear weather) conditions. Northwest wind conditions occurred in 37% of VFR conditions. However, 70% of clear-weather delays occurred during northwest wind conditions. The new runway would have eliminated 68% of the VFR delays in 1998 and 32% of the total delay.
  - In response to a question from Mr. Rushing about when a delay is considered "significant," Mr. Nicosia-Rusin from FAA noted that a traditional benchmark of significant airport delay is 20,000 hours annually. Logan's annual hours of delay have been 120,000.
  - Ms. Welch asked whether efforts are underway to improve the delay tracking systems to include all the delays that are missing from the current data. She also asked how airline overscheduling and its impact on delays is factored in to the current models.
  - Mr. Tye noted that there is a question where to put the regional aircraft if they are a sizeable contribution to total delay. He asked if other regional airports could handle some of these flights, and achieve the same delay reduction as the runway. Mr. Tye requested data on how much regional airlines contribute to the delay.
  - Mr. Rushing asked about how Logan would rank if hours of delay were reduced. Ms. Meehan, President of S, H &E, noted that it is difficult to calculate this without

modeling activities at all other airports. Mr. Nicosia-Rusin offered that although not accurate enough to publish, a sense of the impact on Logan's ranking could be determined by considering that total simulated delays were reduced by about 32%. You could say then that this might represent a 25% reduction in the flight delays recorded in OPSNET, and make your own judgement on how that would affect the rankings. Mr. Rushing asked if it is possible to find out where the delayed flights are coming from or going to. Ms. Meehan noted that this is possible to produce.

Presentation on Peak Period Pricing

- David Hollander of S, H & E, gave an overview of the Peak Period Pricing (PPP) proposal evaluated in the draft EIS. He described a previous Massport PPP initiative, the PACE program, which was developed and implemented in the late 80's, but overturned in a lawsuit. He described how the $100 to $150 peak period fee proposed in the DEIS was developed, and the anticipated delay reduction results. He showed that current operations at Logan are within the 120 operations per hour capacity, and therefore PPP invoked at 110 operations per hour would not have much delay reduction effect. However, if operations go above 120 per hour, as is predicted for the future, then PPP would have significant delay reduction results. That was the rationale for including a monitoring program and trigger for PPP in the DEIS mitigation plan. He further outlined a proposed exemption program for situations in which PPP would reduce flights to communities that need the current number of flights, specifying that these communities would be allowed two flights in peak periods that would be exempted from the peak period fee.
    - Ms. Welch noted that letting the delays escalate to the trigger point before invoking the PPP did not make sense. She asked whether the PPP could be developed from the beginning, setting a trigger that could start as soon as it was reached, thereby advancing the several months of rulemaking that would be needed to implement the program. Richard Litteri, a Massport attorney, commented that the rulemaking process is a state DOT process, which might take six months to conduct. Ms. Welch suggested that Logan become a national model and implement PPP prior to the construction of a new runway.
    - Mr. Hollander was asked if PPP is in place anywhere in the U.S. He responded that it is not.

Presentation on PPP and Other Demand Management Strategies

- Fred Salvucci, Former MA Secretary of Transportation and Professor at MIT, gave a presentation on PPP and other demand management strategies. He began with a statement that he was not representing the views of any other groups in his remarks, but was speaking from his own viewpoint. In his presentation, he proposed that the airport needs to find a way to increase load factors, make other airports and transportation modes more attractive, and conduct sensitivity analysis of various capacity levels at the airport to determine a reasonable level of operations. He noted the need to work with LaGuardia Airport to prevent gridlock on the Boston/New York routes. He further noted that many prior mitigation projects for Logan activities have not been implemented, creating credibility problems for new mitigation proposals. He

suggested that the existing injunction could be used to create enforceable commitments to address RW 14-32 impacts.

- Mr. Salvucci outlined several demand management options, in addition to PPP:
  - Terminal/gate regulation (set number of movements per hour)
  - Asking airlines to consolidate flights voluntarily ("jawboning")
  - Flat landing fees with off-peak discounts
  - Expanded use of Logan Express buses to TF Green, Worcester, Manchester, South Station, and Rte. 128 rail station
  - Expanded high speed rail to Worcester and Springfield via an inland route
  - Upgrade Logan's rail connection, including South Station
  - Pilot test a change in the FAA's first-come/first-serve policy for certain, small aircraft types
- Lt. Governor Swift and Mr. Litteri discussed how demand management strategies could be designed to avoid the legal problems that the PACE program faced, and there was general agreement that a PPP program could be designed to avoid those problems.
- Ms. Welch advocated that a regional intermodal solution and PPP be implemented prior to any runway construction. She further noted that the affected communities do not agree with Mr. Salvucci when he suggests the possibility that a new runway be constructed with restrictions of use only in NW wind conditions.
- Mr. Butler pointed out problems with some of Mr. Salvucci's suggestions, including
  - the impossibility of changing the first come/first serve policy,
  - the move to eliminate, not create, slots at most airports,
  - the lack of connection between ground access and RW14-32,
  - the fact that demand management could be viewed as interfering with interstate commerce, especially if the number of flights that would trigger PPP was artificially lowered,
  - take-offs are not a problem at Logan, and
  - the United Airline changes in San Francisco were not induced by demand management approaches, but by United's pilot strike.

- When the Panel was asked for views about the improvements in the SDEIS on the issues of PPP, Ms. Welch responded that she would like to see PPP included in the Preferred Alternative from the beginning. Others suggested that any PPP program be designed to withstand legal challenges.

III. Public Comment

- Marty Pepper Aisenberg, from Save Our Heritage, asked whether it was within the jurisdiction of the panel to implement demand management or in their jurisdiction to recommend to FAA certain demand management strategies. Mr. Scarano responded that is was more likely the latter.
- Dan Wolf, President of Cape Air, talked about the impact of PPP on airlines like his, with small aircraft, but who do not contribute to the delays nor compete with larger aircraft for runway space, since they use the 2500 foot RW33R-15L. He also said the regional jet fleets are being purchased by airlines for over $10 million per plane, and that a $150

PPP fee might not make much of a difference to those airlines. He thought other forms of demand management might be more effective.

- Bob D'Amico from the City of Boston, questioned a statistic used in the discussion, asking whether it included arrivals and departures, or just arrivals. It was clarified that in bad weather, arrivals are reduced to 45 per hour, not all operations.
- Blossom Hoag from CARE and the Sierra Club asked for clarification about whether flights leaving the gate on time, but delayed awaiting take off, were considered on-time flight departures. Panelist John Butler responded that the flight could be considered delayed if it took off late.
- An aide to Representative Robert DeLeo noted that the Representative had been present for a portion of the Panel meeting, but regretted not being present to make public comment due to a conflicting appointment. He may submit comments to the Panel in writing.

IV. Planning for Next Meeting

The Panel reviewed and revised the draft meeting agenda for September 6. The Panel agreed to meet beyond 7:00 PM if necessary for that meeting, but, given Ms. Welch's inability to stay beyond 7 PM, adjusted the schedule of presentations to fit most of the Panel deliberations in the 4:00 to 7:00 time slot.

V. The meeting adjourned at 4:00 PM.

Boston Logan International Airport

Supplemental Draft EIS (SDEIS) Panel

Minutes

July 26, 2000

I. Agenda (See attached)

- The Panel convened at 4:07 PM

II. Attendees (See attached list)

- Mr. Rushing was not present; the House of Representatives was in session.

III. Discussion

Presentation on Multi-Modal Transportation Planning by Kevin Sullivan, MA Secretary of Transportation

- Secretary Kevin Sullivan provided the Panel with extensive information about efforts underway by Massachusetts, and neighboring states, to improve the coordination of all modes of transportation. He described the following initiatives:
  - Road signage for all regional airports, including signs in RI and NH
  - Expenditure of $154 million in highway funds "flexed" to transit and train projects
  - Dialogue with RI that resulted in eight rail trips per day from MA to Providence which will also serve Warwick/TFGreen Airport when the station is completed
  - The commitment of $385 million for the widening of Route 3 from 128 to the NH border
  - Investigation of a partnership with NH to encourage rail service between Nashua and Lowell
  - Massport efforts to increase flights at Worcester Airport from 9 to 19 per day
  - Manchester Airport evaluation of the environmental impacts of a new access road
  - Development of an intermodal facility in Wilmington, MA
  - Rehabilitation of Worcester's Union Station
  - Development of a business facility at Hanscom
  - Promotion of the Accela train for a lower fare than the NY shuttle from Logan
  - South station connector to Logan via the new Silver Line
  - Expansion of MA commuter rail, which is now the 4th largest in the country and the fastest growing
  - Development of bus service in the Urban Ring
  - MBTA Blue Line expansion
  - Initial planning for the North Station/South Station rail link
  - Development of smaller airports by MA Aeronautics Commission

- Mr. Egan asked if there were other efforts involving more than one state in aviation planning. Mr. Scarano responded that this is a first effort of this scale, to his knowledge.

- Ms. Welch asked the Secretary about plans for improving the Blue Line, which have been put off several years. The Director of the MBTA responded that they are pursuing the capital program for this and the rail service from South Station to airport through the Ted Williams Tunnel.
- Mr. Tye asked about what numbers of passengers could be diverted from Logan. Mr. Sullivan responded that growth is at regional airports, not at Logan. Lt. Governor Swift noted that it is not easy to determine if regional airport growth is totally a diversion of Logan traffic. Ms. Meehan (S, H. & E) added that roughly 1/3 of new passengers are new travelers brought into the market by low fares, and another 1/3 are diverted from Logan.
- Mr. Scarano asked about the development of a rail line from Lawrence to Manchester, and Secretary Sullivan responded that the priority is on the line between Lowell and Nashua, where there are existing rights of way.
- Ms. Welch asked if bus service could be instituted from Woburn to Manchester, in addition to the Woburn-Logan service. The Secretary noted that he is trying to encourage this service.
- Ms. Welch asked how close to completion the North Station-South Station rail link is. Mr. Sullivan remarked that it is a $3-$6 billion project, and will not happen without considerable time and effort to identify and secure the funding.
- In response to a question about the Urban Ring, Mr. Sullivan clarified that a transit rail system was much more difficult to achieve than a bus service along the ring. The bus service is in the planning stage. The price for the transit service is several billion dollars, and this project is competing with the North Station-South Station rail connector for funding.

<u>Summary Comments on Regionalization and Forecasting</u>

- Ms. Orenstein asked the Panel to comment on how the SDEIS should reflect their concerns about forecasting and regionalization. Mr. Scarano asked the Panelists to consider whether the forecasting covers a reasonable range of scenarios. In response, the Panelists made the following comments.
    - Ms. Welch asked if a different kind of forecast, one with a lower low passenger estimate and a lower high passenger estimate, could be developed and used to understand how much diversion to regional airports should occur. She also asked if this revised forecast could be used to evaluate airline overscheduling and aircraft mix.
    - Mr. Tye asked how to avoid a new runway for a problem (NW winds) that occurs only 20% of the time. He asked if traffic could be prioritized and/or diverted, as happens in bad weather.
    - Ms. Welch noted that, while there are many pieces in place or in planning for multi-modal transportation, there is no integrated, coordinated planning process, and what does exist does not offer a vehicle for citizen input. Lt. Governor Swift noted that the New England Council of Governors has sponsored a New England Transportation Initiative, which is the vehicle for interstate planning and cooperation on multi-modal issues.
    - Lt. Governor Swift noted that a strength of both the regionalization analysis and the forecasting done for the EIS is that there is careful tracking of regional

airport users. This helps create understanding of what is driving regional airport use. She recommended that this tracking continue.

Panel Administrative Discussions

- The minutes of the previous meeting on July 13 were finalized and accepted.
- Ms. Orenstein noted that in an effort to increase public access to the panel operations, agendas and presentation slides (when in the compatible electronic format) will be posted on the FAA web site.
- The Panel briefly discussed its upcoming visits to four regional airports on August 16 and 28. Panelists had previously asked for passenger forecasts and market projection information for these airports, and Mr. Scarano noted that this information would be requested from the airport directors for presentation during the site visits. Lt. Governor Swift also noted that it would be helpful for the Panelists to receive information about the decision making structure and lines of authority between the states and the airports.
- Mr. Scarano announced that the FAA had decided to hire an independent consultant for the Panel. He anticipated the consultant would be on board in mid-August. Mr. Egan asked whether this would delay the Panel process and the FAA decision on the SDEIS. Mr. Scarano said FAA remains committed to its goal of a final SDEIS by April, 2001, but that reaching the goal is dependent on Panel events and analysis that are difficult to predict.
- The Panel set dates for interim meetings after the August and September meetings, in case they will be needed. The new dates are September 6 and October 12, from 4:00 to 7:00 PM. The list of meeting dates will be revised and posted on the website.

Overview of Logan Airfield Operations, Joe Davies, FAA Tower Manager

- In preparation for understanding delays at Logan, and the potential impacts of the proposed project on those delays, Joe Davies presented an overview of how Logan airport operates. He explained the air traffic control system in general, and airspace around Logan, and the location of the runways, taxiways, and terminal areas. He then described the configurations of runways that the controllers use, their efficiency, noise and environmental restrictions, and operational needs in VFR and IFR. He concluded by saying that the taxiway, minimums, and runway 14/32 would improve the options available for air traffic control, and also would provide a greater ability to use the Preferential Runway Advisory System (PRAS).
- Ms. Welch asked how well the airport was complying with the PRAS system. Mr. Davies noted that recent data showed that some goals were met, while others were not. Mr. Egan asked if RW 14-32 would allow airport to better meet PRAS goals. Mr. Davies response was yes.
- Mr. Tye asked whether small planes could be diverted to other airports during NW wind delay periods. Mr. Davies responded that it would be illegal. Federal law requires aircraft to be accommodated on a first come-first serve basis.

Observer Comment

- Susan Black, Marketing Director for the Worcester Airport, commended Massport for their efforts at developing the Worcester Airport, and noted that Worcester looks forward to the Panel's visit to the Worcester Airport.
- Peter Koff of AIR said he had sent a letter to Jane Garvey commenting that the Panel process has not spent enough time on issues which would need to be addressed in the SDEIS. He distributed copies of his letter to the panelists.
- Blossom Hoag of the Sierra Club and CARE commented that Mr. Sullivan's presentation did not have many numbers to back it up. She also commented about how undesirable it is to have the North Station-South Station connector pitted against development of the Urban Ring.
- Steve Lathrop, from Hull, commented on the inadequacy of passenger volume and operations analysis. He suggested the Panel ask what might cause more passengers on fewer aircraft. He suspects that operations forecasts are too high, but noted that forecasts are often optimistic and need to be tempered with realtime or very recent data. He also remarked that the Panel has spent too much time on what environmental improvements can be expected from a new runway, and not enough time at looking at alternatives to reduce delay. He asked the Panel to take a broader perspective.

Panel Discussion of Public Outreach Issues

- Ms. Welch asked the FAA to hold community meetings, scheduled in the evenings to encourage attendance, about the Panel process. These meetings could be attended by Panelists if they desired, and might be sponsored by the Citizen Advisory Council (CAC) for the Airport. She proposed that a meeting with the CAC happen in September, and that three additional meeting happen in October to increase the outreach to several geographic regions.
- Mr. Butler and Mr. Egan objected to these outreach meetings, noting that a large number of community meetings have already been held on the runway issue. Mr. Butler noted that these meetings would not meet the Panel's objective of providing input to FAA.
- Mr. Tye suggested that the public's questions should be put in writing. He also suggested that a Panel meeting could be held in the evening to accommodate more public observers.
- Mr. Scarano noted that Mr. Rushing and Lt. Governor Swift (who had already left this meeting) needed to be consulted on this issue. Ms. Orenstein suggested the Panel return to this question at the next meeting.

IV. The meeting adjourned at 7:15 PM.

Boston Logan International Airport

Supplemental Draft EIS (SDEIS) Panel

Minutes

July 13, 2000

I. Agenda (See attached)

- The Panel convened at 2:35 PM

II. Attendees (See attached list)

III. Discussion

Organizational Issues

- Mr. Scarano opened the meeting with a statement that it was his hope that the Panel would devote most of the meeting to substantive discussion of regional transportation issues. He noted the presence of Todd Burger, an expert on rail service forecasting, and mentioned the plan to have the MA Secretary of Transportation attend the next meeting to discuss regional multi-modal transportation planning. Facilitator Suzanne Orenstein reviewed the agenda, noting that in an effort to make up time after delays at the last meeting, the focus for this meeting would be on Panel discussions, and public comment would be taken only if time allowed. Ms. Welch asked that time be allotted for Panel discussion after each presentation, not solely after the first two presentations and at the end of the meeting. The Panel agreed to address questions during the presentations, in an effort to encourage Panel discussion.
- The minutes for the June 22 meeting were reviewed. No corrections were made. The June 22 minutes were finalized and will be placed on the web site.

Forecasting Presentation (continued from past two meetings)

- Ralph Nicosia-Rusin, FAA Airport Capacity Program Manager, began this portion of his forecasting presentation with a review of his previous presentations regarding projections for numbers of passengers and numbers of flight operations at Logan. He continued the presentation with explanations of how the forecasts for passengers and operations used for the DEIS were consistent with those developed for other studies. He reviewed criticisms of the forecasts, addressing issues regarding confidence levels (he noted that by using a range of forecasts, confidence levels could be close to 100%), and whether the data used for the forecast was current. Ms. Welch asked whether the forecasts could be further updated to use 1999 and/or 2000 data, in addition to the update from 1993 to 1998 in the Brown Book. She noted this would have the advantage of incorporating equipment upgrades and producing more accurate noise information. Mr. Nicosia-Rusin responded that the data will always be behind the present because of the 6-8 months it takes to produce the model results. He further noted that comparisons of one year to another were not as significant as comparisons of the build and no-build alternatives. He ended by stating that when delay reduction benefits of the proposed Airside Improvement Project are evaluated using both the low and high ends of the forecast ranges, the results do not differ significantly, except for the

increase in effect of Peak Period Pricing at the higher passenger estimates. This leads him to conclude that the forecasts are sufficient for the evaluation of the project.

- Discussion following Mr. Nicosia-Rusin's presentation included the following additional comments and questions.
  - Are there demand management techniques in use at other airports, other than Peak Period Pricing, that should be considered for Logan, and that could be evaluated using the forecast and other models?
  - Ms. Welch noted that an FAA web site presented data comparing delays at various airports that showed that delays at Logan were decreasing by 6%. Mr. Butler responded that delays at Logan are not down, and that airports are not directly comparable, because some have parallel runways that provide more flexibility for reducing delays. Logan's runways are intersecting, so managing delays at Logan is more complicated than at other airports. Mr. Nicosia-Rusin noted that delays at Logan are affected by incidence of weather conditions that are not consistent from year to year, so decreases might occur, but might not be consistent over time. After considerable discussion of the delay issues, the Panel asked for a break down of all causes of delay by source and frequency. Noting that some sources will be unknown, S, H, and E agreed to provide a breakdown of causes of delay for the discussions at the next meeting on airfield operations.
  - Mr. Tye commented that he was not comfortable with conclusions that the benefits of the runway were borne out by the forecasting process. He heard a lot about the benefits of a new runway but nothing was presented regarding the need for it. He views the Panel's role as examining the need for the Airside Improvements Project, and finds the conclusions premature.

Presentation on Regional Alternatives

- Deb Meehan, President of S, H, & E, gave an overview presentation of how regional alternatives to Logan were factored into the Logan passenger and operations forecasts. She noted that the forecasted passenger numbers include an estimate of 7 million passengers diverted to regional airports, rail service, and video conferencing and how the estimates for those diversions were developed. She noted that regional carriers will continue to need to serve Logan because 59% of their passengers are connecting to non-stop flights that are not available from T.F. Green or Manchester, and that the remaining regional carrier passengers have Boston as their destination. In the discussion of regional alternatives, the following comments and questions arose.
  - Mr. Tye commented that he was interested in options for using regional airports to the maximum extent available as a way to reduce operations at Logan. Mr. Scarano and others responded that both Manchester and Providence were growing at unbelievable rates, but that their growth would be constrained by the physical and land availability, even after major improvements in access and facilities.
  - Ms. Welch asked if airport plans and projections for all regional airports could be researched and reported to the Panel. Ms. Meehan and FAA agreed to provide this information. Ms. Meehan also explained how some regional airports compete with others, which also might limit growth. For example, Bradley, Manchester, and Providence all serve part of the area that Worcester airport could serve.

- Mr. Tye and Ms. Welch asked about whether Logan should de-emphasize the market for short-haul trips. They asked for information about the average aircraft size for short, medium and long haul trips, and how these factors affect Logan operations. Ms. Meehan agreed to provide this information.
- Several panelists, and Mr. Burger, commented on the factors needed to promote growth at regional airports, including proximity to the traveling population, ease of access to the airport, and sufficient service to meet travelers needs for flexibility.
- Ms. Welch requested that the FAA research how many airlines will use a 5000 foot runway and whether they will make a specific commitment to do so. Mr. Scarano noted that this would be addressed at the next meeting.
- Mr. Egan remarked that much has been accomplished in the regional airport development process and that it appears that all of the Panel Members support improvements in the regional transportation arena. When he asked whether the opponents of the Logan Airside Improvement Project also opposed the expanded use of Hanscom Field, Ms. Welch responded that the Mayor's representatives support increased use of Hanscom Field.

Presentation on Potential Impacts of Rail Service on Logan Forecasts

- After a short break for an executive session, Todd Burger, an independent transportation consultant formerly with Arthur D. Little, and project manager for the Strategic Assessment Review (SAR) in 1993, presented his view of the realities of diverting Logan passengers to high speed rail. He noted some factors that may reduce the desirability of the high speed rail alternative in the Northeast Corridor, including potential rail traffic delays. He noted that rail service between Boston and TFGreen airport might be more successful than anticipated, but that this might adversely impact passenger use of Worcester airport. Lt. Governor Swift noted that MBTA, not Amtrak, would be operating the TFGreen rail service. Mr. Burger noted that he thought the forecast estimates for Logan, which are quite consistent with the forecasts used in the SAR, are on-target in spite of slight changes in the rail diversion numbers. He also noted his conclusion that rail service will not be a substitute for runway 14/32.

IV. Observer Comment

Because State Representative McManus, from Worcester, asked to address the Panel, having traveled to the meeting from his vacation to do so, time was made available for some public comment. Representative McManus spoke appreciatively about Massport's efforts to increase air traffic at Worcester and noted Worcester's strong support for additional air service from Worcester airport. He stated that Worcester's central location and strong industry should create a market for additional service. He noted that he and others in Worcester are convinced that the access road to the airport can happen, especially if the market demand is there to support it. He noted that he did not see any conflict between Runway 14-32 and growth at Worcester, and that he thought both should occur.

The meeting adjournment time of 6:00 PM was reached before public comment from Steve Lathrop, from Hull, and Mark Cestari from Shuttle America could be heard. They were asked to make their comments at the next meeting on July 26.

V. Next Meeting

The next meeting is on July 26, from 4:00 to 7:00 PM at the Volpe Center, 55 Broadway, Cambridge, MA. The agenda will include the following items.

- Synthesis discussion among the Panel about the status of the forecasting and regional issue discussions
- A presentation on efforts to integrate multi-modal regional transportation by the MA Secretary of Transportation
- Initial discussion of the Logan airfield operations and delay factors
- Discussion of whether and how Public Outreach about the Panel process should occur.

The Panel agreed to extend the time of its August 22 meeting, which will now be 11:15 AM to 4:00 PM, in order to allow more time for discussion of airport capacity and peak period pricing. The Panel also agreed to follow through on visits to the regional airports, tentatively scheduled for August 16.

VI. The meeting adjourned at 6:03 PM.

Information Requests from July 13 Logan SEIS Panel Meeting

Item	When To Provide	Who Will Develop
1. Examples of demand management techniques, other than Peak Period Pricing, used at other airports	In background materials for August 22 meeting on PPP	FAA
2. Details of all sources of delay at Logan, what proportion of delays are caused by what source, how frequently they occur, and what the trends have been historically.	At July 26 meeting, send out before meeting, if possible.	S,H, &E
3. Information on passenger growth projections and plans from regional airports, including Portland, Pease, Manchester, & Bradley	Prior to July 26 meeting	FAA
4. Information on what is being done to increase use and access for regional airports	Prior to July 26 meeting	S, H & E
5. Specific data on average aircraft size by length of haul, & how average size affects Logan	Prior to July 26 meeting	S, H, & E
6. Information on how many regional airlines will use and acknowledge commitment to use 5000 foot runway.	At July 26 meeting, or prior to August 22 mtg. on airfield capacity	??
7. Potential for improvements at Manchester Airport to affect long-haul/short-haul mix.	Prior to July 26 meeting	S, H, & E
Outstanding requests from previous meeting		
A. Geographic illustration of sensitivity of noise forecasts	Prior to July 26 meeting	FAA – Ralph Nicosia-Rusin
B. Geographic presentation of impacts of forecasts on runway utilization	Prior to July 26 meeting	FAA – Ralph Nicosia-Rusin

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes for Meeting No. 2A
June 22, 2000

I. Agenda (See attached)

- The Panel convened at 4:00 PM

II. Attendees (See attached list)

III. Discussion

Organizational Tasks

- In the review of the **agenda**, the facilitator stated that the goal for the meeting was to complete the presentations on forecasting and begin the discussion of regionalization as it relates to forecasting, if time allows. Mr. Rushing noted that he did not receive background information on regionalization and that it was his view that there should be no discussion of this topic at this meeting. Mr. Butler responded that background information was available in the Brown Book. Mr. Scarano noted that FAA agreed that it would direct panelists to relevant sections of the brown book. He proposed that we return to the question of whether to discuss regionalization when the forecasting discussion was completed, at which time it would be known if there was time available to begin that discussion.
- The **minutes** for the previous meeting were revised to correct a quote from Mr. Rushing, and to clarify a response from Mr. Scarano. The minutes were accepted as revised and are ready for posting on the web site.
- Mr. Scarano clarified that the **meeting date for the next meeting** was incorrectly stated in the FAA memo for this meeting. It is July 13, not July 26. Ms. Welch questioned the usefulness of conducting the Panel meeting on regionalization in Manchester. Community groups who attend the meetings as observors would not be able to be present if the meeting was not in the Boston area, and regionalization is a very important issue for these groups. The Panel agreed that visits to regional airports are important, but that the meeting on regionalization could be conducted in the Boston area. The location for the July 13 meeting was changed to Cambridge, and the start time will remain 2:30 PM.
- **New Procedural Guidelines provisions** governing dissemination of information to panelists and contacts with the press and external decision makers were considered and finalized. In reviewing the guideline concerning notice to other panelists before contacts were made with external decision makers, the panelists acknowledged that this guideline would not affect contacts with the decision makers who appointed them, namely, the mayor and the governor. It

would also not affect discussions with the FAA Administrator and others that arose coincidentally at meetings and in other non-Panel forums. The Panel added a specific guideline concerning contacts with the press, namely, that panelists would avoid characterizing the views of other panelists in press contacts.

- Ms. Welch raised the issue of the need for an independent **technical consultant** to assist the Panel members. Panelists discussed this issue for some time, with some panelists expressing the view that the consultants who developed the DEIS should be adequate, and others arguing for independent consultants. Two panelists expressed the view that the Panel should not go any further in its work program until a technical consultant was hired. The Panel identified several possible roles for the consultant, as follows.
  - Help answer "what if" questions from panelists;
  - Identify alternatives to views in the Brown Book
  - Provide independent evaluation of elements of the Preferred Alternative

  Options for obtaining technical consultation for the Panel also were identified:
  - Use S, H, & E
  - Use FAA experts
  - Look for an independent consultant
  - Do homework on own
  - All of the above

  Concerns about hiring a technical consultant included that it might slow down the process, where the funding would come from, and what would be the result of conflicts among the consultant views.

  Mr. Scarano noted that the federal procurement guidelines might be prohibitively time intensive, and that it was his preference that a consultant to the Panel be hired through MassPort. Mr. Tye noted he did not care where the funding came from, as long as the consultant worked for everyone on the Panel. <u>The Panel decided to await FAA's decision about whether and how to provide technical consultation</u>, given that the issue had already been presented to Jane Garvey.

<u>Forecasting Presentation</u> (continued from previous meeting)

- Ralph Nicosia-Rusin, FAA Airport Capacity Program Manager, continued his presentation about the forecasts of passenger levels and operations projected for Logan Airport for the future. In addition to highlighting issues around fleet mix and historical passenger and market trends, Mr. Nicosia-Rusin showed how the forecasts and changes in the forecast would affect noise and delays. There were several questions and answers discussed during the presentation.
  - Ms. Welch asked whether anything could be done to put more people on larger aircraft, thereby decreasing the number of flight operations. Mr. Nicosia-Rusin showed how the low and high fleet scenarios built into the forecast took these possibilities into account.

- Ms. Welch asked about the sensitivity of forecasts to errors. Again, the response was that by using a high and low scenario, any changes are within the extremes that have been studied.
- Ms. Welch asked for additional information about the noise impacts, noting it was easier to see the impacts on a map than on a graph. Mr. Nicosia-Rusin agreed to develop a geographic illustration for the next meeting. Ms. Welch also asked that slides show land areas for changes in runway utilization, and Mr. Nicosia-Rusin agreed to provide that information also.
- The presentation was stopped prior to the discussion of possible impacts from regional airports on the forecasts, for lack of time. Mr. Scarano noted the inadequacy of the time available for discussion and recommended that time be made available at the next meeting for additional questions on forecasting.

Observor Comments

- Gerry Falbo, of Winthrop, noted that he preferred to have community people respond to the issue of independent consultants, not those satisfied with the MassPort consultants.
- Steve Lathrop, from Hull, presented some research that showed airports with rapidly increasing emplanements also had increases in efficiency. He also expressed the view that the technical consultant needed to be either adversarial, with one for each view of the expansion, or a single consultant for the Panel as a whole.
- Anastasia Lyman, of the CAC, noted that the noise contours in the SDEIS are predicated on optimal use of PRAS. However, there is no assurance of optimal use, and the CAC is not in support of PRAS as currently used.
- Blossom Hoag, of the Sierra Club and CARE, noted that Massport's mailing to frequent flyers asking for their support of the runway was not constructive. She also asked if observors could have handouts used during the Panel meetings.

IV. **Next Meeting**

- The Panel identified the following topics for the next meeting.
  - Continue the forecasting presentation and discussion, including impacts of regionalization, geographic presentations of noise and runway utilization, and criticisms of forecasting components of the DEIS document.
  - Discuss regionalization, including an overview of the components, expectations for growth at regional airports, and impacts from increased use of rail due to high speed routes.
  - Whether and how the Panel should conduct meetings in locations proximate to affected communities.

V. The meeting adjourned at 6:40 PM.

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Panel

Minutes for Meeting No. 2
June 7, 2000

I. Agenda (See attached)

- The Panel convened at 3:00 PM

II. Attendees (See attached list)

III. Discussion

Organizational Tasks

- Mr. Scarano updated the Panel concerning FAA follow-up to the previous meeting. He noted that a web site has been established and the "Brown Book" will be available on it; that the Brown Book was distributed to ARC members, and letters went to local legislators describing the availability of the report. The summary of the significant public comments on the DEIS, with responses, was also distributed to Panel members.
- Ms. Orenstein reviewed the agenda, noting the proposed public comment period. The Panel agreed with the proposal.
- The Panel reviewed the summary of the April 26 meeting, and suggested the date be added in the heading. The minutes were accepted and FAA agreed to post them on the web site.
- Scheduling for future meetings was completed. The dates agreed upon are:
  - June 22, as a supplement to the June 7 meeting
  - July 13, 2:30 to 5:30 PM, at Manchester Airport
  - July 26, 4:00 to 7:00 PM
  - August 22, 12:30 to 3:30 PM
  - September 27, 4:00 to 7:00 PM
- The Panel reviewed the Procedural Guidelines, including Public Involvement Options. Mr. Rushing requested addition of several items previously discussed, including the agreement that materials would be provided to the panel at least 7 days before meetings and earlier if possible, and that all Panelists will receive any information requested by any panelist at the same time as the requesting panelist.
  - Mr. Egan asked if the schedule outlined in the guidelines, for completion of the Panel process by April 1, 2001, called for a Record of Decision (ROD) by that date. Mr. Scarano responded that the Final EIS will be available on that date subject to the progress of the scheduled meetings, and the ROD would be issued some time after that but could not specify any specific time because considerable internal FAA coordination would be required.

- In response to questions from the governors representatives to the mayoral representatives about a meeting held with the mayor and Jane Garvey, Mr. Egan proposed that all Panelists agree to forego advocacy with political leaders, press, and the courts regardless of the outcome of the Panel process. His suggestion was not adopted. Mr. Rushing suggested that a groundrule be adopted specifying that if any panelists desired to meet with political decision makers or the press, they would notify the rest of the panelists first. The Panel did not object to this suggestion, and Ms. Orenstein agreed to draft this provision for Panel review.
- Ms. Orenstein suggested, and the Panel agreed, to consider the Procedural Guidelines a working document that is open to revision as the Panel sees fit. <u>The Panel agreed that the Procedural Guidelines were accepted and should be posted on the web site.</u>

<u>Presentation on the Interim SDEIS – "The Brown Book"</u>

- John Silva, Manager of Environmental Programs for FAA New England, began the substantive presentations with an overview of the requirements for an EIS, and a description of the components of an EIS.
  - In response to a question from Mr. Tye regarding what action would not require an EIS, Mr. Silva noted that construction of a runway at a small airport where there were no environmental impacts might be an example of a federal action with no significant impact.
- Deborah Meehan, President of S, H &E, air transportation consultants, gave a detailed presentation describing the Draft EIS and the Interim Supplemental Draft EIS. She explained that the ISDEIS, or Brown Book, represents the effort to incorporate public comments that began prior to the inauguration of the panel. Ms. Meehan described the differences between the two documents, and noted that the Preface in the Brown Book was a good overview of the comparison and revisions in the Brown Book.
  - Comments and questions on Ms. Meehan's presentation included:
    - Page 18 of the presentation, which outlines the geographic distribution of Logan passengers, is not in the Brown Book. Ms. Meehan noted that it would be added.
    - Service between Worcester Airport and Atlanta was not included in the description of the service provided there. It will be added.
    - Lt. Governor Swift noted that there are many acronyms used throughout the Brown Book, and that they should be explained. The presenters noted that the Generic Environmental Impact Review for Logan includes a glossary. Panelists can request a copy of the GEIR from FAA or Massport.
    - Mr. Tye asked if there is an opportunity to move some of the small aircraft operations to another airport, and what could be done to reduce

the number of small aircraft carrying few passengers. He also requested data on all of the sources of delay, not just NW winds. These topics will be addressed in depth at the July and August meetings.

- Ms. Welch noted that it was frustrating to have so much information presented without having the ability to question assumptions and give an alternative view. Mr. Scarano responded that as each component of the SDEIS is taken up in depth in future meetings, her questions and comments will be addressed in detail.

Presentation on Forecasting Methodology and Results

- Ralph Nicosia-Rusin, FAA Airport Capacity Program Manager, began a presentation on forecasting of passenger use and resulting operations projections for Logan Airport. His presentation was only partially completed, and will be continued at the June 22 meeting.
  - Comments and questions raised by Mr. Nicosia-Rusin's presentation included:
    - Mr. Butler asked about noise associated with the forecast, as related to Stage 2 and 3 fleet components.
    - Ms. Welch asked how increased regionalization would affect the forecasts. In response, the range of variation between forecasts, from 29 million passengers to 45 million passengers was described in more detail, to show that the current forecast range covers most likely scenarios.
    - Mr. Butler asked how consolidation of the airlines, such as the proposed merger between United and US Airways, was factored into the forecasting.
    - These questions were briefly considered as time allowed, and will be discussed in more detail on June 22.

IV. Observer Comments

- Steve Lathrop from the Hull Airport Committee, noted that overwater take-offs also go over Hull, sometimes at an altitude of 1500 feet. He also suggested that the preferred alternative be compared to current conditions, and that noise data in the DEIS is erroneous. He requested that the slide presentations be included on the web site.
- Ed Pignotti from the Boston Chamber of Commerce commented on the critical nature of the airport to the region's economy. He noted the need to solve the delay problems, and expressed support for significant improvements of regional airports.
- Blossom Hoag representing the Sierra Club and CARE noted the need for high speed rail improvement projects to include the link between North and South Stations, and noted that Chelsea is not the only area impacted adversely because the Harbor Islands also are subject to environmental and noise impacts.

- Bruce Thatcher asked when information will be on line on the web site, and was given the response that most is available now. He suggested that future Panel meeting dates be posted on the web site. He further noted that pilot non-compliance with Land and Hold Short Operations might increase delays. As a Roxbury resident, he is interested in Roxbury's receiving some focus regarding Logan impacts although Roxbury may not be impacted directly.
- Bernice Maider from the CAC spoke about the cumulative impacts that communities are feeling from the Big Dig, bridge construction, the convention center development, and development in South Boston. If air travel demand increases as predicted, there will be a need for more jets, which will fill the time available from delay reduction activities. She asked if there will be a guarantee on unidirectionality, and distributed clippings showing press coverage of Logan delays seldom, if ever, mentions the NW wind problem.
- Rick Rodes from CARE and a resident of Winthrop noted his community's concern about the centerfield taxiway, and its health effects. He further asked if other airfield projects would be considered in the Panel discussion, and it was clarified that the Panel will address all components of the alternatives discussed in the DEIS, not just runway 14/32.

V. Action Items

Task	Whom
Post final minutes for all meetings to date on web site	FAA
Post Procedural Guidelines on web site	FAA
Draft additions to procedural guidelines	Facilitator
Post meeting dates on web site	FAA

VI. Plans for Future Meetings

- The Panel agreed to meet on June 22 from 4:00 PM to 6:30 PM to continue the discussion of forecasting and begin the discussion of regionalization. Lt. Governor Swift noted that she would not be available for that meeting and encouraged the Panel to meet without her present.
- The meeting scheduled for July 13 will be held at the Manchester Airport, and will continue the discussion of regionalization. The Panel reviewed the regionalization issues outlined by FAA in the workprogram, and the issues raised by the mayoral appointees, and agreed that the meeting should include a focus on those items. The meeting will also include a tour of the Manchester airport and a briefing about its operations. This is all subject to coordination and approval of the Airport Authority.
- **VII. The meeting adjourned at 6:20 PM.**

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Process

Minutes for Panel Meeting No. 1A
April 26, 2000

I. Agenda (See attached)

- The meeting convened at 4:00 PM

II. Attendees

- John Butler was absent but he had previously noted he would not be able to attend. We had committed to date and in effort to avoid any further delay the meeting would be conducted in his absence. Because of his previous experience with the project this absence would not be significant to his understanding of this evenings activities.
- Mr. Joe Davies, ATCT Manager for Boston Logan was in the audience and introduced by the Chair.

III. Discussion

Agenda Item 1 - Review and Acceptance of the Minutes for March 28th.

1. Introduction of the Facilitator

- Mr. Scarano introduced Ms. Suzanne Orenstein who had been retained to facilitate the Panel proceedings.
- Ms. Orenstein provided a brief resume of her previous experience.
- She noted that she had attended the first Panel meeting.
- She stated that she will strive to speak to Panel members between meetings to ensure that all their concerns are being properly understood and communicated.
- She went over her role saying she would ensure that everyone is heard and the meeting is run efficiently.
- All members had been previously provided a copy of her resume and the scope of her services on this project.
- Ms. Welch asked for the difference between the Chair and Facilitator. Ms Orenstein responded that the Facilitator:
  - Ensures that the conversation is balanced and remains focused.
  - Works for the entire panel, including one-on-one meetings.
  - Is not a mediator in the process.
  - Keep ensures that the meeting stays on schedule and runs efficiently.

  Basically the Chair introduces the topic and the facilitator facilitates the discussion. The Chair would also be the position to make decisions on certain issues and Panel suggestions that arise during the discussions.
- Mr. Scarano stated any reasonable suggestions to assist the facilitation would be reviewed and added to the scope.

2. Review of Minutes

- Mr. Tye questioned who prepared the Work Program and the schedule. He noted it appeared "capped". Mr. Scarano clarified that the Work Program was prepared in response to Lt. Governor Swift's request for a schedule at the March 28th meeting.

The program summarized the activities ahead in a narrative format. The Panel prior to each meeting will develop each issue in more detail.

- Mr. Tye also asked for a copy for the DEIS "Response to Comments. The FAA acknowledged they would provide this information at the next meeting **(noted as an IOU Item).**
- At Lt. Governor Swift's suggestion the minutes will be amended to reflect that a FEIS will be ready in approximately 12 months.
- Ms. Welch added that should be a schedule we hope to attain but it is not a commitment.
- Mr. Egan brought the frequency of meetings and the need to move through the topics quicker than proposed in the Work Program. Mr. Scarano responded that the monthly frequency was necessary to prepare for each meeting.
- The Chair anticipates the Final EIS to be published in 12 months.
- Panel concurred to tentative schedule based upon reasonable accommodating any significant issues that arise and with the understanding that if a topic runs over the scheduled time a supplementary meeting will be scheduled rather than allowing unfinished business to push the work program out in time.
- The Lt. Governor asked what the Minutes would be used for – are they part of the official record? Mr. Scarano responded by saying that the Minutes would be used to capture the important points and decisions for FAA to use to prepare the best possible EIS.
- Lt. Governor then for a clarification on a statement about the Interim SDEIS at the end of the Minutes (Page 4): re: FAA was active part of in of the Report review?
- Mr. Tye wanted to know if FAA was endorsing the conclusions of the interim SDEIS report.
- Mr. Scarano said **no** but acknowledged that the FAA probably said at the March 28th meeting that the effort went well beyond what was typically required in an EIS. He also acknowledged that the statement at the end of the March 28th Minutes was an added after the meeting after he deliberated on the subject.
- There was agreement that the idea of adding notes after the meeting should be treated differently.
- Mr. Egan requested that the minutes be amended to reflect the fact that: The FAA stated that the report went well beyond that which is required that the FAA read the report and had no arguments with it. The FAA acknowledged to amend the minutes to reflect the position noted at the March 28th meeting **(noted as an IOU Item).**
- Mr. Egan requested that the Facilitator review the Minutes prior to distribution to the Panel.

Agenda Item II - Public Process and Overview of the Issues

1. **Public Process**
   - Mr. Scarano introduced the topic and indicated the items noted on the agenda forwarded to the Panel were suggestions and by no means a requirement. He was open to all Panel suggestions.
   - Ms. Welch stated the Panel needs to hear suggestions on topics and share information with the public.

- Lt. Governor Swift said that the final product needs to have credibility – open and considerate of all views.
- Mr. Egan said the document needs to reflect traveling public in general.
- Mr. Tye said public input is what it's all about.
- Ms. Welch noted that public meetings need to be accessible by public transportation.

Discussion of public meetings topic by topic versus after several topics ensued.

- Lt. Governor Swift said that public input at the end of the process would be helpful and that people have strong views that may be changed.
- Mr. Egan felt that public meetings would not be helpful unless there were new things because the issues have already had a public forum.
- Mr. Tye said he would invite public input and that he needs much more information. He asked that Ms. Orenstein decide how public involvement should be carried out. She noted the request **(It is listed it as IOU item).**
- Rep. Cushing said that credibility was important and since not everyone has had the opportunity to provide input on issues that the Panel may frame, e.g., regionalization.
- Lt. Governor Swift talked about a web site for public input. Rep. Rushing seconded the idea and said he also favored face to face meetings.
- Mr. Tye and Ms. Welch agreed on asking the facilitator to work on the public process.
- Lt. Governor Swift and Mr. Nicosia-Rusin spoke about the need to use public meetings to inform and educate, with the idea that FAA has to decide on the issues.
- Ms. Orenstein summarized the thoughts on this subject of public process.
  - There was no unanimity on the need for public involvement.
  - Use the facilitator to work on a public process plan.
  - Public already well exposed.
- Ms. Welch said that more public involvement is needed because Interim SDEIS is very different from previous Draft EIS.
- Rep. Rushing said Interim SDEIS could be distributed to libraries, ARC and on the Net.
- Ms. Welch said that politicians needed it.
- Mr. Scarano expressed a concern that FAA would begin receiving comments from those who would obtain a copy of the report and would have to respond to those comments. This issue could be covered in a cover letter that could accompany the document.
- There was agreement to offer the Interim SDEIS (Brown Report) to communities.

Topic shifted to overview of the issues (view graph of prospectus issues was shown on screen).

- Ms. Welch introduced a list of additional potential issues (The Panel was given a copy.) was developed in conjunction with Mr. Tye and Rep. Rushing that should be addressed in the SDEIS. (See note below on same subject.)
- Re: Item I – Induced Demand , Capacity. Lt. Governor Swift said some items on the list might be covered by FAA's list. Need to work items into Work Program.

- Discussion of issues within existing agreements, e.g., Can additional traffic be handled in accordance with the parking freeze?
- Rep. Rushing would like to discuss "off line" EJ and DOT policy reference their E.J issue.

Agenda Item III - Agenda for Panel Meeting No. 2

1. **Discussion of schedule.**
   - Agreement that schedule is tentative for production of FEIS in 12 months.
   - The dates were agreed to for meetings through Meeting No. 4. They were:
     - May 31, 2000 at Volpe TSC 4:00PM - 6:30PM
     - June 22, 2000 at Volpe TSC 4:00PM - 7:00PM
     - July 26, 2000 at Volpe TSC 4:00PM - 7:00PM

     Dates for Meeting No. 5 and 6 would be revisited.
   - Mr. Scarano said FAA would integrate the primary issues presented in Ms. Welch's supplemental paper into the Work Program where FAA thought they could best fit. In preparing the issue for the next meeting we would discuss the plausibility of actually assessing the individual topics as part of the Work Program.
   - There was agreement to move aviation forecasting from meeting No. 3 into the next meeting, Meeting No.2 - Overview of the EIS.
   - Ms. Welch requested that the presentation include the differences between the DEIS and the SDEIS.
   - Mr.Nicosia-Rusin suggested that the next meeting include a description of how forecasts affect environmental impacts. He also suggested presentation of forecasted demand around a "sensitivity analysis" to determine how significant changes are as a result of those forecasts.
   - Ms. Welch spoke to the desirability of having their consultant present at the net meeting.
   - Mr. Tye expressed the need to have the most credible information.
   - Mr. Egan objected to listening to the CAC's consultant.
   - The CAC consultant may be making a presentation on forecasting at the next meeting.
   - Ms Orenstein summarized the IOU's for the next meeting.
     - Reserved
     - Reserved
     - Reserved

Prepared by V.Scarano April 30, 2000

Boston Logan International Airport
Supplemental DEIS Process

Revised AGENDA
Meeting No. 1[1]

March 28, 2000
5:15 PM - 8:00 PM

Massachusetts Transportation Building
Conference Room No. 1 on the 2nd Floor

1. **Introductions**

2. **Opening Statement**

3. **Logistics for Future Meetings**
   Frequency, Day and Time, Length of Meetings, Location, Guidelines, Facilitation

4. **Roles and Responsibilities of FAA, Panel, Massport, Public**

5. **FAA Overview of Existing Planning and DEIS Process.**

   NOTE: The following items were not discussed and deferred until the next meeting in approximately 2 weeks.

6. **General Review of the FAA Prospectus (Deferred to Meeting 1A)**
   - **Public Process: Providing Input and Disseminating Information**
   - **Issues: See Prospectus - Section V**

7. **Agenda for Next Panel Meeting. (Deferred to Meeting 1A)**

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[1] Revised Agenda effective March 28, 2000

Boston Logan International Airport
Supplemental Draft EIS (SDEIS) Process

Minutes for Panel Meeting No. 1

I. Agenda (See attached)

- The meeting convened at 5:15 PM

II. Attendees (See attached)

III. Discussion

Introductions:

- Mr. Scarano introduced himself and acknowledged several others in the audience (Derosier and Leo, Massport, Higgins, EPA, D'Amico, City of Boston Transportation, Dusseault, Borgioli, ATCT, Flieger and Harris, FAA Air Traffic.
- The Panel introductions were Lt. Gov. Jane Swift, Ray Tye, State Rep. Byron Rushing, Mary Ellen Welch, John Butler, and Dick Egan, Panel Members, as well as Ralph Nicosia-Rusin and John Silva, FAA Airports and Panel Technical Support staff

Opening Statement

- Mr. Scarano read his opening statement (See attached).
- Rep. Rushing noted that Mr. Scarano's reference to Ms. Garvey's citation omitted a phrase. (The attached statement has been annotated to include the phrase inadvertently omitted.)

Logistics for Future Meetings

- Mr. Egan suggested the meetings be held every 2 weeks to expedite.
- Lt. Gov. Swift also asked whether it would be possible to hold frequent meetings to expedite the process and what FAA anticipated as a time frame to complete the process.
- Mr. Scarano highlighted:
  - It was expected that it would take 10 – 12 months and it would be difficult to schedule meetings with an interval less than 1 per month.
  - Preparation for meetings, especially when new material was required was a factor.
  - He also highlighted that it would take at least 10 meetings.
  - The time frame also included specified time required (a) to comply with the NEPA process and (b) respond to comments provided during the public review process. The DEIS process took 2 months to respond to public comments.
- Mr. Egan asked that the process and that all meetings be recorded.
- It was accepted that minutes would be recorded and FAA would consider tape recordings for subsequent proceedings.
- Mr. Scarano noted that FAA was going to provide a Facilitator and would be available for the next meeting. Rep. Rushing noted that no future meeting should be scheduled until the Facilitator is on board. We all concurred with this point.
- Ensuing discussion about the Facilitator's role followed. It was agreed that FAA would provide the Panel with a position description.

- Acknowledging his limited awareness of many of the issues associated with this Boston Logan issue Mr. Tye asked that all information be provided in sufficient time to prepare for subsequent meetings.
- Mr. Scarano offered to meet with him or any Panel member separately and brief them on the subject. It was agreed that FAA would provide an agenda and any associated material in sufficient time to prepare for all meetings.
- Mr. Egan asked whether the Panel should establish a policy about speaking with the media.
- Mr. Scarano suggested that the Panel should consider this, but he was not adverse to media being present at meetings because it was a form of a public process.
- The panel reached a consensus that as a Panel, they would only issue statements with unanimous consent.
- Mr. Egan inquired as to the format of the meetings and the possibility of the Panel meeting in private to facilitate more expression of ideas.
- Mr. Tye commented that the dialogue held throughout this process would speak for itself.
- Rep. Rushing observed that this discussion reflected a concern about "trust" in the process and this was why a Facilitator was required.
- Mr. Scarano replied that he was uncertain about the legal requirements for a public meeting, but felt that the process would benefit more by keeping it open.

Roles and Responsibilities

- Mr. Scarano requested that the Panel discuss their views of their "roles" and responsibilities. Rep. Rushing concurred that it would be good but requested that Panel have an opportunity to return to this topic after a facilitator has been brought on board.
- Lt. Gov. Swift felt that her role had already been well defined by Ms. Garvey's letter to the Governor. Rep. Rushing concurred with the Lt. Gov.
- Mr. Egan spoke about regulations covering the adequacy of the document and whether the Panel's role should determine such, and perhaps regulations should determine the Panel's review and not the quality of the document. He also wished to know what other SDEIS had been completed elsewhere in the U.S., as well as when and how.
- Mr. Scarano replied that for the most part there were no specific regulations as to how this process should be conducted but that other airports had conducted supplemental studies and that each was unique to their specific needs. The FAA accepted his request as an IOU.
- Ms. Welch suggested that public meetings could be held at certain delegated points in the future, each using a community involvement consultant. Meetings should be held to cover more limited topics as the FAA develops the SDEIS. She stressed the point that there was a definite need to coordinate all information with the public.
- Mr. Scarano noted that these were items on "Public Input and Dissemination" and suggested the discussion be deferred until that topic was raised. **Note**: Because the Panel meeting was concluded before that agenda item was reached the topic was deferred to the next meeting. Ms. Welch's point warrants a full discussion at that time.
- All Panel members agreed to address the need for public involvement at the next meeting.

- The other item on the agenda not discussed this evening was the framing of the issues highlighted in the Prospectus attached to Ms. Garvey's letter to the Mayor and Governor. Moreover, Mr. Scarano asked whether the Panel concurred that those issues are generally the general concerns expressed by the public during the DEIS process.
- Mr. Scarano cited as an example of framing an issue for the next meeting the discussion of the new runway would have to include examining the adequacy of its length in light of the introduction of regional jet technology and growth.
- In response to questions as to whether these issues have already been resolved Mr. Silva added that information from the consultants would be given to the Panel. We view this as a starting point but anticipate the need to clarify and in some cases expand the analysis.
- Ms. Welch reiterated that independent consultant rather than one consultant might be more beneficial to the panel and FAA should consider her request. This topic was discussed at some length with others noting that the Panel had to be the best source of values and judgement.
- Ms. Welch also asked for a commitment that experts would be available to the Panel.
- Mr. Scarano responded that his opening statement contained a commitment that if the Panel felt additional analytical work was necessary the FAA would consider it. He also noted that FAA would rely on Massport to provide the resources to conduct additional work.
- Lt. Gov. Swift made the point about Massport credibility. She made the recommendation that the Panel not require resources to be spent on providing additional information if the Panel would not commit to accepting the credibility of the source of the data prior to reviewing the results.

FAA Overview of Existing Planning and DEIS Process

- This was a slide presentation by Mr. Scarano generally highlighting:
  - The planning since 1991 leading up to the decision by Massport to pursue the environmental process for a new runway.
  - How that environmental process (NEPA and MEPA) proceeded to date.
  - Where we are at the start of this SDEIS and what will occur from this point to conclude with an EIS and Record of Decision (ROD).
  - It also noted the Panel's role in that process and where it concluded.
  - The panel will help guide our response to the comments received during the formal public process on the SDEIS and before we prepare the Final EIS.
  - The point that this was strictly a Federal process.
- The Panel requested and received a copy of the slide presentation.
- There was also a specific request for a copy of the "New England Service Study" that was referred to in the Planning slide presentation. FAA accepted this as an IOU.

General Review of the FAA Prospectus – Public Process and Issues
Agenda for Next Panel Meeting

- To conclude the meeting at the 8:00 PM scheduled time all agreed to reconvene in about 2 weeks to complete discussion of both these items. The Panel agreed to send schedules to FAA for identification of a mutually convenient time and date.

- Lt. Gov. Swift asked that the FAA develop and furnish the Panel with a Work Plan for all subsequent meetings. FAA accepted this as an IOU.
- To conclude the meeting FAA provided each member with the Interim SDEIS, reminding each member to refer to the FAA opening statement regarding the FAA position on this document.
- In deliberating the issue of the report after the meeting the FAA is incorporating an additional statement for the record.

  The FAA was an active participant in reviewing the report and was instrumental in commenting and suggesting changes to its content. Notwithstanding that fact, the Panel should not assume from its content that the FAA has adopted, either in part, or as a whole document the final conclusions. In preparing the Final EIS the document will be subject to changes based on the SDEIS deliberations with the Panel and the responses received during the final public comment process.

IV. IOU's

- The following is the status of the IOU's developed at this meeting.

#	Item	By	Remarks
	IOU's Meeting #1		
1.	Copy of FAA Statement	FAA	Copy Attached
2.	Copy of Minutes for Meeting No.1.	FAA	See Above Notes
3.	Provide draft Work Plan for Mtgs.	FAA	Work in Progress
4.	Copy of NE Air Service Study	FAA	Copy Attached
5.	Copy of Slide Presentation on Planning Studies and NEPA process.	FAA	Provided at Meeting
6.	Other Examples where a "supplemental process" utilized • Where, When, How?	FAA	Work in Progress
7.	Copy of PD for Facilitator.	FAA	Work in Progress
8.	Copy of original SDEIS.	FAA	Work in Progress
9.	Provide Scheduling Information to FAA	Panel	Information Pending
10.	Schedule Meeting No. 1A to Complete Agenda	FAA	Work in Progress

The meeting concluded at 8:00 PM.

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Minutes prepared by FAA April 3, 2000[1]

[1] The minutes will be reviewed, discussed and accepted as part of the Agenda for Meeting 1A.

Subject: Boston International Airport Supplemental DEIS Process - Meeting No.1 March 28, 2000.
Opening Statement by Vincent Scarano, FAA, Airports Division, New England Region

1. COMMITMENT

When the administrator asked me to serve as the Chair for this Panel it was a matter of great personal and professional pride. I am asking you to trust me and to seek out the answers to your questions during this process from my office. In serving in her behalf I am committed to:

- Guiding the panel and ensuring that we stay focused on our purpose.
- Making this an objective process.
- Understanding all viewpoints.
- Making no decisions about the environmental process until we have completed the process.

2. PURPOSE

The Panel is asked to confront this controversial R/W project by engaging in a fair and open process with the hope of:

- Helping FAA understand all viewpoints.
- Sharing your insights.
- Discussing, evaluating, understanding and perhaps even reconciling divergent views.
- Suggesting alternative approaches.
- Providing information to the public.
- And finally counseling and guiding the decision-makers to find the right solution.

In some respects this process is more then influencing a decision on whether or not to build Runway 14-32.

- Either choice will influence decision-makers on transportation policies for Boston, the region and even the national airport system.
- Equally important is the fact that either way you create environmental choices that impacts the communities and region positively and negatively.
- Finally, decisions about Logan Airport also impact the economic development of Boston and the region.

Therefore in progressing through this process you need to think broadly about the airport issues and impacts and not just about building or not building a runway.

3. THE PROCESS

This process is about the panel working with FAA.

- The starting point for our discussion is the interim report that will be provided to the members tonight. Whether you agree or disagree with its content, it is a data source from which to develop an understanding of the information to date.[1] Please do not get hung up on what it is called.

The existence of this report does not mean that:

- The process will be limited to the existing information.
- Limited to analyses and evaluations that have been completed.
- Issues or options that warrant additional assessment or review will certainly be a consideration.
- FAA will call upon the panel's viewpoint before making a decision about performing new work.
- If there is evidence that another consultant should conduct the analytical work FAA will also take that under consideration.

This is a FAA environmental process and we are following the National Environmental Policy Act process and therefore:

- Ultimately we will prepare a supplemental DEIS that will be made available for public comment.
- The process will conclude with FAA issuing a final EIS and ROD.

4. TRUST

The lack of it has continually plagued the relationship between the community and aviation interests. Therefore, in my role as Chair I am adding one more commitment and that is:

- To ensure that trust and credibility will not become an issue jeopardizing the validity of this process.
- There may be differences of views but it will be based on honest opinions on how a fact is viewed.
- Creating an open process will be one the first subjects of tonight's meeting.
- How we provide information to the public will be a first step in creating a positive attitude on trust.

5. IN CLOSING:

For this process to be objective it is also critical that there be a balance in our thinking. It is best expressed by referring to Jane Garvey's personal statement to the Governor and Mayor on February 10th.

> "For this process to succeed, those who believe that r/w 14-32 can play a positive role in improving Logan must be prepared to help **identify the other parts of a reasonable solution**[2], to consider mitigation that can eliminate any negative impact and be prepared to consider that there may be alternate solutions that do not include a runway. Those who have opposed the runway need to clearly identify concerns and be prepared to consider that there may be an acceptable package of actions that includes the runway."

The challenge therefore is for all of us to move the process forward in the spirit of commitment and compromise.

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[1] Refer to the Minutes Mtg No.1 (page 4) - an additional comment concerning the FAA position on the Report is noted.
[2] The section in bold print was inadvertently omitted during the reading of the statement to the Panel on March 28th

SDEIS Panel Questions

Questions Submitted by Mary Ellen Welch, Logan SDEIS Panel Member

#	Comment	Response
1.	May this panel have the T.F. Green forecasts? In fact, may we have the marketing forecast and analysis from the Manchester, Worcester, Green, Pease, Portland, and Bradley airports and have a FAA presentation to compare with the Logan forecasting of market issues?	Appendix B of this Supplemental DEIS/FEIR presents all available planning forecasts and a summary of predicted environmental impacts for the regional airports that surround Logan – T.F. Green, Manchester, Hanscom and Worcester. Chapter 2 of this Supplemental DEIS/ FEIR describes Massport's marketing forecast for the Worcester Airport.
2.	Could we have an explanation of the differences between the M.P.A. delay model and the FAA delay model? The delay numbers are different. Why?	Appendix C of this Supplemental DEIS/FEIR describes measures used by the FAA and US DOT to assess delays at airports, the limitations of those measures, and the use of simulation models for estimating delays. Chapter 1 of this Supplemental DEIS/FEIR compares delay simulation estimates produced by the FAA's delay model to estimates produced by the DELAYSIM model used for the Airside Project analysis. Chapter 4 of this Supplemental DEIS/FEIR contains a discussion of the models used by the Airside analysis to estimate delays. The Logan Airside modeling includes only those delays produced by conditions at Logan, and it tallies all delays experienced by Logan traffic.
3.	What will be the projected number of all flight operations off of all runways in 2010? Could we have them listed by runway in a scenario with 14/32 in place?	This Supplemental DEIS/FEIR provides forecasts for a range of future, long-term activity levels. The projected number of flight operations by runway end and project alternative are presented in Appendix E. While the Draft EIS/EIR attributed these forecasts to 2010, the impact of the regionalization suggests that Logan will not reach these levels until 2015. A new 2015 scenario which contains a higher number of regional jets is fully analyzed in the Supplemental DEIS/FEIR
4.	Alternative 2 (no 14/32) is left out of the SDEIS as a feasible and prudent alternative. Why?	The Airside Project Draft EIS/EIR presented detailed results for all project alternatives for all forecast fleets. This Supplemental DEIS/FEIR contains detailed results for a range of fleets comparing the Preferred Alternative to the No Action Alternative. The comparison is limited in this Supplemental DEIS/FEIR in order to focus attention on the relevant analysis. In this Supplemental DEIS/FEIR the results of all Alternatives, including Alternative 2, are summarized in the Appendices: Appendix C contains operational results, Appendix E contains noise results, and Appendix F contains Air Quality results.

#	Comment	Response
5.	Reinstate alternative 2 for a comparison study so the public can understand, and the impacts of 14/32. Without the comparison there is no demonstration of those populations that would receive increased impacts if 14/32 is built.	See response to Question 4. The new analysis of the high regional jet fleet in the Supplemental DEIS includes Alternatives 1 and 2, as well as the No Action and Preferred Alternatives.
6.	PRAS is used in ISDEIS to plan for a shared noise model. PRAS has not been used by the tower most of the time.	Chapter 4 of the Supplemental DEIS/FEIR provides an evaluation of PRAS performance using existing measures for monitoring PRAS and demonstrates that the FAA has improved its performance relative to the PRAS goals. The analysis also shows that Runway 14/32 will substantially enhance the FAA Tower's ability to increase PRAS performance with respect to both annual and short-term goals. The Preferred Alternative (Alternative 1A) mitigation program includes additional reporting requirements recommended to enhance the monitoring efforts.
7.	Contours should be re-done reflecting the use of PRAS to reflect reality. PRAS needs to be re-worked with an approved minimizing overall noise before sharing noise in a system model. May we have information, analysis demonstration, and presentation of this?	The goals of the Airside Project are to reduce delay, increase the airport's efficiency and improve airfield safety in an environmentally responsible manner. In addition to reducing delays and improving efficiency, Runway 14/32 would also give the FAA air traffic controllers considerably more flexibility, which would allow them to improve achievement of PRAS goals and redirect many flights over water and away from close-in communities. The addition of Runway 14/32 would be the single most important mechanism for achieving a more equitable geographic distribution of aircraft operations. While more people are added to the more distant contours (60 and 65 DNL), the close-in populations achieve substantial relief (70 and 75 DNL). Without the proposed runway, demand at Logan will increase the airport's reliance on Runways 4 and 22, disproportionately impacting communities north and south of the airport.
8.	In 98 – 99, operations are down. Delays are down by 6%. Other airports, Detroit & Denver, both with 5 runways, have increased delays. 118% → Detroit Both have 500,000 plus operations, 43% → Denver	Depending on wind, weather and demand, delays at Logan will vary from year to year. Regardless of the annual variation in the number of delayed flights reported by the FAA, Logan remains one of the most delayed airports in the country. Logan is more severely delayed than either Detroit or Denver. For the year cited, 1999, Logan was the 7th most delayed airport, while Detroit ranked 10th and Denver was 29th. Further, Logan experiences significantly more delays per aircraft operation than Detroit or Denver. In 1999, there were 30 delayed flights at Logan for every 1000 operations, compared to 21 for Detroit and only 3 for Denver. Analysis in Chapter 4 demonstrates that if Runway 14/32 were available in 1998, Logan delays would have declined by 32 percent.

#	Comment	Response
9.	Logan is decreasing in delays on its own. Why?	Refer to Question 8.
10.	In the discussion on fleet mix, it was stated that 45% of the fleet are 9-18 seat turbo prop airplanes. This 45% of the fleet serves 10% of the total passengers. Where is the analysis of a plan to minimize the 45% mix? Generic EIR, '98; Passengers increased 3.8%; Aircraft increased 5.2%	The most recent growth trends at Logan show declines in operations with increases in passenger traffic. In 2000, total operations fell by 3.2% while passengers grew by 1.3%. The average seat size of regional/commuter turboprops (with 9-50 seats) has steadily increased. Moreover, the number of non-jets has begun to sharply decline; in 1999, the non-jets comprised only 39% of Logan operations. In the Supplemental DEIS/ FEIR, a new "High Regional Jet" fleet is analyzed for 2015. In this fleet, turboprops account for only 11% of the fleet while regional jets account for 32%.
11.	May we see demand management techniques from other airports as an approach to curb this unbalanced growth? And could it be done before a new runway is decided on to test it?	Section 3.5.2 of the Supplemental DEIS includes a summary of demand management techniques that have been proposed or implemented at Logan and other airports. Due to the increased congestion that developed at New York's LaGuardia Airport after the AIR-21 legislation last year, the FAA is developing a new demand management policy that will be implemented at LGA in September 2001, and which will provide guidance for other US airports such as Logan. It is important to recognize that demand management (e.g. Peak Period Pricing) and proposed Runway 14/32 address very different delay problems at Logan. Unidirectional 14/32 is designed to reduce delays due to Northwest Winds. It does not represent an increase in Logan's total capacity; rather, it helps Logan maintain capacity when the winds are from the Northwest. On the other hand, Peak Period Pricing is a demand management technique that addresses the problem of airline overscheduling. Massport is committed to implementing a monitoring program, and, if demand conditions warrant, a Peak Period Pricing Program. Other demand management techniques, such as slots or operational caps, are not within the purview of Massport and therefore do not represent realistic alternatives.
12.	'98 comparison for a base seems unfair; 87% of the fleet was Stage 3. Reduction would be 3db if it had been fully compliant. Would this be or make a difference in comparing '98 contours to a future with all stage 3s? Could you program the INM to produce a contour using '98 fleet without stage 2s? This would seem to be fairer for future contour projections for E.J.	Throughout the Airside documents, the relevant comparison for environmental and delay results is Action to No Action within the same fleet. Comparisons across years can be informative, but are not useful for deciding which project alternatives are appropriate for achieving delay reduction benefits, nor what their relative environmental impacts are.

#	Comment	Response
13.	How will the new terminal developments affect airspace capacity, new gates, increase of traffic impacts? Will they affect fleet mix and operations?	These modest changes are expected to increase operating efficiency and level of service somewhat, but to have no impact on passenger levels, ground traffic, fleet mix or number of operations. The terminal developments envision a few additional gates, but a reduction in aircraft parking positions.
14.	How will ground access improvements affect future passenger levels, e.g. Big Dig, South Boston Waterfront.	Major ground access improvements from Boston to an alternative airport or to a major air market, such as New York, are the types of ground access improvements that could impact Logan passenger levels. The Airside analysis takes into account improved access to Providence Airport via rail and high-speed rail access to New York (Amtrak's Acela service). Both of these ground access improvements have a dampening effect on the projected growth in Logan demand. Other ground access improvements have an impact on mode choice to and from the airport, but not impact the decision to use Logan.
15.	Pg. 4-1, 4th bullet. Why did 1999 29M low fleet mix change regarding % of jet operations that would utilize 14/32?	With the improvements of the Preferred Alternative, 52,000 additional jet operations occur over water compared to the No Action Alternative.
16.	The DEIS stated: "75,000 operations (52,000 jet ops.)." The ISDEIS states that out of the 75,000 ops there will be "32,000 jet operations" using 14/32. What changed and why?	See response to Question 15.
17.	Alternative 2 seems to offer an additional 45,000 hours of delay reduction compared to Alternative 1A in the DEIS, Table 4, pg. 6-3, High Fleet Scenario. Why? How does the forecasting address this? There is a need for additional analysis and presentation.	In high fleets, both Peak Period Pricing and the runway result in significant reductions in delay. In low fleets, Peak Period Pricing has almost no effect on delays because airline over-scheduling is not a primary cause of delay in these scenarios. Massport is committed to Peak Period Pricing, along with the runway and taxiway improvements, if Logan begins to suffer from over-scheduling.
18.	When you do forecasting what % of the delays are due to: longer aircraft separation; schedule demand / over-scheduling; air traffic control procedures; noise abatement rules; other restrictions, e.g. weather.	The proposed Airside Improvements address those delays that Massport can expect to reduce at Logan. Figure 4.6-3 of the Supplemental DEIS compares the breakdown of delays during VFR and IFR weather conditions. It also demonstrates the effectiveness of the Preferred Alternative in reducing VFR delays. Reduced Minimums also provide a small reduction in IFR delays, but in general there is little that can be done at Logan to reduce these delays. Figure 4.6-1 shows the VFR delays for 1998 by wind direction, and the dramatic benefit that Runway 14/32 would have on northwest wind delays. Similar data for the new 37.5M High Regional Jet Fleet is presented in Figures 4.7-4 and 4.7-5. Delays due to airline over-scheduling can be estimated by comparing Alternatives 2 and 4 in Table 4.5-3 of the Draft EIS/EIR, and in Table 4.7-2 of the Supplemental DEIS/FEIR. Air

#	Comment	Response
		traffic control separations and procedures were developed by the FAA to maintain safe aircraft operations, and cannot be modified by Massport.
19.	How do these compare to NW wind situation?	Refer to response to Question 18.
20.	What % of the "wake turbulence separation" restriction decreased capacity and increased delays?	In August 1996, the FAA changed the aircraft weight categories used to determine wake vortex separations, and increased the separation between B757s and Small (mostly turboprop) aircraft. With Logan's fleet mix at the time, this resulted in a shift of 12% of Logan's operations from the Large category to the Small category. This increased the approach separations of these aircraft by 1 to 1.5 miles behind Large or B757 aircraft. When Logan is able to use three runways, the Small aircraft are normally assigned to a different landing runway than the jets, so the effect was most important during northwest winds and under IFR conditions. Since 1995/96, the number of Small aircraft at Logan has declined as airlines have replaced them with larger and heavier equipment.
21.	(From Feb. 1999, Draft EIS/EIR, pg. 4-33) (45,000 less hours of delay with Alt. 2)	Refer to response to Question 17.
22.	Could we have a graphic showing the kinds of delays compared to each other, e.g., NW winds vs. other weather delays vs. over-scheduling vs. other airport delays causing Logan delays?	Refer to response to Question 18.
23.	Analysis of all existing and potential delay-reducing FAA air traffic demand management and flight procedures.	The FAA is always studying new procedures to reduce delays. However, there is no technique or management tool that replaces the need for Runway 14/32. The proposed runway is designed to reduce delays in Northwest wind conditions when Logan drops from a three-runway configuration to a two-runway configuration, and occasionally, in severe winds, to a one-runway configuration. A summary of ongoing FAA measures to reduce delays nationwide is presented in Chapter 1 of this Supplemental DEIS/FEIR.
24.	Comparison analysis of same-size airports with similar wind and weather delay-creating factors.	Chapter 1 of this Supplemental DEIS/FEIR compares reported delays at Logan to delays at other similarly sized airports, including northeast airports subject to similar weather conditions.
25.	Comprehensive analysis on runway length and acknowledged intent to use 5000' runway from all airlines using Logan.	Research by the FAA consultant indicates that the proposed 5,000-foot runway is adequate for all turbo-prop, most general aviation, and most regional jet types forecast to operate at Logan. The report of the FAA consultant is contained in Appendix C of this Supplemental DEIS/FEIR.

#	Comment	Response
26.	When you're doing the forecasting, how much regionalization do you include?	To account for the uncertainty associated with any forecasting effort, the Airside analysis considered a range of future passenger and aircraft operation levels. One of the factors that cause this variation is the success of regionalization. In this Supplemental DEIS/FEIR, Massport extended its forecast of 37 million passengers from 2010 to 2015 to reflect the observed impact of regionalization on Logan's growth trend. Chapter 2 of this Supplemental DEIS/FEIR describes the impacts of regionalization on Logan's future demand levels.
27.	What are your methods for dealing with uncertainties, e.g. In Chapter 4 delays, MPA and FAA admit their forecasts are inflated (pages 4-7 and 4-8) as much as 10% above actual '99 operations and off by 2.5 of passengers forecasted for 2010. These forecasts are the same ones used to compare the alternatives and push 14/32.	To account for the uncertainty associated with forecasts, the Airside analysis considered a range of future passenger levels from 29 million (expected to be reached in 2003) to 37.5 million (expected to be reached in 2015), and 45 million (expected to be reached around 2024). Furthermore, the results of the Airside analysis indicate that the delay reduction benefits of the Preferred Alternative are not dependent upon the forecast passenger levels. On the contrary, if the elements of the Preferred Alternative had been available to Logan users in 1998, annual delays hours would have been reduced by 32 percent (Refer to Chapter 4 of this Supplemental DEIS/FEIR).
28.	Please explain, on pg. 4-8, 1st paragraph: "In terms of the hourly demand profile, the 1998 profile has significantly less peaking than the 29M forecasted fleets. The late afternoon peak period in '98 has fewer operations and is shorter than the peaks in the near term forecasts. The '98 demand is "flatter" and produces fewer delays than the 29M high and low profiles.	The shape of Logan's demand profile (hourly arrivals and departures) has an impact on delays. Higher and longer peak periods of aircraft demand result in more delays. Chapter 4 of this Supplemental DEIS/FEIR provides a detailed description of the changes in Logan's demand profile.
29.	Pg. 4-11: During '99 Logan had moderate 20% growth in passengers despite a 2.5% decline in operations. Pg. 18, 2nd paragraph: "In '99 there was a 1.9% increase in passengers." Why is this? Why the difference?	In 1999, Logan passengers increased by 2% over the 1998 passenger level (Note that the 20% reported in the comment and 1.9% on page 4-18 of the Interim Supplemental DEIS distributed to the Panel are typographic errors). Changes in passenger demand are largely a function of changes in economic conditions. As economic conditions improve, passenger demand increases. Changes in the number of aircraft operations can be caused by competitive factors and carrier fleet decisions, as well as other factors. It is generally true in the air transportation industry that the growth in passenger demand outpaces the growth in operations. This is because growth in passenger demand is accommodated through higher load factors or larger aircraft.

#	Comment	Response
30.	If operation levels are rising minimally and passenger levels are declining, thereby impacting forecasts, why the rush for a new runway?	The FAA consistently rates Logan Airport as one of the most delay-prone airports in the United States. The proposed unidirectional Runway 14/32 is designed to reduce delays caused by Northwest winds. Runway 14/32 has no impact on delays that result from increases or decreases in airline schedules. Despite the reduction in aircraft operations in 1999 and 2000, Logan was the 7th most delayed US airport in both years. Please refer to Chapter 1 of this Supplemental DEIS/FEIR for a discussion of delays caused by Northwest winds.
31.	How do you factor into the air passenger predictions for Logan the fact that it is full? Terminals are full, curbs are full, and it's hard to park or get a cab. How do you determine capacity with passenger forecasting?	The ESPR, which Massport files annually with MEPA, confirms Logan's ability to accommodate increases in passenger demand for the foreseeable future. The ESPR describes on going and proposed improvements at Logan in terms of terminals, parking, ground access, etc. The Airside Project utilized a wide range of activity levels, including current and future levels. The Preferred Alternative provides significant delay reduction benefits at current and all future activity levels. See Chapter 4 of this Supplemental DEIS/FEIR
32.	Logan is 11th in operations, 17th in passengers, 18th in cargo. Is this why the delay--too many small planes?	There are a number of factors that cause delay, including wind, weather, fleet mix and demand. Please refer to Chapter 1 of this Supplemental DEIS/FEIR for a discussion of the specific causes of delay at Logan and the proposed improvements for addressing various sources of delay.
33.	With regional airports, high-speed rail, and videoconferences: "It is possible that Logan would not realize the 37.5M passenger level until some time beyond 2010. In fact, if Logan continues on its current growth path, it is likely to achieve close to 34M passengers in 2010." So, why does MPA continue to use 37.5M and 45M passenger levels as representing "reasonable long-term planning levels for use in evaluating the relative merits of alternative airside improvements at Logan"?	Please refer to Chapter 2 of the Supplemental DEIS/ FEIR for a discussion of the impact of regionalization on demand for Logan. This Chapter describes how the regional airports and high speed rail dampen the rate of growth for Logan, delaying until 2015 and 2024 when Logan is expected to reach 37.5 million and 45 million passengers, respectively. The 37.5M and 45M passenger forecasts still remain valid long-term planning projections for Logan. Furthermore, a projected 2010 passenger level of 34 million is bounded by the Airside Planning forecasts of 29M, 37.5M and 45M. Also, the delay analysis clearly demonstrates that the Preferred Alternative would have provided significant delay reduction benefits in 1998 if Runway 14/32 were in place (see Chapter 4).
34.	Pg. 6-20: The contours on 29M Low Fleet forecasts assume a "low level of commuter operations in the mix." But Logan has 45% of its fleet as commuters. How do you explain this?	The percentage of non-jet aircraft in the 29M Low Fleet, 41.8%, is very similar to current conditions at Logan. In 1999, non-jets accounted for 39% of all Logan aircraft operations.

#	Comment	Response
35.	How do you explain discrepancies they found in forecasts and assumptions discussed on pg. 6-30?	Chapter 6 of this Supplemental DEIS/FEIR explains differences between Logan's actual 1998 activity and fleet mix and the forecast 29M Low scenario. The differences do not imply that the 29M Low scenario is unrepresentative of a future scenario at Logan, nor does it imply that it is not instructive for analyzing proposed improvement projects.
36.	It is necessary to have a full air quality analysis on income and minority communities as a basis for projecting future impacts if 14/32 is built?	Refer to Chapter 6 of this Supplemental DEIS/FEIR for a detailed discussion of the Environmental Justice analysis. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the Final U.S. Department of Transportation Order, and environmental justice guidelines from the Council on Environmental Quality. In addition, the analysis of low-income populations was expanded to include households at 150 percent of the poverty level. Even at this expanded poverty threshold the Preferred Alternative does not result in any high and adverse disproportionate impacts to low-income and minority populations.
37.	How do you justify 14/32 as an over-the-water runway when Figure 6.2, pg. 1-4 shows Runway 14/32 actual flight tracks over southwest Boston and south-shore communities after a short stretch of harbor? Flying over Quincy, Dorchester, Mattapan, Hull, Hingham, and Milton are not all over the water.	All jet aircraft departing from Runway 14 will follow noise abatement departure tracks and will be above 6,000 ft when passing over Hull and other South Shore communities. Aircraft on straight-in arrival tracks to the Runway 32 end fly over water longer before overflying communities than aircraft arriving to any other runway end, except Runway 33.
38.	There needs to be a section about land use and social impacts to the Fan Pier and South Boston waterfront development by increased use of Runway 27 if Runway 14/32 is built. 60-65DNL encompasses that area and the 65-70 DNL contour extends into Southie if 14/32 happens.	The 60-65 DNL contour for the Preferred Alternative for the 29M Low scenario, which produces the largest Airside contours, falls within the 1999 actual 60-65 DNL contour over South Boston. Therefore Runway 14/32 and any increased use of Runway 27 do not cause any additional land use or social impacts beyond those that exist today.
39.	How can it be stated (pg. 6-1) that "No one residing in the area exposed to noise above 65 DNL is projected to experience an increase in levels in excess of 1.5dB due to the preferred alternative"? On the same page it states that for 29M. The forecasts show 380 more people will be included in the new 65 DNL contour with the preferred alternative over the "no action" and in the 37.5M High forecast 508 more people will be in the 65 DNL contour (Figure 6.2-5, pg. 6-20, pg. 6-29.)	The reference to the bullet on page 6-1 of the Interim Supplemental Draft EIS ("Brown Book") that was distributed to the Panel refers to the 29M Low fleet. For the 29M Low fleet, the noise increase experienced by these populations as a result of the Preferred Alternative is less than 1.5 dB. This Supplemental DEIS/FEIR clarifies that this point refers to the 29M Low fleet.

#	Comment	Response
40.	Table 6.2-9 shows increased "newly included" populations impacted by an increase of 1.5 dB inside the 65-70 DNL contour. That equals 3,905. Explain this please.	See response to Question 39.
41.	There is no discussion of new terminal developments and how they will impact airspace capacity. Will there be new gates added? Will there be an increase of traffic? What are the impacts?	The delay and environmental impacts of current and future aircraft operations levels are fully reflected in the Airside Project. The 1999 ESPR discusses all landside projects, including terminals and ground access, and Massport's planning forecasts, which are consistent with the forecasts analyzed in the Airside Project.
42.	Pg. 3-1: What does the FAA plan to do about its agreement with the City of Boston not to reduce the minimums.	The FAA did not enter into an agreement with the City of Boston. The agreement between the FAA and Massport stipulates that any modification of the existing approach minimums requires completion of an EIS, even though the setting of minimums is otherwise categorically excluded from the EIS process. Incorporating the analysis of reducing the minimums honors the FAA's agreement with the Massport.
43.	As Green, Manchester, Portland, and Worcester mature, can't those passengers be better served with direct flights without coming to Logan?	Chapter 2 of this Supplemental DEIS/FEIR discusses in detail the passengers that the regional airports can be expected to "recapture" from Logan.
44.	Isn't San Francisco proposing a ban of aircraft smaller than 30 seats (to reduce airside congestion), working with United to use larger planes, and moving commuters to surrounding regional airports? Can't we do that too?	San Francisco withdrew this proposal. Logan serves as a gateway to the national and international air transportation systems for small, remote New England communities that do not generate enough demand to support direct flights to other destinations. Passengers traveling between these communities and Logan on commuter airlines rely on connecting services at Logan to reach their final destination. The regional airports are not a good substitute for Logan in this regard because they lack the demand to support the breadth of services available at Logan.
45.	What are the factors that lead to a "high" or "low" fleet scenario? How can we get a "very low" scenario?	The number of operations and size of aircraft are what separate the high and low fleets. For a forecast passenger level, a "High" scenario assumes a high proportion of small aircraft in the Logan fleet. By comparison, the "Low" scenario for the same passenger level assumes a smaller proportion of small aircraft and thus fewer operations. Through market forces Logan's current fleet is similar to a "Low" scenario. In fact, in 1999 and 2000, Logan's annual aircraft operations had declined due to reductions in regional carrier turboprop flights. If Logan should move towards a high fleet, the proposed Peak Period Pricing Monitoring System will identify that and the necessary action to deter delays due to the over scheduling of a high fleet.

#	Comment	Response
46.	What is the trade-off between reliability and number of aircraft movements per hour? What proportion of time can Logan handle 120 movements per hour? 100? 80? 60? 45?	Logan's highest capacity is 120 movements per hour. The objective of this Supplemental DEIS/FEIR is to maintain this capacity in all operating directions, thereby improving the reliability of the airport. Artificially constraining airport capacity is not a project goal.
47.	What is the private sector mechanism that regulates over-scheduling? Just what is the level that convinces airlines to increase the size of aircraft and reduce the frequency? How do European airports handle this issue? Other US airports? Why can't FAA and MPA aggressively work with the airlines to reduce over scheduling and increase the number of large planes used at Logan?	A mechanism for managing over-scheduling is Peak Period Pricing. The pricing necessary to convince an airline to increase aircraft size or reduce frequency varies with a number of factors including the mix of business and leisure passengers, the number of passengers, existing aircraft size, and the opportunity cost of doing something else with the aircraft. Some European airports have a form of Peak Period Pricing, while others have some form of hourly or daily caps. Massport is committed to implementing Peak Period Pricing if over-scheduling becomes a contributor to delay and has designed a monitoring system to detect over-scheduling.
48.	What are the possible actions to divert passengers from Logan?	The regionalization of aviation in New England is currently underway. As a result of capital investment, service expansion at regional airports and coordinated efforts between Massport and other Federal, state and local agencies, eight out of ten new passengers in New England have used regional airports since 1996. Refer to Chapter 2 of this Supplemental DEIS/ FEIR for a discussion of a new study effort by the New England Region of the FAA and Massport that will identify new efforts to further regionalization.
49.	What is the maximum number of passengers Logan can handle? Both of the above (47 and 48) must have thorough analysis.	The maximum number of passengers that Logan can handle is an indeterminate number. As a service facility, the key measure is the level of service (e.g. queue length and delays) that is experienced by aircraft, passengers and vehicles flowing through the airport complex. These depend on many factors that are constantly changing, such as weather, types of users, etc. Massport's Airside and Landside improvements are aimed at providing a higher level of service for all users, in an environmentally responsible manner.
50.	There is a need to analyze a reasonable fleet mix, which would get the % of the passengers using 15% or 20% of the airside capacity using small regional jets of 30, 50 or 70 passengers. How do we get a more reasonable fleet mix?	This Supplemental DEIS/FEIR analyzes a new fleet that includes a significant number of 30-70 seat regional jets and a small proportion of turbo-prop aircraft. See Chapters 4 and 6 for a discussion of the delays and environmental impacts associated with this new High RJ Fleet. Also see response to question 47.
51.	There should be an analysis of a low reasonable fleet with only 15% of the operations in small aircraft and regional jets and a high reasonable fleet of 22% in order to show the impact that a different fleet mix might have. Back to a previous question,	Refer to Question 50. The broad range of fleets analyzed in the Airside Project clearly indicates that as operation levels increase, delays also increase. The analysis shows the delay associated with Action and No Action for 14 different aircraft operations levels. These are: 1993 historic operations; 1998 actual operations;

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	this hopefully would show how reliable the different levels of movement are, e.g. 120 movements an hour; 110, 100, 90, 80 or 70 per hour. We could see what delay happens at what movement rate.	Alternatives 1A and 4 for 29M Low, 29 High, 37M Low, 37M High, 37M RJ, and 45M High; and Alternatives 1, 2 and 3 for 29M Low, 29M High, 37M Low, 37M High, 37M RJ and 45M High. Note that alternatives with Peak Period Pricing (Alts. 1,2,3) result in a lower number of operations than alternatives without Peak Period Pricing (1A and 4) due to scheduled flight cancellations.
52.	There needs to be a different set of figures to be developed as an alternative to the one the MPA uses to illustrate "High Fleet" and "Low Fleet." Their "High" is unreasonable. Their low is still excessive. There has to be a description of the relationship of schedule and fleet mix to reliability. The MPA definition of over-scheduling is too high. Information about how the runways are used and how it affects delay would be more helpful. The definition of over-scheduling could then be relaxed to real information.	Please refer to responses to Questions 50 and 51. The Massport forecasts represent reasonable near and long-term projections of passenger growth and are consistent with the FAA's Terminal Area Forecasts. The future "High" and "Low" fleet scenarios are based on real information regarding the aircraft orders and options of airlines, and assumptions, based on historic and current conditions, of how many regional airlines will operate at Logan. This approach has produced a broad range of future aircraft operation levels for accommodating the projected levels of Logan passenger demand. The future scenarios assume that the rate of increase in aircraft operations is lower than the rate of passenger growth. This is consistent with recent trends and assumes that passenger load factors increase over time. The long-term fleet scenarios assume operations increase by 0.8% to 1.6% average annual growth over Logan's CY 2000 operations. These forecast growth rates are significantly lower than Logan's historic long-term operations growth, which is 2.4% average annual growth between 1980 and 2000. The threshold used to define overscheduling was 110 operations per hour, which is below Logan's normal operating capacity and is reasonable. For information on how the runways are used and how delays at Logan accrue, refer to Chapter 1 of this Supplemental DEIS/FEIR.
53.	The MPA approach analyzes two alternatives, with and without a new runway, using their definition of "high" and "low" fleets. Both show delay returning and exceeding present delay with or without the runway. We need to have different analysis to show how regionalization would answer this issue in a better way using different descriptions of "high" and "low" as described in a previous question as "reasonable" high or low.	Please refer to responses to Questions 26, 27, 33, 50,51, and 54.

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54.	If the goal is to achieve a more reliable regional transportation system, the analysis is not "clear weather" or "low wind" but all delay. If the reasonable high/low alternatives with and without an added runway are analyzed, the effectiveness of a new runway could change. The runway would have fewer numbers of planes and the issue of regional jets not willing to use a 5000' runway (as in Atlanta and Philadelphia) would be a part of the study. This analysis is necessary.	The Airside Project analyzes the runway's benefit at 14 aircraft operation levels, including the level achieved in 1998. Regardless of the demand level, the runway provides significant delay reduction because it fixes an inadequate runway system—the lack of a third runway in northwest wind conditions (See Chapter 1 of this Supplemental DEIS/FEIR). By serving the largest concentration of population in New England, Logan Airport plays a critical role in the region's air transportation network. The purpose of the Airside Improvements Project is to reduce delays at Logan that can be alleviated by improving the efficiency and reliability of the airfield. These include delays due to northwest winds, and, when it is a problem, delays caused by airline overscheduling. Reducing these sources of delay at Logan improves Logan's reliability and improves the region's airport system (See Chapter 2 of this Supplemental DEIS/FEIR). The FAA conducted a review of the utility of a 5,000-ft runway at Logan and concluded that the proposed runway could accommodate all turboprops and most of the regional jet types expected to use Logan Airport (See Appendix C of this Supplemental DEIS/FEIR.)
55.	Analysis should be done to show how a new "reasonable" fleet mix would affect total delay and how presumably it would cause a significant reduction in total noise exposure. When there are delays planes are put off to the extent that more fly at night where the noise is louder.	It is correct that delays often push aircraft into the night when aircraft noise is more annoying to people in surrounding communities. By reducing delays that occur during northwest winds, the proposed runway will keep daytime flights from being delayed into the night during these operating conditions. A new fleet using a higher proportion of regional jets, the 37.5M High RJ fleet, was analyzed in the Supplemental DEIS/ FEIR. See Chapter 4 for the operational impacts of the new High RJ fleet and Chapter 6 for the environmental impacts of the new fleet.
56.	If the number of 19-seat aircraft is reduced (which would be necessary if Logan accommodates more passengers), the effectiveness of both 14/32 and the centerfield taxiway changes. This needs to be analyzed.	A comparison of the delay reduction results for the High and the Low fleets, shows that the proposed runway is effective even with the lower numbers of 19-seat aircraft operations in the Low fleet scenarios. The FAA's review of the length of the 5,000-ft runway concludes that the proposed runway would be able to accommodate regional jets. (See Appendix C of this Supplemental DEIS/FEIR.) Further, the analysis of the new 37.5M High RJ fleet, which reflects the FAA's RJ utilization assumptions, indicates that the runway is effective even if airlines reduce the number of 19-seat aircraft and replace them with larger, 30- to 50-seat regional jets. (See Chapter 4 of this Supplemental DEIS/FEIR.) The Centerfield Taxiway will serve all types of aircraft

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		operating at Logan, to reduce taxiing delays and thereby environmental impacts.
57.	Again to the centerfield taxiway–how much delay would exist if Logan had 100 movements per hour? There should be some analysis of the sensitivity of delay to the number of operations, and the relationship of the number of operations to aircraft size.	The Airside Project examined a broad range of impacts associated with 14 different levels of aircraft operations, including two historic levels (1993 and 1998). The objective of the analysis was to determine operational/delay benefits and associated environmental effects for the spectrum of likely future demand conditions at Logan. Demand levels associated with artificial caps on hourly operation levels that are well below the airport's VFR capacity were not examined. The centerfield taxiway provides safety and efficiency benefits at all operation levels. The analysis of taxiway delays in the Draft EIS/EIR shows that the centerfield taxiway and the other taxiway improvements provide 15,000 to 22,000 hours of taxiway delay across the range of future operations forecasts.
58.	The safety risks of the centerfield taxiway need to be considered. The taxiway could be mistaken for a runway and the turns could be potential hazards. These issues need analysis.	Practically all major airports with parallel runways, like Runways 4 and 22 at Logan Airport, also have parallel taxiways. Runway markings, air traffic control procedures, and electronic approach guidance during poor visibility make mistaking a runway for a taxiway highly improbable. The Centerfield Taxiway will satisfy all applicable FAA safety regulations regarding its design, construction, lighting, marking, signage, and use.
59.	The queue issue needs to be evaluated as well. If a change in management pushback happened, only a limited number of aircraft could be in a line at one time. There has been a question about queue before as it applies to existing conditions and how this would relate to a new taxiway.	The Centerfield Taxiway is intended to reduce queues and taxiway delays. It will prevent aircraft queues in the northern sector of the airfield waiting to cross runway 4L/22R, and will reduce delays on Taxiway November by allowing aircraft that require Runway 22L for takeoff to bypass the queue for 22R. It will also provide an alternate taxipath when pushbacks interfere with operations on Taxiways Alpha & Kilo.
58.	Holding peak pricing in abeyance until over-scheduling occurs needs to be reevaluated. This would allow a counter-productive pattern to occur and grow before it is addressed by starting peak pricing. There needs to be an evaluation of the over-scheduling today and how peak price would address it and include exemptions and/or discounts for airlines who need it or just adjust their schedules.	The Airside Project has performed a comprehensive analysis of Peak Period Pricing. The analysis presented in Chapter 4 of this Supplemental DEIS/FEIR addresses the issues raised in this comment. To deter over-scheduling without a pre-emptive Peak Period Pricing Program, Massport has designed a schedule monitoring program which is also described in Chapter 4 of this Supplemental DEIS/FEIR .
59.	In a recent article, two Virginia Tech engineers working under the auspices of the FAA devised a new approach in which air traffic controllers could alleviate time delays in a big way. With the involvement of U. of VA, U. of CA, U. of MD, and MIT, they	Comment noted. There are many excellent and interesting delay related studies and analyses underway. Massport's delay reduction program addresses specific delays at Logan that are caused by the lack of a third available runway in northwest winds. This source of delay at Logan cannot be remedied by a national

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	developed aviation related computer models to improve airport capacity and reduce delays. Their paper, "Integration of Simulator Models to Evaluate the National Airspace System", describes the bottleneck in the air traffic control system and how to solve it. They developed 3-computer software models that help controllers sequence arrivals and departures in a better way, which reduce time connected with taxiway operations. Please present this approach and how it would address the delay issues.	program focused on the Airspace System. Therefore discussion of the referenced analysis would not be germane to Logan Airside Program. This specific comment was addressed by the FAA during the August 22, 2000 SDEIS Panel meeting. Please refer to the SDEIS Panel meeting minutes in Appendix A of this Supplemental DEIS/FEIR.
60.	Writing in the N.Y. Times on August 13th, Joe Sharkey used a quote from Dante to describe the air traffic gridlock: "Abandon hope all ye who enter here." There were 44,401 delays in July 2000, about the same as July 1999. But July 1998 had 25,672. And these don't count cancelled flights. The thesis of the article is that airlines enjoy record revenues now with fuller planes and have no incentive to do more than pay lip service to complaints. And Congress, under pressure from industry lobbying, didn't act to resolve the issue. Please discuss ways to address this gridlock and over scheduling by airlines.	Massport's Airside Delay Reduction Program is designed to alleviate delays that are specific to Logan, causing Logan passengers to suffer unnecessarily. It does so by offering a full complement of remedies designed to reduce delays associated with an inefficient taxiway system, artificially high landing minimums, northwest winds and over-scheduling.
61.	An air traffic controller from Foster City, CA, recently wrote that "trying to cram more planes into a specific Airspace won't solve delays, it will make them worse." He says bigger planes, especially the huge new aircraft, will make it even worse. He also blames the industry for basing their scheduling on profit motives. He says building more runways at SFO, OAK and SJC will not manufacture more airspace. Please explain this issue and show how it relates to the issue at Logan.	The Logan Airside improvements are not intended to solve the nation's delay problem. Likewise, national delay reduction measures that improve airspace flow will not have any impact on delays specific to Logan, such as northwest wind delays. Massport is proposing improvements at Logan that will alleviate delays caused by inefficiencies in the airport's runway and taxiway system, and by overscheduling if this becomes a problem. The Airside analysis presented in Chapter 4 of the Draft EIS/EIR and Chapter 4 of this Supplemental DEIS/FEIR demonstrates that the proposed runway will virtually eliminate VFR delays that occur because the airport lacks a third available runway in northwest wind conditions.
62.	Since delay is a "given" at all major airports. How much delay is "acceptable" to the MPA?	There are certain delays that Massport can not solve (i.e., aircraft mechanical problems, snow storms, etc.) or are outside Massport's purview (i.e., delays at other airports, airspace delays, etc.). Massport supports efforts to solve these delays but is forced by circumstances to accept them. The delays that are "unacceptable" to Massport are delays that Massport can do something about, such as delays caused by Northwest Winds, airline over-

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		scheduling, an inefficient taxiway system, and artificially high approach minimums. The Airside Delay Reduction Program is designed to alleviate these delays in an environmentally beneficial manner. See Chapter 4 and Appendix C of this Supplemental DEIS/FEIR for the amount of delays at Logan that Massport can eliminate with Airside improvements.
63.	How much delay reduction does 14/32 give in non-NW wind conditions and describe how it would work?	Even without northwest winds, unidirectional 14/32 does provide modest delay reduction benefits. In certain other wind conditions, Runway 14/32 can provide a more efficient configuration than those otherwise available. As shown in Figure 4.6-1 of the Supplemental DEIS/FEIR for 1998, Runway 14/32 would have reduced northwest wind VFR delays by 31,200 hours (87%) from 35,900 hours to 4,700; for the other directions combined, it would have reduced VFR delays by 4,600 hours from 16,200 to 11,600 hours.
64.	Can the FAA produce written confirmation to the panel that all airlines flying regional jets will use 14/32 for arrivals and departures?	The FAA does not control decisions made by individual pilots on whether or not to accept a runway. Every landing is unique, in terms of wind, weather, temperature, aircraft loading, pilot experience, and other factors. A study done by the FAA following the SDEIS Panel process suggests that the majority of regional jets will utilize Runway 14/32. See Appendix C of this Supplemental DEIS/FEIR.
65.	From the impacted communities on the South Shore is this concern: They project that the extended axis of 14/32 would intersect with the axis of 15/33. Please detail any plan to manage this conflict. Where will the traffic be routed? Until this is done, one cannot determine the environmental impacts, other than by conjecture	Runway 14/32 is oriented at an angle of 8.5 degrees toward Runway 15R/33L, so the extended centerlines intersect about 5 nm from the runway thresholds. Aircraft approaches to Runway 32 will be conducted along a path parallel to Runway 33L until the aircraft is about ¾ nm from the threshold, where the pilot would make a slight left turn to line up with the runway centerline. Thus the two final approach courses are parallel and separated by about 4,000 feet.
66.	Please evaluate an alternative VFR approach to 33L. It would involve placing a glide slope beacon on Thompson Island, the arrivals coming in over the harbor mouth then guided by the new beacon, making a right turn into the final approach to 33. This would be a true "over the water" approach.	Such a procedure is theoretically possible, and could be better developed using Long Island, or without any additional navaids for aircraft equipped with RNAV (e.g. GPS) and FMS (Flight Management Systems). However, it would involve a sharp right turn (about 45 degrees) at a low altitude approximately two miles from Runway 33L.This would be a very unsettling and unsafe maneuver for large passenger jets, and would be disapproved by the FAA and refused by airline pilots. Commercial turbojets require a stabilized straight approach during the final 5 miles for normal operations.
67.	Please provide and explain all the runway combinations that would be used if 14/32 is put in place. Along with this please show a traffic management plan showing what pilots and controllers will do for approaches,	The runway combinations using Runway 14/32 are presented in Appendix H of the Draft EIS/EIR. The flight tracks for arrivals to and departures from Runway 14/32 are shown in Chapter 5 of the Supplemental DEIS. Most Runway 32 approaches would be conducted in

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	missed approaches and departures out to at least 15 DME for each runway combination.	VFR conditions, but simultaneous dependent approaches to 32 and 33L are anticipated. The FAA will have to develop the missed approach procedure for Runway 32, but it will likely be a turn to the south similar to that for Runway 22L. The missed approach point would be over the harbor at an altitude of 400 feet or higher.
68.	Please present a Community (sic) in 1999 (2000 would be better!) and in 2010 for each planning alternative. These should be presented both graphically and in the form of statistical tables. Arrivals and departures should be detailed separately. All affected towns within Rt. 128 should (sic) as well as S. Shore towns down to Scituate and Norwell. If towns are affected differently in their different parts, with one getting departures for instance, the parts should be broken out separately on the tables, which compare alternative future scenarios.	Appendix E of the Airside Project Draft EIS/EIR included detailed operations data by runway end for each fleet and each alternative. Data was listed separately for arrivals and departures, and separately for jet aircraft and non-jet aircraft. Appendix C of this Supplemental DEIS/FEIR contains the same detailed operations data for the new 2015 High RJ fleet.
69.	Please show data which would have approaches and departures in "over the water" designs and have planes no closer than 1.25 miles to mainland areas out to a distance of 10 DME. If claims are made that fewer people will be affected by noise, such claims should be specific and quantified.	Please see the response to question 58. Chapter 6 of the SDEIS presents noise-exposed population details by town or neighborhood for the 29M Low, 37.5M High and 37.5M High Regional Jet Fleets.
70.	Please show data that clearly demonstrates what factors have correlated with increases in operations efficiency (more passengers per op.) at other airports in the past. With this data, present Logan in relation to whatever key indicators are found and then revise the operations forecasts to reflect the new understanding.	See Chapter 3 of this Supplemental DEIS/FEIR for a discussion of demand management programs at other US and international airports.
71.	Request that the EIS and ROD include language that makes a commitment not to fan out departures from any runway as a means of increasing capacity. Commit to not reduce departure intervals below those now in use.	The Logan Airside Improvements do not propose any changes to existing ATC procedures or flight tracks other than Reduced Minimums and Unidirectional Runway 14/32.

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72.	The EIS should contain a side-by-side comparison of actual measured noise data and modeled data for each MPA noise monitoring station for each planning alternative. If under estimation of modeled vs. actual measured, we request a new noise modeling study which increases operational parameters until they show only non-systemic variation from measured data. Contours resulting from new data should be compared to previous contours.	It is not possible to have actual measured noise data for future scenarios and planning alternatives. However, Chapter 6 of this Supplemental DEIS/FEIR does contain data and a discussion of measured versus modeled noise for 1999 Logan operations. Massport has reported differences between measured and modeled sound levels in Logan Airport's various GEIRs and Annual Updates (now called the ESPR) for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.

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73.	The EIS should contain a map showing all sub-paths used to do noise modeling for jets for each arrival and departure. The map should show these paths in relation to geographic and political boundaries. Explain methods of selecting sub-paths and how they are validated. There should be a complete listing of modeled aircraft for each planning alternative and how choices were made. There should be also an explanation of what tests were used to validate the assumption that in noise modeling noise from over the water approaches should be boosted for operations below 1,000 feet but not for those over water at higher altitudes.	The darker lines in Figures 5.2-1 and 5.2-2 indicate the actual flight tracks used to model the operations for all scenarios involving the existing runway configuration. The darker lines in Figures 6.2-1 through 6.2-4 indicate the actual modeled tracks used to model all scenarios, which include the proposed new unidirectional Runway 14/32. In each case, tracks flown by jets are shown in yellow, turboprops are shown in purple. Arrivals are separated from departures. Political jurisdictions for all communities within approximately 20 miles of Logan Airport are outlined on the basemaps in these figures. The lists of aircraft modeled on these tracks and their frequency of occurrence are included in multiple tables in various appendices to the study documents. The aircraft types modeled for 1993 and for all the original 29M, 37.5M, and 45M High and Low scenarios were shown in Volume III, Appendix E, Table 11 of the Draft EIR/EIS (the "Blue Book"). The table lists annual operations by individual aircraft type; the noise model used these numbers of operations divided by 365 to get average daily operations. The frequency of occurrence for all of these flights were shown in Appendix H of the same document in the table labeled "Aircraft Operations by Fleet, Alternative, Runway End and Operation [arrival or departure]." The aircraft types modeled for all of the 1998 and 2015 High Regional Jet Scenarios are shown in Volume Two, Appendix C. In these cases, the operations are shown as average daily operations. Their frequency of occurrence by runway end is also shown Appendix C. Justification for the over-water sound propagation adjustments are included in a letter from Mr. Kenneth Eldred to Mr. John Gulding at the FAA's Office of Environment and Energy requesting approval to modify the INM database so as to improve the differences between measured and modeled noise exposure levels. The letter along with FAA's response is included in its entirety in Appendix C of the Interim Supplemental DEIS (the "Brown Book"). The changes are applicable to aircraft at low altitudes because over-water sound propagation differs from normal over-ground sound propagation only when an aircraft is low to the horizon and the noise emanating from it reflects off the acoustically "hard" surface of the water as opposed to being partially attenuated (lessened) as it passes over softer ground.
74.	Explain the geographic scope of the EIS. How was the study area determined? Was noise modeling used to determine it? If so, there should be a discussion of alternative	Chapter 5 of the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR discuss in detail the geographic scope of the Logan Airside project. As described, the study area for each category of impact

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	methods for determining the study area not based on noise modeling.	varies. For example, noise impacts are examined in a number of ways including Day Night Sound Level (DNL) contours beginning with areas closest to the airport, the 75DNL out to the FAA's threshold of incompatibility at the 65DNL. In addition to this, and in response to the May 7, 1999 EOEA Certificate, Massport presented analysis out to the 60 DNL contour. Please refer to Chapter 5 for definition of the various study areas.
75.	Request that an appendix to the Brown Book, in which all tables, slides, and other graphics shown to the Garvey Panel, but not included in Brown Book, be published and distributed to the public.	Comment Noted. Please refer to Appendix A of this Supplemental DEIS/FEIR , which contains meeting minutes for all the SDEIS Panel meetings. These meeting minutes reflect the substance of all presentations made to the Panel as well as questions and answers that followed each presentation.
76.	Request that a study of steeper approach paths as a method of mitigating arrival impacts be done. It should include other airports in the US and abroad using such steeper paths.	Comment noted. The FAA requires that all new or relocated glideslopes be commissioned with the standard 3 degree slope. Steeper approaches can only be approved by Washington under exceptional circumstances. Foreign practices are not applicable in the US.
77.	The EIS should include an evaluation of the Airport Noise & Capacity Act of 1990, including a discussion from a qualified attorney about what alternatives will be available to future MPA management teams if they wish to modify or undo effects produced by the construction of 14/32, or if they wish to remove 14/32 from service.	Comment noted. Evaluation of the Airport Noise & Capacity Act is not part of this Supplemental DEIS/FEIR.
78.	The EIS should include a study identifying communities affected by jet operations from more than one runway.	The Draft EIS/EIR contains analysis of all communities within the 65 DNL, the FAA's threshold of incompatibility. In fact, at MEPA's request, the analysis extends to the 60 DNL. These contours contain all communities affected by one or more runways.
79.	Compare the experience they can expect with 14/32 in operation to the PRAS goals established for communities near the airport.	Refer to Chapters 4 and 6 of the Airside Project Draft EIS/EIR and this Supplemental DEIS/FEIR for a comparison of PRAS achievement for the Preferred Alternative and the No Action alternative.
80.	Request that a study be done to show, in NW winds, what other delays (en route, over-scheduling, and mechanical problems) are happening at that time? What is the %? This should be in the EIS.	Comment noted. Appendix D of this Supplemental DEIS/FEIR contains a case study of northwest wind delays. There are no data on all of the other delays that may randomly take place in northwest conditions. However, all of the delays identified in the Draft EIS/EIR as occurring in northwest winds are due to northwest winds, and not to other causes.
81.	Recommend that the "first come, first served process" be studied with respect to the possibility of changing it as a demand management technique	Discussions with the FAA Headquarters in Washington determined that this concept would require study on a national basis.

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82.	Since delay is a given at all airports, the CAC asks the FAA to determine, within the SDEIS process, "acceptable" delay at Logan.	See response to question 62.
83.	The CAC, through the Panel, requests that the FAA quantify and qualitatively present the complete, cumulative environmental impacts, as well as the total cumulative construction environmental impacts of the following: the proposed Runway 14/32, the proposed centerfield taxiway, the forecasted increase of ground transportation to and from Logan within a four mile radius of Logan, and the Central Artery project.	Chapter 7 of this Supplemental DEIS/FEIR discusses the cumulative environmental and construction impacts of the Preferred Alternative, which includes Runway 14/32 and all the proposed taxiway improvements, and all concurrent construction projects. The impacts of ground transportation traffic associated with each forecast passenger level are discussed in the *Logan Airport 1996, 1997, and 1998 Annual Updates*, and the *Logan Airport 1999 Environmental Status and Planning Report.*
84.	The CAC requests that the FAA rule that the impact of the proposed dramatic increase in air traffic that would be generated by Runway 14/32 over densely populated inner city, low income and minority communities is too significant to warrant FAA approval to construct this new runway.	Comment noted. Please refer to Question 36 for environmental justice.
85.	The CAC requests that the FAA engage "outside the box" professional transportation planners to bring alternative proposals to Runway 14/32 to the Panel table for consideration.	Comment noted.
86.	Has the direction of 14/32 changed? If so, how did it change and why?	The direction has not changed.
87.	Request from the Town of Hull Jet Noise Task Force that the FAA/MPA do a Part 161 study to obtain all the additional data it would produce.	Comment noted. A Part 161 analysis is not part of the scope for this Supplemental DEIS/FEIR.
88.	Request from the Bayswater neighborhood in East Boston that Panel support in the study of a higher blast fence and make it collapsible as well.	In December 2000, Massport filed an ENF to remove the blast fence because of aircraft safety concerns. Massport's analysis showed that the benefits of the blast fence to the Bayswater community are very minimal and better results could be achieved through mitigation. Massport provided funds to the Bayswater Blast Fence Committee (BFC) to hire an independent consultant to study Massport's proposal.
89.	The prediction of a threefold increase in flights departing Runway 27 brings a request from the Roslindale/Jamaica Plain neighborhoods that a noise monitor be placed in their area to record present noise impacts. They also request that an analysis of the readings from this microphone be analyzed and compared to the predictions for this runway if 14/32 is built. In addition this neighborhood wants to know how the information from this microphone would be	Massport will consider adding a permanent noise monitor in the vicinity of Jamaica Plain. If it is added, the data collected by the monitor will include metrics such as the annual average DNL represented by the noise contours of this study. However, as is the case with all of the permanent measurement sites, the measured levels are not incorporated directly into the INM; rather, the results are compared to modeled levels to check for potential inconsistencies and to improve INM inputs when it is determined that the measurements highlight a problem with the noise modeling. In the past, such

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	incorporated into the INM and what the difference, if any, in the description of the neighborhood noise would be.	inconsistencies have led Massport to modify its noise model to account for over-water sound propagation and, more recently, to include the effects of terrain in Orient Heights.
90.	From the City of Cambridge comes the request to research the implications of the statement: "Increase the aircraft size, decrease the frequency."	Comment noted. All of the forecasts used in the Draft EIS/EIR reflect an increase in average aircraft size over time.
91.	In Charlestown a question about the reliability of the predictions that 37-45 million passengers would be handled at Logan in the future. How reliable is this information? On what do you base this information?	To accommodate uncertainty, a wide range of future passenger and activity forecasts have been studied in the Logan Airside Project. This includes Logan's actual activity levels achieved in of 1993 and 1998, as well as 12 different levels in the future (with and without Peak Period Pricing). The forecasts are discussed in Chapter 4 of this Supplemental DEIS/FEIR and in Appendix E of the Airside Project Draft EIS/EIR. The uncertainty is not so much the future level of passengers, but when that volume will occur.
92.	From Braintree comes a request that the PRAS system be reevaluated before the expansion proposal proceeds. The feeling is that the PRAS has not achieved the goals all these years. The feeling is that the FAA didn't use the PRAS system whenever possible all these years. So, on what basis is the public in impacted communities to believe that the PRAS system will ever be used in future?	The proposed Unidirectional Runway 14/32 provides controllers with the ability to redirect more aircraft over water and away from people. Regardless of the noise policy, arrivals and departures over water would be desired. Runway 14/32 provides the tower with the ability to better achieve the PRAS goals by providing a third runway in the NW direction. If the tower can maintain capacity in all directions, they will be more likely to change runway configurations more frequently, which is the very foundation of PRAS. Section 4.3 of the Supplemental DEIS contains a detailed discussion of PRAS development and improvements, and of the FAA's increased conformance with the PRAS goals.
93.	A question on the INM input from the Town of Hingham: How is the data put into the INM and how is it verified? The question comes because there are noted differences between the on-site microphones and the Integrated Noise Model read-outs in Hull, East Boston, and Chelsea. Please research and respond to this in the DEIS.	The INM essentially utilizes flight tracks and the aircraft operations on them to compute noise at points on the ground. Existing flight tracks are generated directly from plots of radar data obtained from the FAA's air traffic control tower that are compiled by Massport's permanent noise and operations monitoring system. The specific aircraft types and the frequency with which they occur on the tracks are also determined from radar records generated by the monitoring system. Details of this data collection effort are summarized each year in Massport's *Environmental Planning and Status Report* (formerly known as a *Generic Environmental Impact Report*) for Logan Airport. Those annual documents have also addressed differences between measured and modeled DNL levels at the measurement sites around the airport. Though differences should always be expected to occur to some degree (due to factors such as pilot technique in flying

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		an aircraft, or non-standard atmospheric conditions), significant improvement in the differences between measured and modeled noise exposure was achieved when Massport upgraded its system in 1997 to report aircraft-only DNL as opposed to total DNL which includes the additional effects of non-aircraft noise. For example, in 1998 the difference between measured and modeled DNL due to aircraft was only 1.1 dB at site 26 in Hull, was 2.2 dB at site 15 in Chelsea, and ranged from -0.3 to 1.3 dB to 2.9 dB at the Jeffries Point Yacht Club, East Boston High School, and Bayswater Street at Annavoy in East Boston.
94.	In Chelsea there is an observation and a request. They believe that the "flaws" in the noise monitoring system are not researched and resolved in an adequate fashion in the document. But on issues of delays there are loads of statistics and analysis. They therefore believe that there are huge gaps on existing documents. And there will be unfair and inexact conclusions if the analysis information gap continues into the new document. Please address and resolve these gaps.	See responses to question 72 and 93.
95.	From Chelsea again a response to this statement is sought: "All growth must be accommodated." Please address this philosophy.	This comment is not attributable to the Airside Improvements Project or any Airside environmental documents. The Preferred Alternative provides delay reduction benefits at current operation levels and does not add capacity to the airport. Runway 14/32, which is part of the preferred alternative, allows Logan to maintain a 3-runway configuration in Northwest winds. See the analysis in Chapter 4 of this Supplemental DEIS/FEIR that quantifies 1998 delays at Logan and the delay reduction that would have been achieved if Runway 14/32 was available in 1998.
96.	In the City of Everett, the Council and several citizens requested an additional noise monitor to establish present noise impacts. So far this request has not been granted by the MPA. Their concern to the Garvey Panel is that present noise is being underrepresented from a threefold increase from Runway 33 departures and will be under-counted as well. Please analyze and respond to this issue.	A noise monitor is located in Everett on Tremont and Prescott Street that provides adequate noise monitoring data.
97.	People in Revere and the Orient Heights neighborhood of East Boston, and in Winthrop as well, want a presentation on the impacts of the Centerfield Taxiway and the changes on the landing minimums. They are	Revere, East Boston, and Winthrop all have representatives on the CAC. The CAC has been fully briefed on all aspects of the Airside Project. In addition, two public hearings on the Draft EIS/EIR were held, as well as meetings in each community to review the

#	Comment	Response
	very concerned that the true impacts of these proposals are not being disclosed and fully evaluated from a neighborhood perspective. Please respond. Please respond by having a meeting in the affected neighborhood.	project.
98.	The Somerville Airport Expansion Group asks that at the October meeting a presentation be made about the design of the runway surface and runway safety areas at each end of the proposed Runway 14/32. They want to know about displaced thresholds and landing distance available. They want to know what the glide slope and minimums will be. They want to know at what point missed approaches abort 14/32 landings.	Runway 14/32 has a landing distance of 5,000 feet with a Runway Safety Area of 1,000 feet on either end, and no displaced threshold. The FAA requires that all new glideslopes be set to 3 degrees. The IFR decision height is anticipated to be 400 feet, with a visibility minimum of ¾ mile.
99.	Why does the SDEIS show a waiver of FAA standards on safety on the proposed 14/32? The Cohasset Airport Study Silence (sic) believes that the FAA safety standards will be waived by the cutting off a corner of the runway safety area on the 14 end. How can they allow this when safety standards are FAA's stated top priority? Why not shorten the runway safety area? Should an accident happen within that officially truncated safety area wouldn't the FAA be responsible?	Chapter 3 of the Supplemental DEIS describes the proposed layout of Runway 14/32 and the associated Runway Safety Areas. The RSA on the approach end of Runway 32 will be a full 1,000 feet in length, but will have the corners trimmed slightly to avoid filling the harbor. A preliminary analysis by the FAA confirms that the RSA will provide an acceptable level of safety.
100.	From South Boston comes the request that the FAA include in the SDEIS the impacts the building heights planned for South Boston waterfront projects would have on Runway 27 departure usage. How would that negate any delay reduction benefits of Runway 14/32?	No known development plans in South Boston will require an increased climb gradient for Runway 27 departures. Any new development plans will be subject to a FAR Part 77 airspace evaluation by the FAA, which will not approve any additional restrictions on Logan operations. Nearly all aircraft operating at Logan exceed the current Runway 27 climb gradient by a wide margin. Moreover, this restriction applies only under IFR conditions, and Runway 27 and 32 will only be used together under VFR conditions.
101.	Does the INM take into account low frequency noise impact?	The A-weighted sound levels utilized by the INM include noise within the frequency range normally considered low frequency (25 to 80 Hz) but those frequencies are de-emphasized by the A-weighting because our ears are less sensitive to acoustic energy in those bands; there has been no special treatment of low-frequency noise metrics in these analyses.
102.	Does the INM depict the noise, which occurs directly behind the aircraft?	Yes.
103.	Does the INM take into account bad weather conditions that cause noise impacts to be worse than on a standard day? Do any weather conditions get reflected in the INM?	No. The INM only addresses average local temperature and airfield elevation to the extent that those parameters affect sound propagation. The model has no provision for accommodating bad weather days, strong winds,

#	Comment	Response
		temperature inversions, or similar non-standard conditions.
104.	Does the INM measure sideline noise as the aircraft rolls down the runway?	Yes.
105.	Has there been an in-depth federal study to show how noise impacts affect the health of people who live near airports? If so, where and what are the results?	No, although there have been Federally sponsored reviews of literature on the health effects of noise and a number of international conferences on the subject. To date, there has been no conclusive evidence from this body of work to indicate a link between noise exposure levels in the community and related health effects. Nevertheless, to the extent that high exposure levels have any detrimental effects on people, the Preferred Alternative does more to reduce these high levels than any other alternative considered in this analysis.
106.	Has there been a study that reflects how an airport affects a neighborhood's overall quality of life? Little things like talking on the phone, watching television or just trying to hold a conversation can at times be very difficult when you live close to an airport.	Yes. Among the earliest of such studies is the EPA's report on "Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety". The report addresses factors such as speech and sleep interference and considers public welfare to include such issues pertaining to quality of life. That document identified a DNL level of 60 dB as requisite to protect public health and welfare and a DNL level of 55 dB to include the margin of safety. However, the document was also careful to point out that EPA was not identifying a standard nor was it taking into account the technological or economic feasibility of achieving the identified levels.
107.	Although the document says there won't be any noise increase over the Boston Harbor Islands with the possibility of simultaneous arrivals on 33 and 32, how is this possible?	Section 6.3.3 of the Interim Supplemental DEIS was incorrect in stating that there are no increases in exposure over the Boston Harbor Islands under the Preferred Alternative. There are small increases estimated to be on the order of 1 to 3 dB depending on location within the Harbor. This Supplemental DEIS/FEIR is corrected to reflect this observation.
108.	The document includes less sleep disturbance in the preferred alternative. How can that be if triple the amount of operations fly off of 27 and triple the current amount of departures off of 33?	The Preferred Alternative causes an overall reduction in noise exposure by reducing aircraft delays and the number of daytime flights that are delayed into the night. In calculating total noise exposure nighttime jet operations (occurring between 10:00 PM and 7:00 AM) have a 10 times penalty to reflect the fact that nighttime noise is more disruptive.
109.	"Over the water" is a term most disputed in the South Shore. Their interpretation of the printed flight tracks combined with their experiential knowledge of observing the flight tracks has them conclude that planes are not flying "over the water" and will not fly "over the water" in the future. Please respond.	Aircraft on straight-in arrival tracks to the Runway 32 and 33 ends fly over water longer before overflying communities in the South Shore than aircraft arriving to any other runway end. Please refer to the Flight Tracks presented in Chapter 6 of this Supplemental DEIS/FEIR. The tracks have been expanded to cover a broader geographic area and include altitudes.
110.	There needs to be an environmental review	The PRAS goals were established by the PRAS

#	Comment	Response
	done on the PRAS so that all new information is shared with the public.	Advisory Committee, which consisted of representatives from Massport, the FAA, the airlines, and 12 neighboring communities. Massport's Preferred Alternative (Alternative 1A) mitigation program includes additional PRAS reporting requirements recommended to enhance the monitoring efforts. (See Chapter 4 of this Supplemental DEIS/FEIR.)
111.	It is necessary to have presented in terms lay people might understand the theory that the noise impacts generated by a threefold increase in departures on 27 and 33 are not significant or are even less than present use. Describe the reasoning behind the theory and how it is computed in recording the noise and drawing the contours and the impacts on the communities.	See response to question 108.
112.	Across from the Bayswater Street neighborhood there is a blast fence. This helps to reduce some impact from operations on the 22's. Will the Port Authority/FAA try again to remove the blast fence? What impact does the blast fence have on the proposal to reduce the landing minimum on 22 arrivals?	In December 2000, Massport filed an ENF to remove the blast fence because of aircraft safety concerns. Massport's analysis showed that the benefits of the blast fence to the Bayswater community are very minimal and better results could be achieved through mitigation. Massport provided funds to the Bayswater Blast Fence Committee (BFC) to hire an independent consultant to study Massport's proposal. MEPA held a public hearing in January 2000 and the public comment period was extended through February 9, 2001. Massport received a MEPA Certificate on February 23, 2001 stating that no additional environmental analysis was required.
113.	It is necessary to have more information about the Centerfield Taxiway and its relationship to gateholds and capacity. From a community perspective it seems that the airlines and airport would move passengers from the terminal onto planes, then have the planes move onto the much longer taxiway to park and wait for take-off openings. This gives the impression that delays are being addressed but it puts more aircraft in between two communities for longer times. Noise and pollution impacts on East Boston and Winthrop need to be re-evaluated and reviewed by people in these close-in neighborhoods and by the FAA and Massport.	Section 3.3.1 of the Supplemental DEIS describes the operational benefits of the Centerfield Taxiway. It will reduce taxiing delays for arriving and departing flights, and will reduce the number of aircraft queued up in the northern sector of the airfield. The Centerfield Taxiway will be an active operations area of the airfield and therefore not available to use as an overflow parking area as suggested by the question. It will have no influence on airline schedules, which are limited by the gates available at Logan terminals.
114.	On the South Shore there is an issue with the noise as recorded on the microphone at the high school. What is a sample of the recorded noise there over a period of time? How does the actual recording of the noise jibe with the INM model? How many times	Since the late-1997 upgrade to Massport's permanent noise monitoring system, aircraft-only DNL sound levels have been measured continuously 24 hours a day, 7 days a week, 365 days a year at Hull High School and other sites surrounding Logan Airport. The data are presented as annual average values and have been reported in the

#	Comment	Response
	is the noise measured at over 60 dB? How does the noise measurement correlate with the flight track usage?	1998 Annual Update to the Logan Airport Generic Environmental Impact Report (GEIR) and the 1999 Environmental Planning and Status Report (ESPR). At Hull High School, in particular, the difference between these measured values and the INM-generated noise contours that are also produced in conjunction with these documents were 1.1 decibels in 1998 and 0.6 decibels in 1999. In each case, the measured levels were slightly higher than the modeled contours; however, these differences are considered small and represent extremely good correlation between measured and modeled noise exposure. Measurement data have not been examined further to identify how many times the sound level has exceeded 60 dBA.
115.	From the South Shore is a request to describe the so called "over the water" track. Exactly when and how does the plane fly over water? How low and how often does the track take the planes over populated areas? Please show moving computer graphics to demonstrate the flight tracks over the South Shore.	Aircraft on straight-in arrival tracks to the Runway 32 and 33 ends fly over water longer before overflying communities than aircraft arriving to any other runway end. Please refer to the Flight Tracks presented in Chapter 6 of this Supplemental DEIS/FEIR. The tracks have been expanded to cover a broader geographic area and include altitudes.
116.	From Winthrop comes the question about Sunday morning heavy odor and constant revving sound. Why does this happen?	The temporal data indicate less jet and turboprop aircraft activity on Sunday mornings than weekday mornings and, in most cases, Saturday mornings. However, it is possible that on Sundays, residents of Winthrop are more likely to be out-of-doors working around the house, playing, or reading the newspaper. Mornings are also the worst time for atmospheric inversions. The combination of these two latter factors could result in these neighbors noticing the odors and noise more on Sunday mornings than on others. The source of the "constant revving sound" on Sunday mornings is unknown.

Appendix B
Regional Transportation

- B.1 Amtrak Memorandum Regarding Ridership Projections for Acela Service
- B.2 Amtrak letter regarding Availability of updated passenger projections for Amtrak's Acela Express service
- B.3 Environmental Impacts of Activity at Regional Airports
- B.4 New England Governors' Conference Resolution Furthering the Regional Transportation System
- B.5 Overview of Proposed New England Airport System Study Update – February 2001

Amtrak Memorandum Regarding Ridership Projections
for Acela Service

HARRIS

MEMORANDUM

TO:	Beverly Jones, SH&E	**DATE:**	January 8, 2001
FROM:	Joanne Haracz	**RE:**	Amtrak Ridership Projections

This memo documents my January 8, 2001 phone conversation with Russ Hall of Amtrak regarding the current status of ridership projections for Acela service on the Northeast Corridor. Mr. Hall informed me that new ridership projections were underdevelopment, but were not publicly available at the current time.

National Railroad Passenger Corporation, 30th and Market Streets, Philadelphia, PA 19104

Amtrak®

October 14, 1999

Joanne Haracz, AICP
Planning Department Manager
Frederic R. Harris, Inc.
66 Long Wharf
Boston, MA 02110

Dear Ms. Haracz:

Thank you for you recent letter inquiring about the availability of ridership projections for Amtrak's *Acela Express* and *Acela Regional* service. Specifically, you requested information about projected station boardings and alightings, estimated ridership between New York and Boston, fare structure and details of the operating plan for Acela service.

You may be aware that the manufacturers of the high-speed trainset recently informed Amtrak of a delay in the delivery of the new trainsets for the *Acela Express* service. For that reason, the operating plans for *Acela Express* and *Acela Regional* service are still being refined. The operating plan is an integral component in preparing projections of ridership, and any projections based on interim plans would be unreliable for planning purposes.

I regret that we cannot provide you with specific information you have requested. I encourage you to contact me in the coming months when we may be better able to provide some of data you requested. You can reach me at (215) 349-3324.

Sincerely,

Nicole Seitz
Government Affairs Officer

AN EQUAL OPPORTUNITY EMPLOYER

ENVIRONMENTAL IMPACTS OF INCREASED TRAFFIC AT REGIONAL AIRPORTS

INTRODUCTION

The Secretary of the Massachusetts Executive Office of Environmental Affairs (EOEA) and the Massachusetts Department of Environmental Protection (DEP) have expressed the need to understand the environmental impacts of increased growth at the regional airports. However, the Secretary also acknowledged the difficulties of presenting cumulative impacts for physically unrelated projects located in different states and in different stages of the planning and environmental review processes. In light of these difficulties, the Secretary specifically directed Massport to summarize the environmental impacts of the regional airports, as they have been described in existing environmental documents and reports.

DOCUMENTS REVIEWED

Massport collected and reviewed the latest available documents for the principal regional airports surrounding Logan, i.e., Manchester, T.F. Green, Worcester and Hanscom Field. The available environmental studies done for Manchester and T.F. Green were completed prior to the entry of Southwest Airlines and other low-fare carriers at those airports. Nevertheless, the reported impacts give an indication of the degree of environmental exposure that results from growth at these airports.

Table 1 - Available Environmental Documents for the Regional Airports

Airport	Lead Agency	Document	Principal Proposed Actions	Base Year	Base Year Activity	Analysis Year	Analysis Year Activity
Manchester	FAA	Final Environmental Impact Statement, Manchester Airport Master Plan Update, June 1997	• Reconstruct and Lengthen Runways • Expand Terminal Building (+23 aircraft parking positions) • Improve Ground Access • Build New Parking Garage	1995	Operations: 85,257 Passengers: 902,000	2015	Operations: 155,500 Passengers: 3,380,000
Providence	Rhode Island Airport Corporation	Final Master Plan Update, T.F. Green State Airport March 1999	• Construct new parallel taxiways for Rwys 5R-23L • Construct Runway 34 Holding Apron • Regrade RSA beyond 34 end of Runway 16-34 • Pavement rehabilitation for Rwy 16-34 • Rwy 16 threshold displacement • Relocate Taxiway K • Removal of Hangar 1	1993	Operations: 122,588 Passengers: 2,373,000	2015	Operations: 137,115 Passengers: 5,367,150
Worcester	FAA	Final Supplemental Environmental Impact Statement/Report, Worcester Airport – 5 Year Plan of Improvements, December 1995	• Construct parallel taxiway for Rwy 11-29 • Reconstruct Rwy 15-33 and RSA's for 15-33 • Realign taxiways • Reconstruct terminal apron	1993	Operations: 73,195 Passengers: 191,472	1998	Operations: 78,147 Passengers: 232,736
Hanscom	Massport	Hanscom Field 1995 GEIR Update, April 1997	*No Physical Improvements Studied* *The HGEIR analyzed various scenarios of future growth including a 3% AAG with Regional Commuter Service*	1995	Operations: 190,282 Passengers: 5,228	2010 "3% Growth Scenario with Regional Commuter Service"	Operations: 296,500 Passengers: 216,906

SUMMARY OF DOCUMENTED ENVIRONMENTAL IMPACTS

Manchester Airport

Table 2 – Summary of Environmental Impacts of Preferred Alternative for Manchester Airport Final Environmental Impact Statement

Impact Category	Impacts
Noise	• Projected area within the DNL 65dB contour for the Proposed Action is 2.97 square miles compared to 4.58 square miles in 1995. • Noise exposed population is projected to decline from 6,575 in 1995 to 2,270 in 2015. After 34 homes are purchased, the noise exposure for 2015 is 1,044 people.
Social Impacts	• The acquisition of several properties is necessary for the construction of proposed access road improvements and Runway 6/24 reconstruction. Total acquisition of 117 properties: 97 residences; 2 commercial properties; 18 vacant parcels and a church, school and day care center.
Air Quality	• Locally, CO, VOC and NO_x increase under the preferred alternative. Projected emissions are within the de minimis levels of EPA's General Conformity regulations. • Regionally, there is an air quality benefit since greater use of Manchester translates into fewer passengers driving to Logan Airport and hence fewer vehicle miles traveled (VMT's) in the region. In 2015, regional emissions would be reduced as follows: CO –17.8%; VOCs –16.7%; and NO_x –12.3%.
Water Quality	• Preferred Alternative may potentially affect both groundwater and surface water quality. • Impacts to groundwater resources may occur due to a reduction in recharge caused by an increase in impervious surfaces. • Increased amounts of glycol-based deicing fluids may result in high BOD discharges to Little Cohas Brook. • No substantial changes in the quantity of stormwater run-off due to reconstruction and upgrading of stormwater drainage system.
Section 4(f) and 6(f) Parklands	None
Historic and Archaeological Resources	• The Preferred Alternative would impact 4 of 5 historic archaeological properties identified as eligible for the National Register of Historic Properties and 7 of 9 sites considered sensitive for prehistoric archaeological resources.
Ecosystems	• 13.02 acres of wetlands would be affected by fill and stream relocation associated with the Preferred Action. 11.52 of these acres are associated with the extension of Runway 17/35 and the relocation of Little Cohas Brook. • Impacts to the Little Cohas Brook habitat include relocating the stream and filling existing wetland habitat. Direct impacts are expected to occur to the resident species and less mobile species, while the indirect impact would be limiting wildlife access to the stream. • No significant impacts to the bald eagle, a federally-protected species. • Minor impacts to the state-listed endangered species, the upland sandpiper, will be mitigated. • Two state-protected flora species of special concern, the single mountain laurel plant and a few clusters of trailing arbutus in the vicinity of Little Cohas Brook, would be affected. However, these occur on airport property and therefore mitigation is not required.

T.F. Green/Providence Airport

The last Environmental Impact Statement (a State document) for the T.F. Green Airport was for the Terminal Area Plan and was completed in 1990. A more recent planning document, the Final Master Plan Update, was completed in March 1999. The Final Master Plan Update provides an environmental overview that identifies potential significant environmental impacts of planned development projects at T.F. Green Airport. Those potential impacts are summarized below.

Noise

The proposed improvements in the 1999 Master Plan Update are not expected to significantly change noise patterns or the number of affected areas since no new runway development is proposed. The most recent Noise Exposure Maps for T.F. Green, which were prepared for 1993 actual and 1998 projected operational activity were approved by the FAA in April 1995. A Part 150 Noise Study was recently completed.

Table 3 - T.F. Green Baseline 1993 and Forecast 1998 Noise Impacts of DNL 65 dB and Greater

	1993	1998	Change
Total Area (sq. mi.)	3.15	3.03	-3.8%
Off-Airport Area (sq. mi.)	2.09	1.99	-4.80%
Number of Dwellings	2,170	2,065	-4.7%
Number of Residents	5,890	5,600	-5.0%

Source: Wyle Research report WR 94-19m revised Noise Exposure Maps for T.F. Green State Airport, April 1995.

Table 4 - Overview of Potential Environmental Impacts of 1999 T.F. Green Airport Master Plan Improvements

Impact Category	Impacts
Compatible Land Use	• Master Plan improvements are not expected to significantly change the compatibility of land use within the airport vicinity.
Social Impacts	• None
Air Quality	• The T.F. Green Airport lies within the Metropolitan Providence Interstate Air Quality Control Region (AQCR). This AQCR, as well as the entire state of Rhode Island, has attainment status for all of the primary pollutants, except ozone (O_3). The Rhode Island Department of Environmental Management (RIDEM) currently inventories emissions in the area for hydrocarbons (HC), nitrogen oxides (NO_x), and carbon monoxide (CO), and has found these pollutant levels to be within attainment standards. • There appear to be no improvements resulting from the Master Plan Update that would significantly affect the air quality in the Airport vicinity.
Water Quality	• It is anticipated that the future Taxiway K relocation and the planned grading of the RSA at the approach end of Runway 34 will require a Water Quality Certification because these planned improvements may impact Federal or State jurisdictional wetland areas.
Section 4(f) and 6(f) Parklands	None
Historic and Archaeological Resources	• The planned grading of the RSA at the approach end of Runway 34 will require an archaeological assessment since the project is located near the Warwick Pond area. According to the Rhode Island Historical Preservation and Heritage Commission the Warwick Pond area may contain areas of archaeological significance.
Biotic Communities	• The grading of the RSA at the approach end of Runway 34 and the relocation of Taxiway K would most likely impact biotic communities, primarily vegetated wetlands and other natural vegetated areas. The effects on biotic communities will be addressed during the preparation of an Environmental Assessment.
Wetlands	• It is anticipated that the planned grading of the RSA at the approach end of Runway 34 and the relocation of Taxiway K will impact state and/or federal wetlands and/ or buffers. Potential impacts may require mitigation.
Floodplains	• It is anticipated that the planned grading of the RSA at the approach end of Runway 34 and the relocation of Taxiway K will impact land area in the 100-year floodplain as designated by the Federal Emergency Management Agency (FEMA).

Worcester Airport

Table 5- Final Supplemental Environmental Impact Statement/Report – Worcester Airport 5 Year Plan of Improvements

Impact Category	Impacts
Noise	• None of the proposed projects in the 5 Year Plan affect airport noise contours.
Water Quality	• Projects are have an overall long-term beneficial impact on the quality of water draining from the airport.
Air Quality	None
Wildlife Habitat	• A grassland management program was developed for the airport in cooperation with the Massachusetts Division of Fisheries and Wildlife. It was implemented in 1995 to enhance wildlife habitat for grassland species of birds.
Traffic	• A traffic analysis of several intersections in the vicinity of the airport indicated no adverse impacts as a result of the 5 Year Plan improvements.
Section 4(f) Properties	None
Historic and Archaeological Resources	None
Biotic Communities	None
Wetlands	• Construction of the parallel taxiway to Runway 11-29 will require the unavoidable filling of 4.2 acres of wetland resources. Wetland replication on a greater than one-to-one basis was proposed for mitigation.
Floodplains	• Construction of the parallel taxiway to Runway 11-29 will require the filling of approximately 2 acres of floodplain.

Noise

The City of Worcester conducted a Part 150 Noise Study of the Worcester Airport from 1989 to 1991. A summary of the noise impacts from the Noise Exposure Map is presented below.

Table 6 – Summary of Worcester Noise Exposure Map Impacts

	Base Year 1989			Forecast Year 1994		
	60-65 dB	65-70 dB	70+ dB	60-65 dB	65-70 dB	70+ dB
Area (acres)	460	50	0	1094	337	7
Dwelling Units	23	0	0	216	1	0
Population	60	0	0	571	3	0

Hanscom Field

As directed by the EOEA Secretary, the 1995 Hanscom Field GEIR Update provided detailed 1995 baseline conditions at and around Hanscom and identified hypothetical future operations and land use scenarios and associated environmental impacts for forecast 2000 and 2010 operations. The environmental impacts of aircraft operations for the 2010/3% Growth scenario, which assumed robust growth in scheduled regional commercial services, are summarized below.

Table 7 – Summary of Environmental Impacts of Aircraft Operations for the Hanscom Field 2010/3% Growth Scenario

Impact Category	Impacts
Noise	• Significant increase in noise exposure due to predicted increased military operations. • 31 homes are predicted to be exposed to Day-Night Average Sound Levels greater than 65dB. • Total noise exposure from departures is predicted to increase from 114.0 in 1995 to 115.6 in 2010/3% Growth Scenario.
Air Quality	• Predicted aircraft and motor vehicle emissions are higher than in the 1995 Baseline due to (1) a shift in the fleet mix from single-engine piston aircraft to turboprops, jets and helicopters; (2) the increase in total operations; and (3) additional predicted roadway traffic. • Total emissions increase from 4.0% to 9.1% per year, depending on the pollutant. However, total Hanscom Field emissions remain small compared to total emissions for Middlesex County. • Hanscom is predicted to remain in full compliance with the National and Massachusetts Ambient Air Quality Standards (NAAQS) and the MA DEP 1-hour NO_2 Policy Guideline.

New England Governors' Conference Resolution Furthering the Regional Transportation System

The Commonwealth of Massachusetts
Executive Office of Transportation and Construction
Ten Park Plaza, Boston MA 02116-3969
Office of the Secretary

Argeo Paul Cellucci
Governor

Jane Swift
Lieutenant Governor

Kevin J. Sullivan
Secretary and MBTA Chairman

860-594-3000

February 9, 2001

Commissioner James Sullivan
Department of Transportation
2800 Berlin Turnpike
Office of the Commissioner
Newington, CT 06131-7546

Dear Commissioner Sullivan,

On behalf of Governor Cellucci and Lt. Governor Swift, we are pleased to invite you to join New England's transportation leaders for the first quarterly meeting of the New England Regional Transportation Coordinating Council on February 16, 2001 at 1:00 at Worcester Union Station Worcester, Massachusetts.

At the most recent New England Governors Regional Transportation Summit, the Governors agreed to establish the Council to oversee, guide, and implement regional policies and initiatives. Our cooperative efforts will help create an even more efficient regional intermodal system that continues to support New England's participation in the global economy. A copy of the resolution is attached.

We expect the Council meetings will be held once every quarter, as is contemplated in the resolution, and this first meeting will be an organizational meeting to establish the goals of the Council and a timeline for achieving our objectives.

We look forward to seeing you on February 16th. Please let Siobhan Perenick, at 617-973-7013, know who will be attending the meeting with you.

Regards,

Kevin J. Sullivan
Secretary
Executive Office of Transportation and Construction

Virginia Buckingham
Executive Director & CEO
Massachusetts Port Authority

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NEW ENGLAND GOVERNORS' CONFERENCE, INC.

RESOLUTION NUMBER 154

A Resolution of the New England Governors' Conference, Inc. Furthering the Regional Transportation System

WHEREAS, New England's Governors recognize that an integrated regional transportation system is fundamental to the economic, social, and environmental well-being of the New England States; and

WHEREAS, New England is a unique region fully participating in the global economy and sharing a highly skilled workforce that is more mobile than ever; and

WHEREAS, the development of an efficient intermodal regional transportation system that maximizes options, increases connections and continues to promote economic growth is a priority of the New England Governors' Conference, Inc.; and

WHEREAS, New England has been engaged in regional transportation planning for the past decade and there is now emerging a New England Regional Transportation System; and

WHEREAS, the New England states can build on this transportation network to create an even more efficient regional intermodal system that continues to support New England's participation in the global economy.

NOW THEREFORE BE IT RESOLVED THAT the New England Governors' Conference, Inc. will

Re-establish the New England Governors' Conference, Inc. Regional Transportation Coordinating Council, with two members appointed by each Governor. This body will meet quarterly to oversee, guide and implement regionalization policy and initiatives;

Petition Congress to provide dedicated funding to support New England's regional transportation planning efforts and invite the federal transportation agencies to participate as members of the New England Governors' Conference, Inc. Regional Transportation Coordinating Council; and

Governor JOHN G. ROWLAND Connecticut | Governor LINCOLN C. ALMOND Rhode Island | Governor ANGUS S. KING, JR Maine | Governor ARGEO PAUL CELLUCCI Massachusetts | Governor JEANNE SHAHEEN New Hampshire | Governor HOWARD DEAN, M.D. Vermont

Petition the US Department of Transportation to work with the Congressional delegation to declare New England a "unique" region in order to allow regulatory flexibility in applying federal transportation policy; and

BE IT FURTHER RESOLVED THAT The New England Governors Conference, Inc. agrees that the New England transportation agencies, along with the Federal Aviation Administration, will embark on the next phase of study, which will evaluate ways to:

Increase domestic and international air service at the regional airports;

Increase non-scheduled charter service and air cargo activity at the regional airports;

Increase HOV/ground transportation and rail alternatives to service the regional airports; and

Develop an air service action plan for the regional airports.

AND BE IT FURTHER RESOLVED THAT The New England Governors' Conference, Inc. also agrees that its Regional Transportation Coordinating Council will:

Survey regional passenger hubs and strive to reduce the differences that passengers experience in making a trip via a combination of local and inter-city transit systems (i.e., local bus, subway and inter-city rail or bus) by developing compatible passenger information systems, including:

door to door web based transit trip planning
consistent signage and electronic information at stations and terminals
locating traveler conveniences such as visitor information centers,
ATMs, and on-site ticket sales for connecting modes

Encourage long distance travel options by investing in new systems for remote check in and luggage transfers between train, bus and air;

Cooperate to integrate New England's transit and turnpike systems by integrating the fare collection and toll technologies;

Study opportunities to improve the regional rail system, including safe and convenient passenger service on the region's designated high-speed rail corridors;

Maintain the states' commitment to enhance the accessibility of the regional system through station design and equipment choice, including lift equipped inter-city buses and information systems for the hearing impaired and the visually impaired;

Establish a New England Intermodal Freight Alliance to analyze key freight corridors in and through New England, including the way that freight and passenger systems share a single corridor;

Identify physical constraints, environmental benefits and market opportunities for each corridor and mode;

Investigate different forms of public-private partnerships to enhance the freight system and assure adequate and continuing maintenance and upgrades;

Offer technical assistance to local planners to identify and prioritize projects that will increase the efficiency of the freight system while respecting residential neighborhoods;

Work with the travel industry to tie the regional airports into the reservation system of travel agents and Internet sites when visitors are looking to access New England; and

Explore the creation of an electronic database (New England Regional Ground Access System) containing schedules of all modes of transportation to the region's airports.

ADOPTION CERTIFIED BY THE NEW ENGLAND GOVERNORS' CONFERENCE, INC. ON FEBRUARY 27, 2001.

Governor John G. Rowland
Governor of Connecticut
Chairman

Overview of Proposed New England Airport System Study Update – February 2001

FAA Regional System Plan Update

- Introduction/Background
- Study Purpose
- Study Background
- Study Organization
- Major Issues
- Study Structure/Content
- Public Consultation
- Schedule

FAA Regional System Plan Update

Introduction/Background

- Evolving roles of New England airports within the regional aviation system.
- Growing aviation demand due to increases in income, lowered fares, and changes in the travel patterns of our lives and occupations.
- The FAA recent forecast of an additional 23 million annual passengers above current levels within the New England region by 2010.

FAA Regional System Plan Update

Introduction/Background (continued)

- Need to identify opportunities that may exist to further enhance the operation of New England's regional system of airports, including an examination of the potential of other transportation modes to either provide alternative services.

- Interest raised through the ongoing *Logan Airside Improvements Planning Study*. A consistent theme of comments on this project has been that improvements at Logan Airport should be considered within the context of regional transportation planning.

FAA Regional System Plan Update

Study Purpose

Provide the background and analytical framework for a common understanding of:

- The current and future demand for aviation services across the New England Region,
- The roles of the major scheduled passenger service airports,
- The inter-relationships of those roles on the system,
- The constraints and challenges that will be faced by current patterns of service, and
- The identification of policies, strategies and infrastructure that would enhance system performance.

FAA Regional System Plan Update

Study Background

- Boston Regional Airport System Study *(1989)*
- Second Major Airport (SMA) Study *(1990)*
- Strategic Assessment Report (SAR) *(1993)*
- New England Transportation Initiative (NETI) *(1995)*
- New England Regional Air Service Study *(1995)*

FAA Regional System Plan Update

Regional Airports in 1995 Study

State	*City*	*Airport*	
Connecticut	Hartford	Bradley International Airport	(BDL)
	New Haven	Tweed-New Haven Airport	(HNV)
Maine	Bangor	Bangor International Airport	(BGR)
	Portland	Portland International Jetport	(PWM)
Massachusetts	New Bedford	New Bedford Regional Airport	(EWB)
	Worcester	Worcester Regional Airport	(ORH)
New Hampshire	Manchester	Manchester Airport	(MHT)
Rhode Island	Providence	T.F. Green State Airport	(PVD)
Vermont	Burlington	Burlington International Airport	(BTV)

FAA Regional System Plan Update

Study Organization

- **Project Administration Group**. Massport and the State of Massachusetts would be the financial sponsors of the FAA grant. Massport would manage the grant and provide all administrative functions.
- **Project Management Team**. Six state aeronautical agencies and a representative from the hub airports. Project Management Team would be signatories of a Memorandum of Understanding (MOU) that would outline the guiding principles for the undertaking of the project. MOU would generally follow the MOU executed for the 1995 Regional Air Service Study.
- **Advisory Group**. Established to provide a forum for information sharing and peer review . Composed of a broad range of aviation and transportation technical specialists that would bring additional industry knowledge to the process.

FAA Regional System Plan Update

Major Issues to be Considered

- **Regional Jets**. Impacts of increase in RJs on services and routes offered at regional airports and the system as a whole.
  Potential for RJs to expand the demand for travel between the New England Region and short/medium range markets
- **Low Cost Carriers**. Impact on the system (i.e. demand stimulation, catchment area expansion, other infrastructure improvements)
- **Other Transportation Modes**. What can be done to use other transportation modes more effectively as complements to the air service system?
- **Ground Access**. Opportunities to improve airport access and passenger convenience that would encourage use of the regional airports?
- Where can **charter**, **air cargo** and **corporate GA** be best served and how can it be accomplished?
- **Service Improvements** at the outlying markets

FAA Regional System Plan Update

Study Structure/Content

Two-Phase Process:

- **Phase I** of the study will address *regional aviation forecasting* and studies to facilitate a possible *reshaping of the market.*
- **Phase II** will consider *Public Policy and Action Recommendations*

FAA Regional System Plan Update

Phase I Tasks

Task 1 –Regional Aviation Forecasting

- Review of existing and planned aviation forecasts
- Forecasts of passenger/charter demand at the city and town level within 100-mile radius of Boston and at county level for rest of region.
- Forecasts of regional cargo demand.
- Detailed forecasts of passenger demand by city pairs for all primary airports in the region sufficient to account for 75% of enplanements. (*may include onsite passenger surveys, ticket-lift analyses or other similar site-specific data collection efforts*).

FAA Regional System Plan Update

Phase I Tasks (continued)

Task 1 –Regional Aviation Forecasting

- Forecast of the region's age-cohort, income distribution and employment by significant industrial sector categories in order to understand major determinants of overall aviation demand within the region.
- Forecasts to be developed for 5 (2005) and 15 (2015) years.
- Forecasts of operations based upon passenger forecasts.

FAA Regional System Plan Update

Phase I Tasks

Task 2 – Shaping the Market

- Identify any new industry trends that might shape the market.
- Define primary catchment areas for the regional airports and identify shifts since the 1995 study. Explain reasons for any identified market area shifts.
- Conduct an inventory of existing and planned passenger, cargo, charter facilities and associated infrastructure that impact services at primary airports within the region.

FAA Regional System Plan Update

Phase I Tasks (continued)

Task 2 – Shaping the Market

- Identify ground access improvements that could enhance passenger and cargo demand at the regional airports.
- Identify range of services and costs of alternative transportation modes, including video-conferencing that have a potential to redistribute regional demand for aviation services. (*DOT Inter-modal group will furnish some of this*).

FAA Regional System Plan Update

Anticipated Phase I Products

- New regional passenger and cargo forecasts
- Updated passenger and cargo fleet forecasts
- Updated catchment areas
- Identification of new service market opportunities
- An understanding of facility needs to accommodate anticipated growth
- A work scope for Phase II
- Development of a public involvement program for Phase I and Phase II

FAA Regional System Plan Update

Phase II Public Policy and Action Recommendations

- Develop an implementation plan/program identifying major actions required to support a regional strategy to enhance air passenger service.
- Develop ongoing planning and evaluation capability to guide evolution of regional strategy as conditions develop beyond original assumptions.
- Evaluate major public policies, alternate airline strategies, federal aviation policies and regulations that could guide regional system planning.
- Identify federal aviation policies and regulations that could be a restriction to cooperative regional intermodal system planning.

FAA Regional System Plan Update

Public Consultation

- Public and agency consultation for input on the work scope and products
- Briefings on topics of high interest
- Consultation with congressional, business, environmental and community groups
- FAA will also coordinate this project within the context of ONEDOT
- Specific timeframes for public involvement have not been fully developed

FAA Regional System Plan Update

Preliminary Schedule

Scoping Activities

Issue Request for Qualifications (RFQ)	February, 2001
Pre-Bid Briefing Meeting	March, 2001
Consultant Selection	March, 2001
Develop Detailed Work Program	April, 2001
System Planning Grant	April, 2001

Phase 1	Begin April 2001
Task 1 Report	August 2001
Task 2 Report	December 2001
Task 3 Phase II Work Program	January 2002

Phase 2	
Phase 2 Grant	January 2002
Phase 2 Report	September 2002

Appendix C
Delay

- C.1 1998 DELAYSIM Results
- C.2 Measures of Delay
- C.3 2015 RJ Fleet DELAYSIM Results
- C.4 Review of Forecast Regional Jet Utilization: Proposed Runway 14/32 at Logan International Airport, Draft – Jim Muldoon
- C.5 Comparison of Delay Results for All Alternatives Excerpted from the Draft EIS/Draft EIR
- C.6 Total Annual and Total Jet Operations by Community, Runway End & Alternative

1998 DELAYSIM Results

Summary of LAIPP DELAYSIM Results
1998 Fleet

Case Name:	Actual Runway Use	PRAS Goal: Alt. 1 A	GEIR Use No Action
Average FAA configuration changes per day:		6.1	9.2
Average Workload Score:		61.9	97.0
Percentage of Equivalent Arrival Operations on 4 (PRAS Goal = 21.1 %)	36.7%	21.8%	36.7%
Percentage of Equivalent Arrival Operations on 9 (PRAS Goal = 0.0%) :	0.0%	0.1%	0.2%
Percentage of Equivalent Arrival Operations on 14 (PRAS Goal = Rwy 15)	0.0%	0.0%	0.0%
Percentage of Equivalent Arrival Operations on 15 (PRAS Goal = 8.4%)	1.2%	6.5%	1.2%
Percentage of Equivalent Arrival Operations on 22 (PRAS Goal = 6.5%)	11.9%	11.5%	11.8%
Percentage of Equivalent Arrival Operations on 27 (PRAS Goal = 21.7%)	21.7%	20.8%	21.6%
Percentage of Equivalent Arrival Operations on 32 (PRAS Goal = Rwy 33)	0.0%	6.5%	0.0%
Percentage of Equivalent Arrival Operations on 33 (PRAS Goal = 42.3%) :	28.6%	32.7%	28.5%
Percentage of Equivalent Departure Operations on 4 (PRAS Goal = 5.6%)	6.6%	7.7%	6.5%
Percentage of Equivalent Departure Operations on 9 (PRAS Goal = 13.3%)	29.9%	15.9%	29.7%
Percentage of Equivalent Departure Operations on 14 (PRAS Goal = Rwy 15)	0.0%	2.1%	0.0%
Percentage of Equivalent Departure Operations on 15 (PRAS Goal = 23.3%)	10.9%	19.1%	10.8%
Percentage of Equivalent Departure Operations on 22 (PRAS Goal = 28.0%)	30.9%	26.2%	30.8%
Percentage of Equivalent Departure Operations on 27 (PRAS Goal = 17.9%)	16.6%	17.0%	16.6%
Percentage of Equivalent Departure Operations on 32 (PRAS Goal = Rwy 33)	0.0%	0.0%	0.0%
Percentage of Equivalent Departure Operations on 33 (PRAS Goal = 11.9%):	5.2%	12.0%	5.5%
Sum of Absolute Deviations from PRAS Goals:	82.8	21.3	82.6
Sum of Squared Deviations from PRAS Goals:	997.4	59.4	991.1
Annual Hours of Dwell Exceedence Noise Area 1 (Art 4):		267	758
Annual Hours of Dwell Exceedence Noise Area 2 (Art 33):		2,939	107
Annual Hours of Dwell Exceedence Noise Area 3 (Dep 15):		580	86
Annual Hours of Dwell Exceedence Noise Area 4 (Dep 22):		318	774
Annual Hours of Dwell Exceedence Noise Area 5 (Dep 27):		227	50
Annual Hours of Dwell Exceedence Noise Area 6 (Art 22 / Dep 4):		658	2,043
Annual Hours of Dwell Exceedence Noise Area 7 (Art 27 / Dep 9):		991	2,164
Annual Hours of Dwell Exceedence Noise Area 8 (Art 15 / Dep 33):		787	110
Total Annual Hours of Dwell Exceedence:		6,767	6,092
Annual Hours of Persistence Exceedence Noise Area 1 (Art 4):		237	959
Annual Hours of Persistence Exceedence Noise Area 2 (Art 33):		4,715	23
Annual Hours of Persistence Exceedence Noise Area 3 (Dep 15):		311	80
Annual Hours of Persistence Exceedence Noise Area 4 (Dep 22):		58	1,218
Annual Hours of Persistence Exceedence Noise Area 5 (Dep 27):		143	18
Annual Hours of Persistence Exceedence Noise Area 6 (Art 22 / Dep 4):		840	4,303
Annual Hours of Persistence Exceedence Noise Area 7 (Art 27 / Dep 9):		2,061	4,493
Annual Hours of Persistence Exceedence Noise Area 8 (Art 15 / Dep 33):		1,712	31
Total Annual Hours of Persistence Exceedence:		10,077	11,125
Percentage of Delays in VFR1 Weather (78.3% of weather is VFRI)		13.7%	36.5%
Percentage of Delays in VFR2 Weather (9.5% of weather is VFR2):		6.2%	6.1%
Percentage of Delays in IFR1 Weather (3.2% of weather is IFR1) :		25.4%	18.6%
Percentage of Delays in IFR2 Weather (7.4% of weather is IFF12):		46.8%	33.3%
Percentage of Delays in IFR3 Weather (1.6% of weather is IFR3)		7.9%	5.5%
Annual Operations:		513,811	513,811
Annual Hours of Delay;		81,840	119,900
Average Delay per Operation (minutes)		9.6	14.0
Average Delay per Operation with Cancellations (minutes):		8.4	12.4

Notes: 96 weather w1gusts, 98 demand, 97-98 fleet mix for capacities

Definitions of Alternatives.

1) Operational Improvements, Taxiway improvements, $150 Peak Hour Pricing Surcharge, 5000'Runway 14132
IA) Operational improvements, Taxiway Improvements, 5000'Runway 14132
2) Operational Improvements, Taxiway Improvements, $150 Peak Hour Pricing Surcharge
3) Operational Improvements, $150 Peak Hour Pricing Surcharge
4) Baseline

1998 GEIR Fleet

Rwy	Total Operations				Jet Operations				Equivalent Operations				Jet Operations - Day				Jet Operations - Night			
	Alt 4	Alt 2/3	Alt 1A	Alt 1	Alt 4	Alt 2/3	Alt 1A	Alt. 1	Alt. 4	Alt. 2/3	Alt. 1A	Alt. 1	Alt. 4	Alt. 2/3	Alt. 1A	Alt. 1	Alt. 4	Alt. 2/3	Alt. 1A	Alt. 1
4 Arr	105190.8		38312.1		60264.5		22617.9		129256.3		74225.4		52,598.7		16,883.7		7,665.8		5,734.2	
9 Arr	1415.6		9288		179.2		86.2		687.7		240.1		122.7		69.1		56.5		17.1	
14 Arr	0.0		0		0.0		0		0.0		0		0.0		0.0		0.0		0.0	
15 Arr	3868.9		16249.5		2849.0		14577.8		4387.1		22262		2,678.1		13,724.0		170.9		853.8	
22 Arr	58733.3		38331.6		11236.1		8151.9		41724.7		39330.7		7,848.5		4,687.6		3,387.6		3,464.3	
27 Arr	57592.5		41797.7		52114.3		40135.8		75972.3		70916.1		49,463.4		36,715.8		2,650.9		3,420.0	
32 Arr	0.0		60925.2		0.0		13935		0.0		22057.1		0.0		13,032.5		0.0		902.5	
33 Arr	30105.5		52002.6		22966.2		50104.8		100318.9		111520		14,371.5		43,280.9		8,594.7		6,823.9	
Total Arr	256906.5		256906.6		149609.2		149609.5		352347.0		340551.3		127,082.8		128,393.7		22,526.4		21,215.8	
4 Dep	46932.7		29461		13796.6		13796.6		22984.0		26310.1		12,775.8		12,406.2		1,020.8		1,390.4	
9 Dep	60878.5		27134.6		46932.0		21054		104752.0		54104		40,507.6		17,381.8		6,424.4		3,672.2	
14 Dep	0.0		15485		0.0		4804.8		0.0		7077.6		0.0		4,552.3		0.0		252.5	
15 Dep	7364.3		11869		6133.1		9847.8		38051.0		65183.6		2,586.7		3,699.4		3,546.4		6,148.4	
22 Dep	109323.8		71356.8		61786.9		41058.3		108567.0		89130.1		56,589.1		35,717.0		5,197.8		5,341.3	
27 Dep	18166.1		51867.2		15085.5		35898.7		58497.0		57842		10,262.0		33,460.6		4,823.5		2,438.1	
32 Dep	0.0		0		0.0		0		0.0		0		0.0		0.0		0.0		0.0	
33 Dep	14240.9		49732.9		5875.2		23149.1		19497.6		40904.5		4,361.6		21,176.3		1,513.6		1,972.8	
Total Dep	256906.3		256906.5		149609.3		149609.4		352348.6		340551.7		127,082.7		128,393.6		22,526.6		21,215.8	

Note that Alternative 4 uses GEIR runway use, rather than DELAYSIM PRAS goal criteria

Annual Delay Hours by Weather Category

1998	Baseline	Alt. 1 A
VFR1 Weather (78.6%)	43,785	11,237
VFR2 Weather (8.7%)	7,300	5,071
IFR1 Weather (3.6%)	22,283	20,752
IFR2 Weather (7.3%)	39,965	38,334
IFR3 Weather (1.9%)	6,567	6,446
Total VFR	51,085	16,308
Total IFR	68,815	65,532
Total VFR+IFR	119,900	81,840

Measures of Delay

The official FAA delays database is the Air Traffic Operations Network (OPSNET), in which FAA personnel record only the number of flights that are delayed 15 or more minutes at a particular facility. The new FAA Consolidated Operations and Delay Analysis System (CODAS) uses existing data sources to produce estimates of flight delays by phase of flight but not by cause. In addition, the U.S. Department of Transportation (DOT) publishes the Air Travel Consumer Report (ATCR) that reflects on-time performance relative to published flight schedules. Each of these delay reporting systems was designed for a specific and different purpose, is based on different data sources or methodologies, and reports flight delays differently. As a result, these measures of delay are not directly comparable and none provides a comprehensive measure of the flight delays at an airport and their causes. However, these measures are useful for identifying which airports in the national aviation system are most affected by delay.

■ FAA Air Traffic Operations Network (OPSNET)

OPSNET is the official FAA delay reporting system for air traffic management purposes.[1] It is used by the FAA on a daily basis to identify where and when delays occurred in the national aviation system, the source of the delays, and their duration.

OPSNET has two major limitations that make it an inappropriate measure of the total delay incurred at Logan in a given year. First, the OPSNET system understates the total amount of delays in the national aviation system. Delays less than 15 minutes are not recorded by OPSNET, nor does it record aircraft on VFR flight plans or airborne delays other than for holding patterns (i.e., speed reductions are not counted). Additionally, total delays are understated because flight delays are recorded separately by each facility. Specifically, FAA personnel in each en route sector and major terminal area manually record the total number of IFR aircraft that suffered more than 15 minutes of delay under their control. Because the 15-minute threshold applies separately to each facility that controls a flight, total delays are understated. For example, a flight from Washington, DC to Boston that may have suffered three 10-minute delays at three different locations (e.g., taxiing out at Washington, in the New York en route sector, and in the Boston terminal area) will not be recorded in the OPSNET data, despite having incurred a cumulative 30 minutes of delay.[2] Finally, OPSNET does not include cancelled flights.

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1 OPSNET was formerly known as the Air Traffic Operations Management System (ATOMS).
2 Airside modeling only counts delays attributable to congestion at Logan Airport.

Second, the OPSNET data records the number of delayed flights rather than the extent of the delay incurred. All delayed flights that meet the 15-minute threshold are treated equally, i.e., a flight which was delayed 15 minutes during arrival and one which experienced a 3-hour departure delay are each recorded as a single delay in the OPSNET data. Thus, OPSNET cannot be used to determine the hours of delay incurred at Logan each year.

Because of these limitations, OPSNET is most useful as a comparative indicator of national aviation system performance rather than as an absolute measure of delay at a single airport.

■ DOT Air Travel Consumer Report (ATCR)

The Department of Transportation's Office of Aviation Enforcement and Proceedings issues the ATCR to provide consumers with information about the on-time performance of airline flights. It is based on Airline Service Quality Performance (ASQP) operational data filed by major air carriers and on scheduled times published in the Official Airline Guide (OAG).

The ATCR data is of limited value for measuring total delays at Logan because it is an incomplete database that may seriously underestimate true delays and it attributes delays to airports that may not be responsible for the delay. A serious source of understatement is due to the fact that the ATCR only reports domestic delayed flights for the ten largest US airlines.[3] This means that no information on international or regional flights is contained in ATCR, an important gap for Logan where commuter and international flights are 53 percent of total operations.[4] Cancelled flights or those delayed by aircraft mechanical problems are also not reported in this database.

While the ATCR, like OPSNET, uses a 15-minute threshold to define a "delayed" flight, the ATCR calculates delays for individual flights by comparing actual and scheduled departure and arrival times. This method of counting delays and the fact that airlines normally make an allowance in their published schedules for expected ATC and airport delays is another source of understatement. For instance, the scheduled arrival and departure times for a flight may already include a 10-minute allowance for delay. Thus, if the flight arrives 25 minutes after its scheduled arrival, the flight actually incurred 35 minutes of delay, not 25. In this respect the "on-time arrival statistics" published in

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3 Based on airlines with one percent or more of total domestic scheduled passenger revenue in the US. These include: Alaska Airlines, America West Airlines, American Airlines, Continental Airlines, Delta Air Lines, Northwest Airlines, Southwest Airlines, Trans World Airlines, United Airlines, US Airlines.

4 Based on Massport statistics for the 12 months ended June 30, 1999.

the Air Travel Consumer Report each month underestimate the true incidence of arrival delays of 15 minutes or more.

The ATCR records delays as small as one minute, and can aggregate delays by individual flight, by carrier and by airport. For an individual flight the ATCR includes delays incurred on all upstream legs. For example, a flight from St. Louis via Pittsburgh to Boston, which is scheduled to arrive at Logan at 10:15, but actually arrives at 10:40, is reported to have a delay of 25 minutes at Boston. It does not matter where in the system the delay occurred. The flight is counted as a delayed flight if the delay occurred at Logan, en route, at Pittsburgh, or even if the flight was 25 minutes late departing St. Louis. While the ATCR "debits" Logan for arrival delays that may be caused by late departures from the point of origin, it would be inappropriate from an airport planning perspective to count these as Logan related delays.

■ FAA Consolidated Operations and Delay Analysis System (CODAS)

The Consolidated Operations and Delay Analysis System was created by the FAA Office of Aviation Policy and Plans (APO) to provide more consistent estimates of aircraft delay by combining data from several existing sources. CODAS, which was implemented in January 1997, calculates delays by phase of flight: gate-delay, taxi-out delay, airborne delay and taxi-in delay.

CODAS integrates data from two primary sources: the FAA's Enhanced Traffic Management System (ETMS) and the DOT's Airline Service Quality Performance (ASQP) System. Back up data come from the Official Airline Guide (OAG), the carriers' Computerized Reservation Systems (CRS) and the Air Transport Association (ATA). In addition, APO independently estimates unimpeded taxi times. Each of these data sources was independently created for another purpose and each has its own strengths and limitations.

While CODAS represents a significant improvement in the tabulation of flight delays, it is not without limitations as a tool for airport planners. For one thing, it measures delay where it occurs, not where the delay is caused, e.g., gate-hold delays at Los Angeles due to congestion at Logan are recorded as delays at Los Angeles. CODAS also understates the actual delays in several ways. First, although it only tracks IFR flights, many of these are not included. For example, the two available years of CODAS reports contain only 75 percent of the Logan operations that are in the OPSNET database. Finally, as with all the measurement systems, flight cancellations are not included.

■ Overview of Delay Measures

Each of the FAA and U.S. DOT delay databases measures a different aspect of delay. OPSNET counts only the number of flights that suffer a delay of more than fifteen minutes at a single element of the ATC system (sector or airport). By concentrating on single elements separately, without regard to overall flight performance, OPSNET underestimates by a wide margin the number of aircraft truly delayed by more than 15 minutes. ATCR measures delay in terms of deviation from the scheduled arrival time of the aircraft. Insofar as airline schedules already include allowances for expected delays, ATCR statistics may seriously underestimate true delays. ATCR is not concerned with the causes of delay and may "debit" an airport for delays that are due to "upstream" congestion or to other events that have nothing to do with that airport. CODAS is the most useful of the available databases since it includes the ASQP measurements, actual FAA operations data, airline schedules and other information. However, it does not include any information on delay causes, it misses many flights, and it generally under-reports airport delays. Table 1provides a summary of the features and limitations of each of the existing sources of flight delays.

Table 1
Comparison of Flight Delay Measurement Sources

Source	Features	Limitations
OPSNET (FAA)	Measures number of delayed flights Official FAA delays source Delays computed for each FAA facility	Does not count delays less than 15 minutes Does not count cumulative delay across flight sectors Excludes VFR flights Excludes taxi-in delays Excludes linear airborne delays Omits flight cancellations
CODAS (FAA)	Minutes of delay by phase of flight Delays for all major US airports Combines best of available data on schedules and actual times	Excludes VFR flights Not all flights recorded, esp. commuters and busy times No causal information Runway configurations ignored Estimates of unimpeded taxi times Flight cancellations omitted
ATCR (DOT)	Monthly consumer reports Actual aircraft arrival/departure times Delays by airport, airline and individual flight	Only 10 largest US airlines included Excludes regional and international flights No causal information No information on flight phase "Upstream" delays included

■ Simulation Modeling for Airport Delay Estimates

Since none of the delay measurement systems presents a comprehensive picture of actual delays at an airport, estimates of the total airfield delay have been developed using computer simulation models. DELAYSIM, the model used for the Logan Airside Improvements Planning Project, estimates that Logan experienced 120,000 annual hours of runway delay in 1998. (See Chapter 4 for a more detailed discussion of delay models.) This is more than six times the FAA's 20,000 annual hour threshold for identifying delay problem airports. However, even these annualized delay hours obscure the true impact of delay at Logan. During periods of excessive northwest winds, delays can exceed three hours per operation. (See Northwest/Southeast Winds Case Study in Appendix I in the Draft EIS/EIR).

The FAA uses airfield simulation models, not historic data, for evaluating major airport improvements such as the Logan Airfield Improvements.[5] FAA orders require the use of simulation when calculating benefits of major investments, like runways, that involve the use of discretionary funds. Simulation has the essential ability of projecting future performance in response to proposed changes in facilities. It can track and aggregate smaller levels of delays as well as the aggregate delay across all phases of operation. Simulations do not normally cancel flights during periods of extreme delay even though airlines are often forced to cancel flights in these conditions. By estimating the delay that would have occurred, the simulation accounts for the cost of such cancellations.

Simulation models are not validated by comparing them to historic delay data since the FAA does not have a system to comprehensively record the appropriate delays. Instead, simulations are validated by comparison with airfield performance characteristics such as hourly capacity, runway occupancy times, runway exit distributions, taxiway routings, etc. In addition, air traffic control specialists are consulted regarding key assumptions in the model.

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5 John Silva, Environment Program Manager, FAA New England Region, letter to Betty Desrosiers, Massport, dated June 14, 1999.

2015 RJ Fleet DELAYSIM Results

Annual Delay Hours by Weather Category

2015 High Regional Jet Scenario	Baseline	Alt. 2/3	Alt 1A	Alt 1
VFR1 Weather (79.6%)	157,673	122,047	70,707	48,212
VFR2 Weather (8.6%)	35,209	25,257	26,848	19,794
IFR1 Weather (3.9%)	49,294	41,760	44,250	38,992
IFR2 Weather (6.7%)	81,572	69,395	75,128	67,084
IFR3 Weather (1.2%)	48,472	45,850	46,557	45,129
Total VFR	192,882	147,304	97,554	68,006
Total IFR	179,338	157,005	165,935	151,205
Total VFR + IFR	372,220	304,309	263,489	219,211

Summary of Logan Airside DELAYSIM Results
2015 High Regional Jet Fleet

Case Name		PRAS Goal	1999 Actual	Alt 4	Alt 2/3	Alt 1A	Alt 1
Pct of Equivalent Arrival Operations	Rwy 4	21.1%	30.6%	43.6%	42.9%	31.8%	31.9%
	Rwy 9	0.0%	0.0%	0.1%	0.1%	0.9%	0.1%
	Rwy 14	N/A	0.0%	0.0%	0.0%	0.0%	0.0%
	Rwy 15	8.4%	2.2%	0.6%	0.7%	2.4%	2.3%
	Rwy 22	6.5%	15.1%	26.7%	26.1%	20.1%	17.9%
	Rwy 27	21.7%	22.5%	11.9%	12.8%	7.4%	9.1%
	Rwy 32	N/A	0.0%	0.0%	0.0%	7.6%	9.2%
	Rwy 33	42.3%	29.6%	17.1%	17.5%	29.7%	29.5%
Pct of Equivalent Departure Operations	Rwy 4	5.6%	6.3%	9.4%	8.1%	8.2%	6.9%
	Rwy 9	13.3%	25.5%	36.6%	37.9%	28.4%	30.1%
	Rwy 14	N/A	0.0%	0.0%	0.0%	0.1%	0.2%
	Rwy 15	23.3%	11.5%	6.3%	6.5%	8.6%	8.5%
	Rwy 22	28.0%	33.9%	38.0%	38.2%	22.9%	21.5%
	Rwy 27	17.9%	17.0%	7.0%	6.6%	21.6%	21.6%
	Rwy 32	N/A	0.0%	0.0%	0.0%	0.0%	0.0%
	Rwy 33	11.9%	5.8%	2.7%	2.7%	10.2%	11.2%
Abs. Dev from PRAS Goals			75.4	159.8	157.5	93.4	88.3
PRAS Performance Index			726.0	2,852.9	2,822.6	1,058.0	1,009.3
Hours of Annual Dwell Exceedence	Arr 4			1,239	1,244	717	692
	Arr 33			73	74	701	665
	Dep 15			62	0	56	3
	Dep 22			658	670	99	121
	Dep 27			33	33	519	453
	Arr 22 / Dep 4			2,448	2,726	908	1,077
	Arr 27 . Dep 9			2,439	2,372	1,149	1,059
	Arr 15 / Dep 33			70	67	775	662
	Total			7,022	7,186	4,923	4,732
Hours of Annual Persistence Exceedence	Arr 4			1,930	1,866	909	924
	Arr 33			9	10	896	839
	Dep 15			45	0	5	0
	Dep 22			774	835	4	35
	Dep 27			6	6	451	395
	Arr 22 / Dep 4			4,779	5,203	1,502	2,167
	Arr 27 . Dep 9			4,839	4,742	2,076	2,134
	Arr 15 / Dep 33			9	9	1,313	973
	Total			12,390	12,671	7,157	7,467
Pct Delays in VFR1 (79.6% of time)				42.4%	40.1%	26.8%	22.0%
Pct Delays in VFR2 (8.6% of time)				9.5%	8.3%	10.2%	9.0%
Pct Delays in IFR1 (3.9% of time)				13.2%	13.7%	16.8%	17.8%
Pct Delays in IFR2 (6.7% of time)				21.9%	22.8%	28.5%	30.6%
Pct Delays in IFR3 (1.2% of time)				13.0%	15.1%	17.7%	20.6%
Pct Delays on Weekdays				85.7%	84.7%	83.7%	82.2%
Pct Delays on Weekends				14.3%	15.3%	16.3%	17.8%
Annual Operations				584,722	566,982	584,722	566,982
Annual Hours of Delay				372,220	304,309	263,489	219,211
	VFR			192,882	147,304	97,554	68,006
	IFR			179,338	157,005	165,935	151,205
Avg Delay per Op (mins)				38.2	32.2	27.0	23.2
Pct of Ops Delayed > 3 hrs				5.89%	4.97%	3.95%	3.39%
Delay Hours for Aircraft Delayed > 3hrs				196,998	162,335	138,301	117,986
Avg Delay per Op with Cancellations (mins)				28.6	24.0	20.0	16.8
Pct Change in Total Delay vs. Baseline					18.2%	29.2%	41.1%
Pct Change in Average Delay vs. Baseline					15.7%	29.2%	39.3%

Definitions of Alternatives

1) Operational Improvements, Taxiway Improvements, $150 Peak Hour Pricing Surcharge, 5000' Runway 14/32

1A) Operational Improvements, Taxiway Improvements, 5000' Runway 14/32

2) Operational Improvements, Taxiway Improvements, $150 Peak Hour Pricing Surcharge

3) Operational Improvements, $150 Peak Hour Pricing Surcharge

4) Baseline

Review of Forecast Regional Jet Utilization
Proposed Runway 32 at Logan International Airport

Prepared for the FAA by Jim Muldoon

Proposed Runway 14-32 at Logan is intended to provide an additional landing runway (r/w 32) during northwest wind conditions for smaller aircraft, principally regional turboprops, and to reduce airfield delays during those conditions. Recently updated forecasts indicate that the volume of regional turboprops will continue to reduce and that the volume of regional jet (RJ) operations will significantly increase. The question then is - "Will the 5000 ft length proposed for runway 14-32 be adequate for the RJ's included in the current Logan forecast?"

A paper prepared by SH&E tabulates the minimum landing distance for the three regional jets, which are forecast to operate at Logan in significant numbers:

Canadair CRJ-200	4,848 ft.
Embraer 145*	4,494 ft.
Fairchild 328 Jet	3,887 ft.

* For the purpose of this analysis I have added the Embraer 135 with a minimum landing distance of 4,200 ft.

A review of manufacturers published performance information, as well as the appropriate sections of the FAA Aircraft Certification and Air Carrier Operating Regulations, confirms the accuracy of these lengths for a maximum landing weight, on a "standard day", with a dry runway and zero wind. In actual operations these length requirements would be reduced or increased based upon prevailing operational conditions. Specifically, the length required would be reduced at landing weights less than maximum, with the likely presence of a headwind component and at temperatures less than 57 degrees. On the other hand, the lengths would increase with a wet runway (by 15%) and at higher ambient temperatures.

Given the expected range of operating conditions it is clear that the Fairchild RJ's would be able to plan on landing on a 5000 ft runway at Logan in accordance with the applicable regulations whenever the runway is in use, and that the Embraer 135 would encounter operating conditions that would prevent a legal landing on the runway very rarely. A similar range of operating conditions would, however, prevent the Canadair RJ and the Embraer 145 from legally dispatching against a 5000 ft. runway at Logan some significant portion of the time.

If the question were simply - Can these RJs legally conduct landings on the proposed runway? - a straightforward weather/performance analysis would probably establish a usability approaching 100% for both the Embraer 135 and Fairchild RJ's and a somewhat lower factor for the Embraer 145 and a lower still factor for the Canadair RJ.

In light of RJ operator requests for runway lengths greater than 5000 ft. at other airports and instances of non-use or a low volume of use of similar runways at other airports the more difficult question is - Will these RJ's operators accept a 5000 ft landing runway at Logan regardless of legal adequacy? Based upon the locations I was able to investigate, I believe that runway use estimates arrived at using "by-the-book" or "legal" requirements should be reduced somewhat.

Operator requests and supporting planning studies at airports, not presently receiving scheduled jet service, have indicated a need for runway lengths of up to 7,000 ft. to support RJ service. Typical of these locations are Sallisbury and Hagerstown Md., where recent analyses established a need for 6,000 to 7,000 ft. for the Embraer (ERJ) and Canadair (CRJ) respectively. These lengths are, however, predicated on takeoff requirements for a reasonable stage length and load factor. The landing lengths noted in the studies, although not critical to supporting the need for a specific runway extention, are, when adjusted back to sea level, essentially the same as those noted above.

Operator requests that at least a 7,000 ft. landing runway be provided during the construction staging at Cleveland Hopkins International Airport have also raised questions as to the suitability of a 5000 ft. landing runway for RJ's at Logan. Investigation indicated that the justification for a 7,000 ft. length at CLE was based on accommodating about 90% of all jet landings, which included virtually all narrow bodied air carrier jet aircraft. Again the landing distance requirements tabulated for the RJ's in the CLE fleet, when adjusted back to sea level were essentially the same as those noted above.

The reported lack of activity on the relatively new 5000 ft. runway at Philadelphia International also raises questions on the acceptability 5000 ft. at Logan. Investigation indicates that there are a number of factors which continue to limit the use of the runway for all commuters, not just the CRJ's operated at PHL by US Airways. Relatively long taxi distances, a land-and-hold short problem and the lack of Precision Runway Monitoring (PRM) equipment are all cited as factors that negatively affect the use of the runway. The hope, on the part of the consultants who planned and managed the construction of the runway, is that with the completion of the new commuter terminal and the commissioning of a PRM system late this spring the use of the runway will increase dramatically.

At Baltimore Washington International a 5000 ft commuter runway has been available since the late 1980's. Although US Airways operates CRJ's at BWI, the ongoing capacity study at the airport indicates no significant landing activity on the runway by RJ's. Conversations with ATC and airport operations people at BWI did not identify any mitigating factors affecting the use of the runway such as those noted at PHL, in fact non-jet commuter aircraft heavily use the runway when conditions permit. It appears clear that the CRJ operators are simply rejecting the runway because the length is, in their view, marginal.

Based on the specific experience at BWI, and the very small margin between the minimum calculated dry runway requirement and the length proposed at Logan, I do not believe that it is reasonable to anticipate any CRJ landings on runway 32 at Logan.

Recognizing that the wet runway requirements for both the Embraer 135 and 145 are just under (4830 ft.) and just over (5168 ft.) the proposed length, I do not believe that is reasonable to anticipate any ERJ landings on the runway in wet runway conditions.

On the other hand I believe that the margins for both ERJ's in dry conditions and for the Fairchild 328 both wet and dry are sufficient when combined with the operational advantages offered by the use of runway 32 to anticipate full use of the runway by those aircraft when conditions permit.

In summary, based upon the investigation outlined above, the following recommendations are offered for estimating RJ landings on runway 32 as an input for additional delay reduction and noise impact analyses:

- assume no landings by the Canadair CRJ-200
- analyze historical weather data to establish the percentage of time that landings would be conducted on runway 32 in "wet runway" conditions,
- allocate landings by both the Embraer 135 and 145 to other landing runways during those periods when runway 32 is a landing runway and wet runway conditions prevail.
- assume the balance of the RJ fleet will be capable and willing to land on runway 32.

JPM
12/29/00

Comparison of Delay Results for All Alternatives
Excerpted from the Draft EIS/EIR

Comparison of Delay Results for All Alternatives Excerpted from the Airside Draft EIS/EIR

Table 4.5-1
Total Hours of Delay by Alternative and Fleet Scenario

	Total Annual Delay Hours				
	1999 29M		2010 37.5M		2010 45M
Alternative	Low	High	Low	High	High
	Runway and Taxiway				
Alternative 1 - All Actions	111,400	126,500	171,900	168,600	236,600
Alternative 1A - All except Peak Period Pricing	114,450	148,700	183,000	249,600	377,500
Alternative 2 - All except Runway 14/32	136,000	155,900	224,000	208,300	328,200
Alternative 3 - No Build	145,600	166,900	233,900	213,200	339,100
Alternative 4 - No Action	157,500	216,600	260,900	363,400	595,700
Alternative 1 vs. Alternative 4	**46,100**	**90,100**	**89,000**	**194,800**	**359,100**
Alternative 1A vs. Alternative 4	**43,050**	**67,900**	**77,900**	**113,800**	**218,200**

Table 4.5-2
Percent Reduction in Annual Hours of Delay by Logan Improvement Concept and Fleet Scenario (Including Runway and Taxiway Delay)

	1999 29M		2010 37.5M		2010 45M
Improvement Concept	Low	High	Low	High	High
	Percent Delay Reduction vs. No Action				
Alternative 1 - All Actions	-29.3%	-41.6%	-34.1%	-53.6%	-60.3%
Alternative 1A - All except Peak Period Pricing	-27.3%	-31.3%	-29.9%	-31.3%	-36.6%
Alternative 2 - All except Runway 14/32	-13.7%	-28.0%	-14.1%	-42.7%	-44.9%
Alternative 3 - No Build	-7.6%	-22.9%	-10.3%	-41.3%	-43.1%
	Annual Hours of Delay				
Alternative 4 - No Action	157,500	216,600	260,900	363,400	595,700

Table 4.5-3
Hours of Delay by Alternative and Fleet Scenario

Alternative	1999 29M		2010 37.5M		2010 45M
	Low	High	Low	High	High
	Runway Related Delay				
Alternative 1 - All Improvements	105,000	122,000	162,000	159,000	228,000
Alternative 1A - All except Peak Period Pricing	108,000	144,000	173,000	239,000	368,000
Alternative 2 - All except Runway 14/32	125,000	148,000	208,000	194,000	314,000
Alternative 3 - No Build	125,000	148,000	208,000	194,000	314,000
Alternative 4 - No Action	136,000	190,000	234,000	333,000	565,000
	Delay Reduction				
Alternative 1 vs. Alternative 4	**31,000**	**68,000**	**72,000**	**174,000**	**337,000**
Alternative 1A vs. Alternative 4	**28,000**	**46,000**	**61,000**	**94,000**	**197,000**

Table 4.5-4
Benefit of Runway 14/32 in Northwest Wind Conditions

Scenario	Average VFR Delays (minutes per operation) Available Runway Configuration		Percent Delay Reduction
	33L	33L and 32	
Baseline	181	14	(92%)
2010 37.5M Low	444	133	(70%)

Table 4.5-5
Benefit of Runway 14/32 in Southeast Wind Conditions

Scenario	Average VFR Delays (minutes per operation) Available Runway Configuration		Percent Delay Reduction
	15R and 9	15R, 9 and 14	
Baseline	368	130	(65%)
2010 37.5M Low	431	189	(56%)

Table 4.5-6
Hours of Delay by Alternative and Fleet Scenario

Alternative	1999 29M		2010 37.5M		2010 45M
	Low	High	Low	High	High
	Taxiway Related Delay				
Alternative 1 - All Improvements	6,400	4,500	9,900	9,600	8,600
Alternative 1A - All except Peak Period Pricing	6,450	4,700	10,000	10,600	9,500
Alternative 2 - All except Runway 14/32	11,000	7,900	16,000	14,300	14,200
Alternative 3 - No Build	20,600	18,900	25,900	19,200	25,100
Alternative 4 - No Action	21,500	26,600	26,900	30,400	30,700
	Delay Reduction				
Alternative 1 vs. Alternative 4	**15,100**	**22,100**	**17,000**	**20,800**	**22,100**
Alternative 1A vs. Alternative 4	**15,050**	**21,900**	**16,900**	**19,800**	**21,200**

FIGURE 4.5-1: FORECAST ANNUAL HOURS OF DELAY BY WEATHER CONDITION – ALTERNATIVE 4 (NO ACTION)

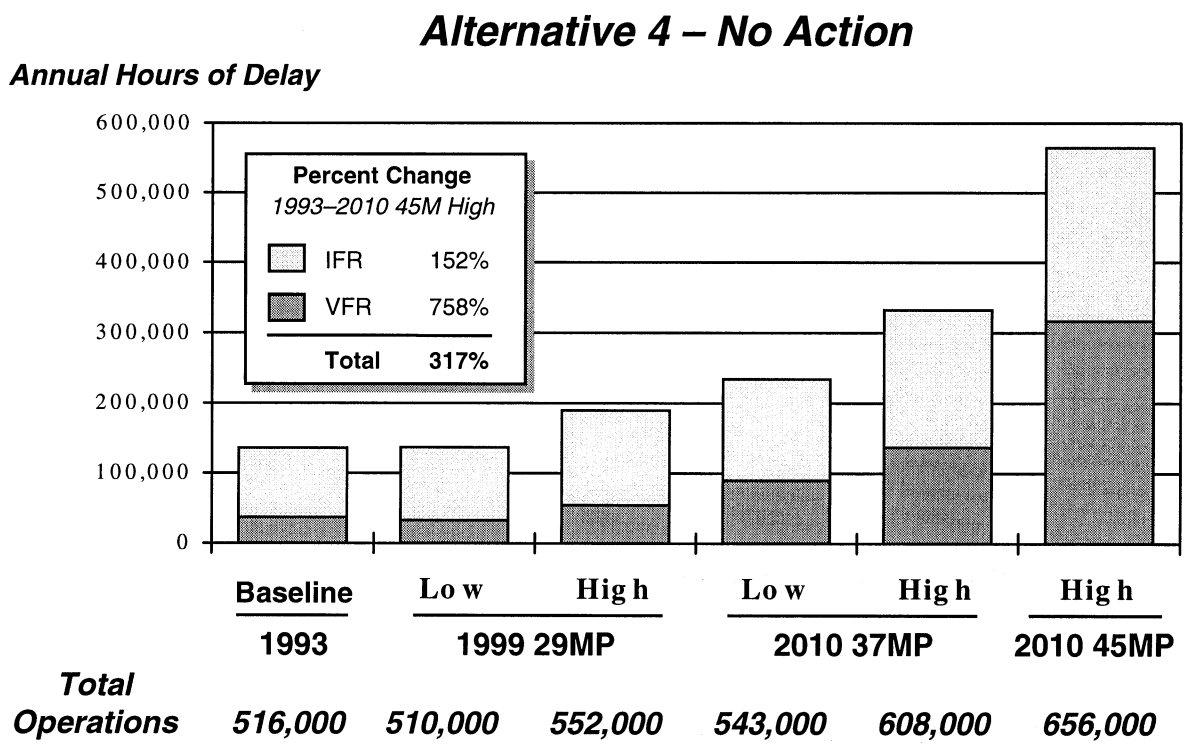


FIGURE 4.5-2: FORECAST ANNUAL HOURS OF DELAY BY WEATHER CONDITION – ALL ACTIONS VS. NO ACTION

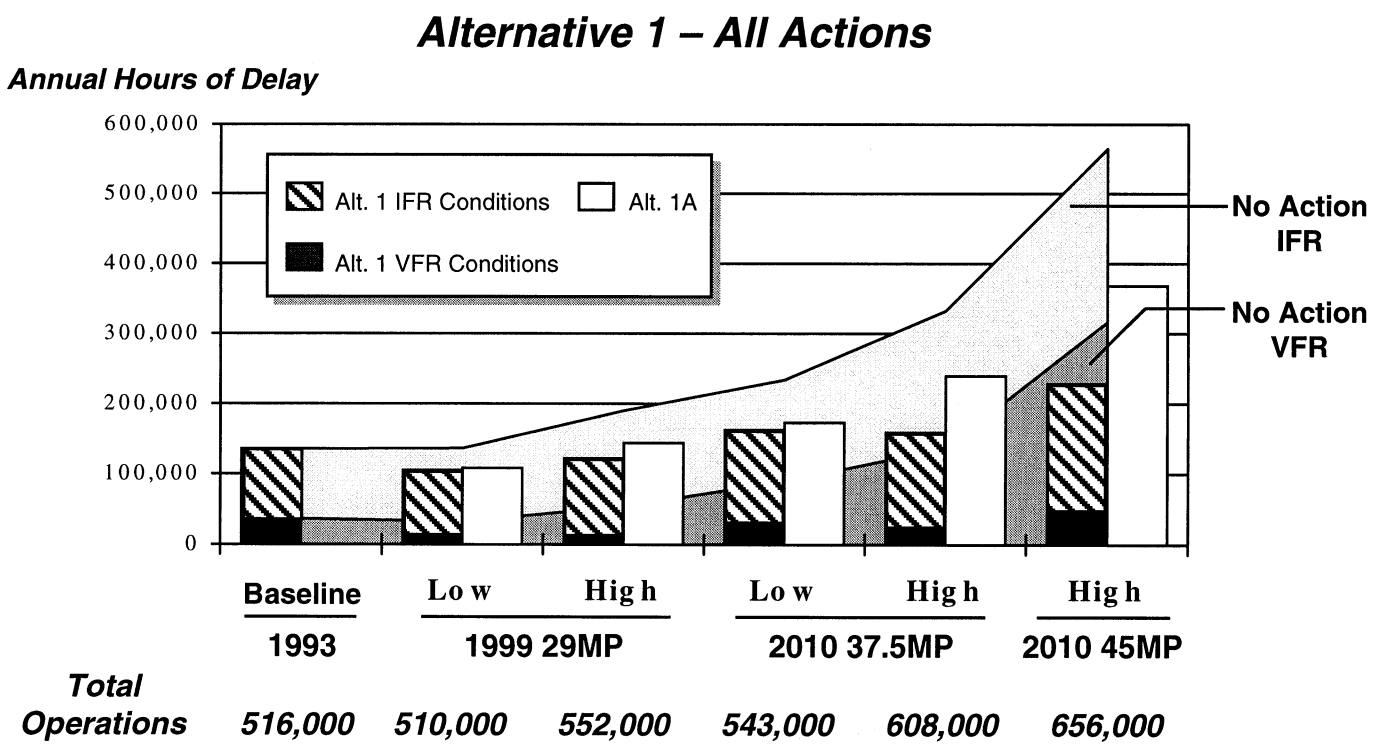
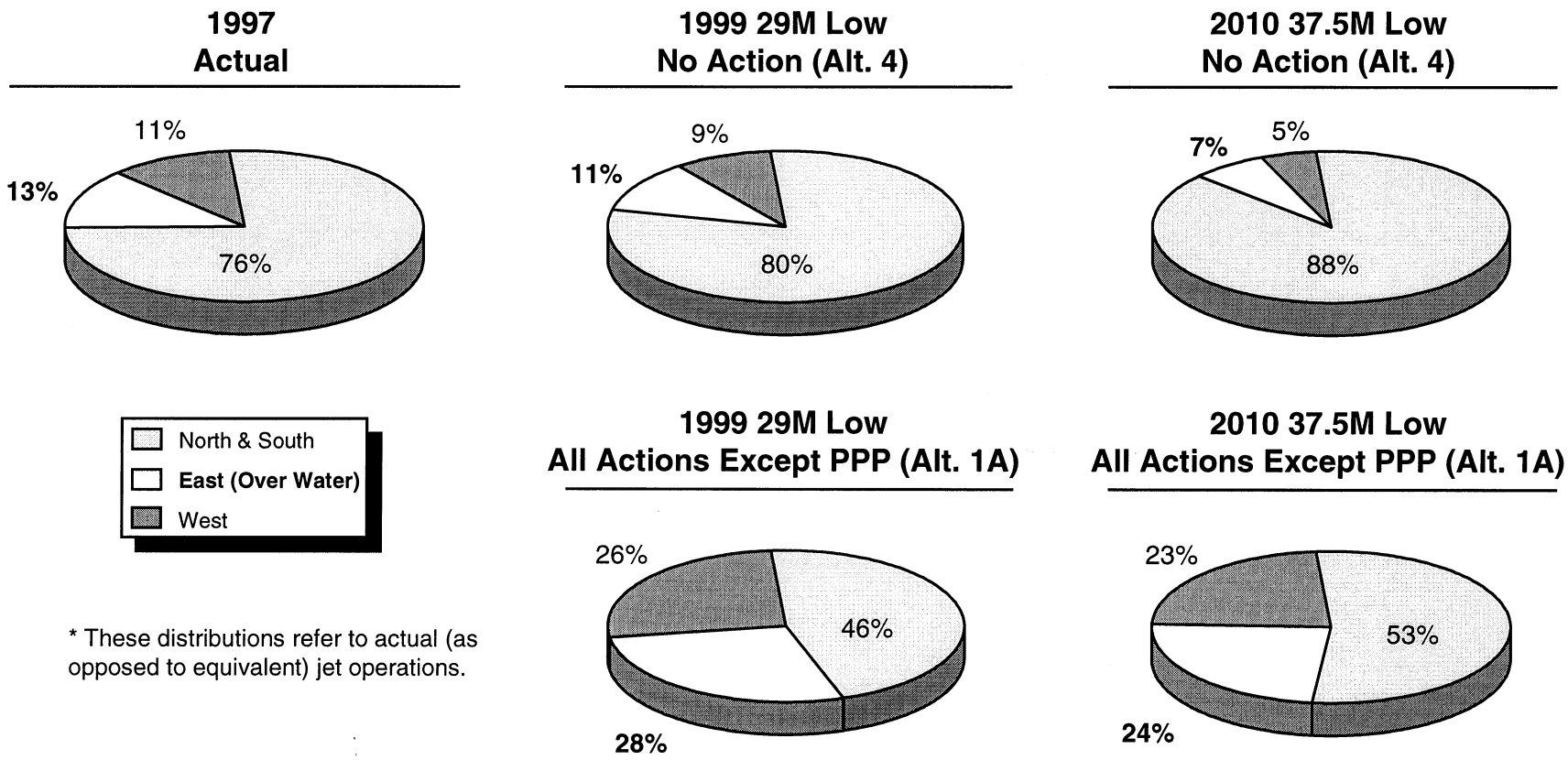


Figure 4.5-3 Jet Overflights by Operating Direction Are More Balanced with Runway 14/32 –
Operations Over the Water Increase and Logan is Less Reliant on North/South Configurations



* These distributions refer to actual (as opposed to equivalent) jet operations.

Total Annual and Total Jet Operations by Community,
Runway End & Alternative

Table 1
Total Annual Operations by Community, Runway End and Alternative

Community	Procedure	1999	2015 High RJ Fleet Alternative 4	Alternative 2/3	Alternative 1A	Alternative 1
North						
Bayswater, Orient Heights,	A22	33,000	65,700	64,100	29,200	29,900
Constitution Beach,	D4	36,100	32,000	39,100	26,200	28,600
Wiinthrop and Revere	Subtotal	69,100	97,700	103,200	55,400	58,500
	A27	46,600	43,400	43,600	19,500	23,300
	D9	65,900	123,600	110,900	97,200	83,800
	Subtotal	112,500	167,000	154,500	116,700	107,100
East						
Boston Harbor, Hull	A33	41,700	26,300	25,000	76,400	72,200
	D15	9,500	6,200	5,600	7,700	7,900
	A32	-	-	-	41,900	43,400
	D14	-	-	-	900	1,200
	Subtotal	51,200	32,500	30,600	126,900	124,700
South						
South Boston, Boston Harbor	D22	87,600	108,100	106,700	42,200	46,300
South Boston, Dorchester, Quincy	Subtotal	87,600	108,100	106,700	42,200	46,300
Milton, Braintree, etc.	A4	86,700	155,500	149,600	121,700	109,300
	Subtotal	86,700	155,500	149,600	121,700	109,300
West						
South Bos (D Street), South End,	D27	30,600	14,800	14,000	72,100	69,600
Roxbury, Jamaica Plain	A9	-	200	200	400	500
Chelsea, Eagle Hill	Subtotal	30,600	15,000	14,200	72,500	70,100
	A15	39,300	1,600	1,200	3,600	5,000
	D33	17,700	7,900	7,400	46,200	46,100
	Subtotal	57,000	9,500	8,600	49,800	51,100
North and South		355,900	528,300	514,000	336,000	321,200
East (Over-water)		51,200	32,500	30,600	126,900	124,700
West		87,600	24,500	22,800	122,300	121,200
Total		494,700	585,300	567,400	585,200	567,100
North and South		71.9%	90.3%	90.6%	57.4%	56.6%
East (Over-water)		10.3%	5.6%	5.4%	21.7%	22.0%
West		17.7%	4.2%	4.0%	20.9%	21.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Table 2
Total Annual Jet Operations by Community, Runway End and Alternative

Community	Procedure	1999	2015 High RJ Fleet			
			Alternative 4	Alternative 2/3	Alternative 1A	Alternative 1
North						
Bayswater, Orient Heights,	A22	14,700	51,000	50,400	23,500	24,000
Constitution Beach, Wiinthrop	D4	12,200	16,800	24,100	13,500	17,700
and Revere	Subtotal	26,900	67,800	74,500	37,000	41,700
Winthrop	A27	41,800	43,200	43,500	19,300	23,000
	D9	47,400	117,500	106,600	93,300	80,500
	Subtotal	89,200	160,700	150,100	112,600	103,500
East						
Boston Harbor, Hull	A33	31,300	22,700	21,800	75,300	71,200
	D15	7,800	5,500	4,900	6,900	7,100
	A32	-	-	-	26,200	28,800
	D14	-	-	-	400	600
	Subtotal	39,100	28,200	26,700	108,800	107,700
South						
South Boston, Boston Harbor	D22	52,700	93,500	93,000	36,500	40,400
South Boston, Dorchester, Quincy	Subtotal	52,700	93,500	93,000	36,500	40,400
Milton, Braintree, etc.	A4	60,100	134,400	130,300	105,200	95,300
	Subtotal	60,100	134,400	130,300	105,200	95,300
West						
South Boston (D Street), South End,	D27	22,600	14,500	13,700	71,800	69,400
Roxbury, Jamaica Plain	A9	-	100	100	100	200
	Subtotal	22,600	14,600	13,800	71,900	69,600
Chelsea, Eagle Hill	A15	3,000	1,400	1,100	3,300	4,600
	D33	8,300	5,100	4,900	30,500	31,500
	Subtotal	11,300	6,500	6,000	33,800	36,100
North and South		202,000	456,400	447,900	291,300	280,900
East (Overwater)		39,100	28,200	26,700	108,800	107,700
West		33,900	21,100	19,800	105,700	105,700
Total		275,000	505,700	494,400	505,800	494,300
North and South		73.5%	90.3%	90.6%	57.6%	56.8%
East (Overwater)		14.2%	5.6%	5.4%	21.5%	21.8%
West		12.3%	4.2%	4.0%	20.9%	21.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Table 3
Total Annual Jet Operations Excluding RJs by Community, Runway End and Alternative

Community	Procedure	1999[a]	2015 High RJ Fleet			
			Alternative 4	Alternative 2/3	Alternative 1A	Alternative 1
North						
Bayswater, Orient Heights,	A22		32,200	32,400	14,900	15,500
Constitution Beach, Wiinthrop	D4		14,800	21,500	11,900	15,900
and Revere	Subtotal		47,000	54,000	26,800	31,400
Winthrop	A27		27,600	28,000	12,500	15,600
	D9		70,000	62,600	55,700	47,400
	Subtotal		97,600	90,600	68,200	63,000
East						
Boston Harbor, Hull	A33		14,400	14,100	59,300	59,400
	D15		3,900	3,200	4,700	4,800
	A32		-	-	4,900	4,400
	D14		-	-	200	200
	Subtotal		18,300	17,400	69,000	68,700
South						
South Boston, Boston Harbor	D22		59,500	60,100	23,200	26,100
South Boston, Dorchester, Quincy,	Subtotal		59,500	60,100	23,200	26,100
Milton, Braintree, etc.	A4		85,400	84,000	66,900	61,500
	Subtotal		85,400	84,000	66,900	61,500
West						
South Boston (D Street), South End,	D27		8,700	8,300	45,400	44,700
Roxbury, Jamaica Plain	A9		100	100	100	200
	Subtotal		8,800	8,400	45,400	44,900
Chelsea, Eagle Hill	A15		900	700	2,100	2,900
	D33		3,800	3,700	19,600	20,400
	Subtotal		4,700	4,400	21,700	23,300
North and South			289,500	288,700	185,100	182,000
East (Over-water)			18,300	17,400	69,000	68,700
West			13,500	12,800	67,100	68,200
Total		263,900	321,300	318,900	321,200	318,900
North and South			90.1%	90.5%	57.6%	57.1%
East (Over-water)			5.7%	5.5%	21.5%	21.5%
West			4.2%	4.0%	20.9%	21.4%
Total		0.0%	100.0%	100.0%	100.0%	100.0%

a Runway distribution data on regional jets in 1999 is not available.

Table 4
Total Annual Equivalent Jet Operations by Community, Runway End and Alternative

Community	Procedure	1999	2015 High RJ Fleet			
			Alternative 4	Alternative 2/3	Alternative 1A	Alternative 1
North						
Bayswater, Orient Heights,	A22	56,000	177,600	161,000	119,800	100100
Constitution Beach, Wiinthrop	D4	19,600	37,000	48,400	33,600	39000
and Revere	Subtotal	75,600	214,600	209,400	153,400	139,100
Winthrop	A27	85,300	81,700	80,300	44,000	51,300
	D9	78,800	256,100	225,300	183,300	163,700
	Subtotal	164,100	337,800	305,600	227,300	215,000
East						
Boston Harbor, Hull	A33	108,600	103,300	97,500	179,000	167,900
	D15	35,300	43,600	45,400	51,000	54,200
	A32	-	-	-	47,200	52,500
	D14	-	-	-	1,200	1,500
	Subtotal	143,900	146,900	142,900	278,400	276,100
South						
South Boston, Boston Harbor	D22	102,000	256,400	238,200	144,100	130,600
South Boston, Dorchester, Quincy,	Subtotal	102,000	256,400	238,200	144,100	130,600
Milton, Braintree, etc.	A4	118,000	297,100	276,000	210,200	194,400
	Subtotal	118,000	297,100	276,000	210,200	194,400
West						
South Boston (D Street), South End,	D27	49,500	46,600	40,500	126,000	118,100
Roxbury, Jamaica Plain	A9	-	600	500	600	700
	Subtotal	49,500	47,200	41,000	126,600	118,800
Chelsea, Eagle Hill	A15	7,900	4,100	4,000	10,200	12,600
	D33	17,200	19,700	18,500	68,200	69,500
	Subtotal	25,100	23,800	22,500	78,400	82,100
North and South		459,700	1,105,900	1,029,200	735,000	679,100
East (Over-water)		143,900	146,900	142,900	278,400	276,100
West		74,600	71,000	63,500	205,000	200,900
Total		678,200	1,323,800	1,235,600	1,218,400	1,156,100
North and South		67.8%	83.5%	83.3%	60.3%	58.7%
East (Over-water)		21.2%	11.1%	11.6%	22.8%	23.9%
West		11.0%	5.4%	5.1%	16.8%	17.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Table 5
Total Annual Daytime (7AM-10PM) Jet Operations by Community, Runway End and Alternative

			2015 High RJ Fleet			
Community	**Procedure**	**1999**	**Alternative 4**	**Alternative 2/3**	**Alternative 1A**	**Alternative 1**
North						
Bayswater, Orient Heights,	A22	10,100	36,900	38,100	12,800	15,500
Constitution Beach, Wiinthrop	D4	11,400	14,600	21,400	11,300	15,300
and Revere	Subtotal	21,500	51,500	59,500	24,100	30,800
Winthrop	A27	37,000	38,900	39,400	16,600	19,900
	D9	43,900	102,100	93,400	83,300	71,300
	Subtotal	80,900	141,000	132,800	99,900	91,200
East						
Boston Harbor, Hull	A33	22,700	13,700	13,400	63,800	60,500
	D15	4,700	1,300	400	2,000	1,900
	A32	-	-	-	23,900	26,200
	D14	-	-	-	300	500
	Subtotal	27,400	15,000	13,800	90,000	89,100
South						
South Boston, Boston Harbor	D22	47,200	75,400	76,900	24,500	30,400
South Boston, Dorchester, Quincy,	Subtotal	47,200	75,400	76,900	24,500	30,400
Milton, Braintree, etc.	A4	53,700	116,300	114,100	93,500	84,300
	Subtotal	53,700	116,300	114,100	93,500	84,300
West						
South Boston (D Street), South End,	D27	19,600	10,900	10,700	65,800	64,000
Roxbury, Jamaica Plain	A9	-	-	100	-	100
	Subtotal	19,600	10,900	10,800	65,800	64,100
Chelsea, Eagle Hill	A15	2,500	1,100	800	2,500	3,700
	D33	7,300	3,500	3,400	26,300	27,300
	Subtotal	9,800	4,600	4,200	28,800	31,000
		188,300	420,400	415,600	265,700	257,700
North and South						
East (Over-water)		27,400	15,000	13,800	90,000	89,100
West		29,400	15,500	15,000	94,600	95,100
Total		245,100	450,900	444,400	450,300	441,900
		76.8%	93.2%	93.5%	59.0%	58.3%
North and South						
East (Over-water)		11.2%	3.3%	3.1%	20.0%	20.2%
West		12.0%	3.4%	3.4%	21.0%	21.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Table 6
Total Annual Nighttime (10PM-7AM) Jet Operations by Community, Runway End and Alternative

			2015 High RJ Fleet			
Community	**Procedure**	**1999**	**Alternative 4**	**Alternative 2/3**	**Alternative 1A**	**Alternative 1**
North						
Bayswater, Orient Heights,	A22	4,600	14,100	12,300	10,700	8,500
Constitution Beach, Wiinthrop	D4	800	2,200	2,700	2,200	2,400
and Revere	Subtotal	5,400	16,300	15,000	12,900	10,900
Winthrop	A27	4,800	4,300	4,100	2,700	3,100
	D9	3,500	15,400	13,200	10,000	9,200
	Subtotal	8,300	19,700	17,300	12,700	12,300
East						
Boston Harbor, Hull	A33	8,600	9,000	8,400	11,500	10,700
	D15	3,100	4,200	4,500	4,900	5,200
	A32	-	-	-	2,300	2,600
	D14	-	-	-	100	100
	Subtotal	11,700	13,200	12,900	18,800	18,600
South						
South Boston, Boston Harbor	D22	5,500	18,100	16,100	12,000	10,000
South Boston, Dorchester, Quincy,	Subtotal	5,500	18,100	16,100	12,000	10,000
Milton, Braintree, etc.	A4	6,400	18,100	16,200	11,700	11,000
	Subtotal	6,400	18,100	16,200	11,700	11,000
West						
South Boston (D Street), South End,	D27	3,000	3,600	3,000	6,000	5,400
Roxbury, Jamaica Plain	A9		100	-	100	100
	Subtotal	3,000	3,700	3,000	6,100	5,500
Chelsea, Eagle Hill	A15	500	300	300	800	900
	D33	1,000	1,600	1,500	4,200	4,200
	Subtotal	1,500	1,900	1,800	5,000	5,100
		13,700	36,000	32,300	25,600	23,200
North and South						
East (Over-water)		11,700	13,200	12,900	18,800	18,600
West		4,500	5,600	4,800	11,100	10,600
Total		29,900	54,800	50,000	55,500	52,400
		45.8%	65.7%	64.6%	46.1%	44.3%
North and South						
East (Over-water)		39.1%	24.1%	25.8%	33.9%	35.5%
West		15.1%	10.2%	9.6%	20.0%	20.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

Appendix D
Northwest Wind Runway Use Restriction

➤ D.1 Case Study

D

Evaluation of Proposed Northwest Wind Restriction on Unidirectional Runway 14/32

One of the issues raised in the FAA Panel Process was the possibility of restricting the availability and use of Runway 32 to Northwest wind conditions only. This proposal was designed to limit the increase in the number and proportion of jet departures on Runway 27 that was predicted to occur with construction of the new runway. Runway 27 is the principal departure runway used in combination with arrivals on Runways 33 and 32 in the new three-runway configuration that would become available with construction of unidirectional Runway 14/32. With the proposed new runway, Logan would have three-runway configurations available in three distinct operating directions: to the north using Runways 4L/4R and 9, to the south using Runways 22L/22R and 27, and to the northwest using Runways 33/32 and 27.[1]

Currently, when wind conditions require air traffic control to route aircraft on a northwesterly heading, available airfield capacity declines sharply from Logan's normal three-runway capacity down to the capacity of two, and sometimes just one runway. As described throughout this report, the construction of Runway 14/32 would prevent this substantial decline in airfield capacity, and the resulting aircraft delay that now occurs under these conditions.

The increased usage of Runway 27 projected in the airfield simulation modeling reflects the availability of this new three-runway configuration in the northwest direction. This configuration would not only allow controllers to nearly eliminate northwest wind delays at Logan, but would also enable air traffic control to more evenly distribute aircraft overflights across three different operating directions during periods of high demand. As discussed in Chapter 4, this flexibility leads to a significant improvement in the ability of air traffic control to achieve the Preferential Runway Assignment System (PRAS) goals and provides relief to residents of communities impacted by use of the existing north and south runway configurations.

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[1] *Construction of the proposed new runway would also create a fourth three-runway configuration—Runways 15/14/ and 9—in a southeast alignment. However, this configuration would have limited arrival capacity.*

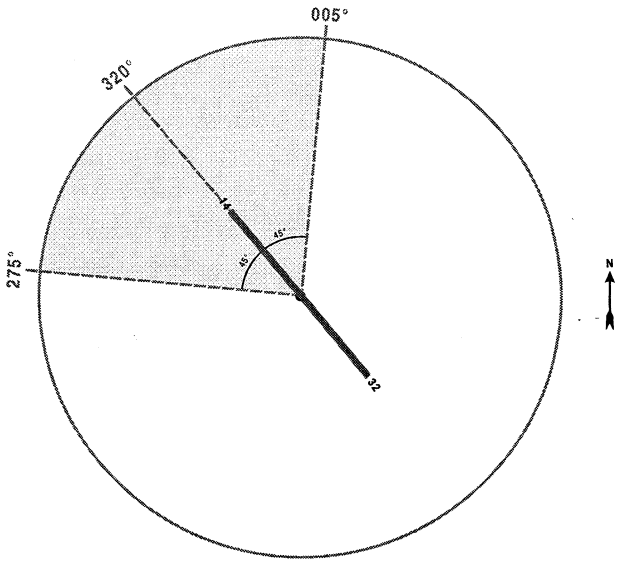
Utilization of the new three-runway configuration (33/32 and 27) to improve PRAS achievement results in a predicted increase in the percent of jets using Runway 27 for departure, above the level that would occur if the configuration was used only to reduce delays resulting from northwest winds. Numerous public comments received on the Draft EIS/EIR objected to a "tripling of overflights" off Runway 27 that was forecast to occur with the construction of Runway 14/32.

For this Supplemental Draft EIS, analysis was performed to determine how restricting the use of Runway 32 to northwest wind conditions would impact the delay reduction benefits produced by the runway as well as the associated utilization of Runway 27 for jet departures. Other changes in runway utilization were identified, as were the implications of the restriction on PRAS achievement and noise exposure patterns. In framing the analysis, rules were developed to identify the wind direction and wind speed under which the Runway 32 would be available for use. These parameters are described below.

Wind Direction

In the wind restriction scenario, Runway 32 was made available for arriving aircraft only when the wind direction was within the 90-degree quadrant between 275° and 005° (i.e., 45 degrees on either side of the 320° runway heading). The wind direction criterion is displayed below in Figure 1. When the wind direction was not within the defined quadrant, Runway 32 was not available for use.

Figure 1.
Quadrant Restriction



Wind Speed

Alternative wind speed criteria of 5, 10, 15, 20, and 25 knots were used to evaluate the proposed restriction on Runway 32. Under the 5 knot scenario, Runway 32 was available for arrivals when wind direction was between 275° and 005°, and wind speed with gusts was 5 knots or greater. As the wind speed threshold was progressively increased from 5 knots to 25 knots, the percent of time in which the runway was available for use declines. For context, FAA Order 7110.65 Air Traffic Control recommends use of the runway most nearly aligned with the wind, when wind speed is 5 knots or more, unless use of another runway would be operationally advantageous or is requested by the pilot.

Weather

Hour-by-hour Boston weather data for the three year period between 1997 and 1999, as reported by the FAA in the CODAS weather database, was used in performing the analysis of the potential wind restriction. This is the same weather database that was used in evaluating all of the proposed airfield improvements for the 2015 RJ Fleet scenario.

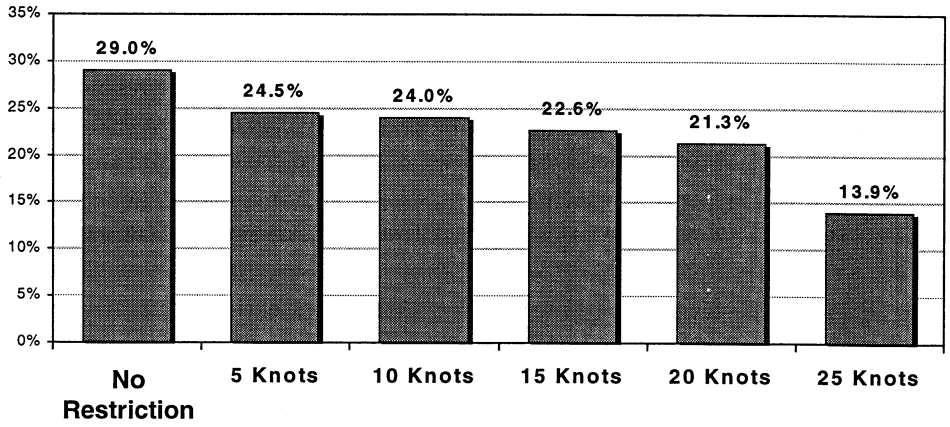
Fleet Scenario

The proposed wind restriction was evaluated based on the 2015 37.5 million passenger RJ Fleet scenario. This fleet represents the third alternative fleet scenario designed to accommodate 37.5 million annual passengers, along with the 37.5 million High Fleet and the 37.5 million Low Fleet. The 2015 RJ fleet has annual operations of approximately 584,000—between the 37.5 High and Low Fleet scenarios—and is characterized by a substantially higher volume of regional jet aircraft and far fewer non-jet aircraft than is present in either of the previously evaluated 37.5 million fleets.

Delay Reduction Impacts

Without any restriction on the use of Runway 14/32, the Preferred Alternative 1A produced a 29 percent reduction in forecast annual delay hours at Logan. Figure 2, below shows the percent reduction in annual Logan delays that could be achieved with various restrictions on the use of the proposed runway.

Figure 2.
Delay Reduction Benefits of Various Wind Restrictions
Percent Delay Reduction: Preferred Alternative vs. No Action, 2015 RJ Fleet



With a 5-knot northwest wind restriction, the delay benefits of Runway 14/32 are somewhat reduced, from 29 percent in the unrestricted scenario down to 25 percent at 5 knots or greater. With a 10-knot northwest wind restriction, Runway 14/32 reduces annual delays by 24 percent. Allowing use of Runway 32 only in northwest winds of 25 knots or greater, the delay reduction benefits are cut by more than half, from 29 percent (unrestricted) down to just 14 percent.

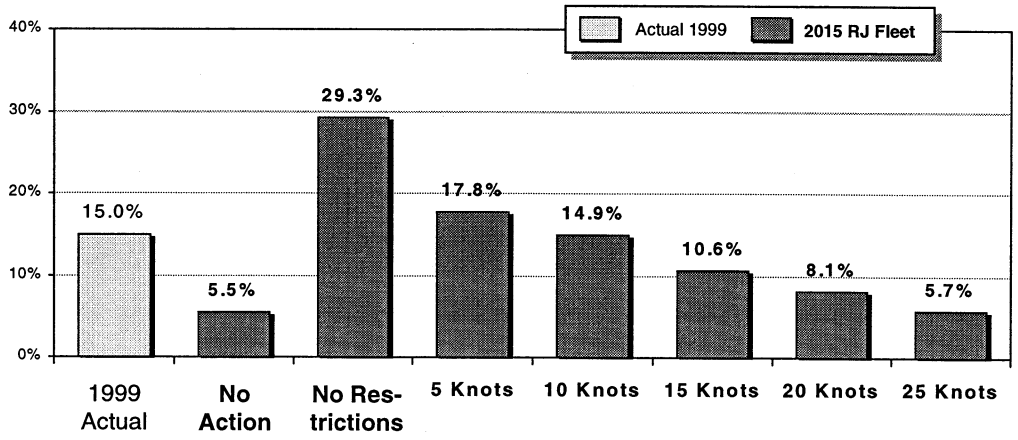
Clearly, the greatest delay reduction benefits are associated with unrestricted availability of the proposed runway. As the circumstances under which air traffic controllers are permitted to use the runway become increasingly limited, the delay reduction benefits associated with the runway are reduced.

Changes in Runway Utilization Patterns

Limiting the use of Runway 32 to northwest wind conditions has impacts on the predicted patterns of runway utilization at Logan. Figure 3 shows that, as intended, the restriction does limit the increase in jet departures using Runway 27. With an unrestricted runway, the use of Runway 27 is projected to increase from 6 percent of jet departures under the No Action scenario up to 29 percent with the Preferred Alternative. With a 5-knot northwest wind restriction, the use of Runway 27 is projected to increase to only 18 percent of jet departures, compared to the 30 percent use in the

unrestricted case. With a 10-knot restriction, the use of Runway 27 is only 15 percent. With a 25 knot restriction, Runway 27 use matches the No Action value of 6 percent. For comparison, in 1999 Runway 27 was used by 15 percent of Logan's jet departures.

Figure 3.
Runway 27 Jet Departures as a Percent of Total



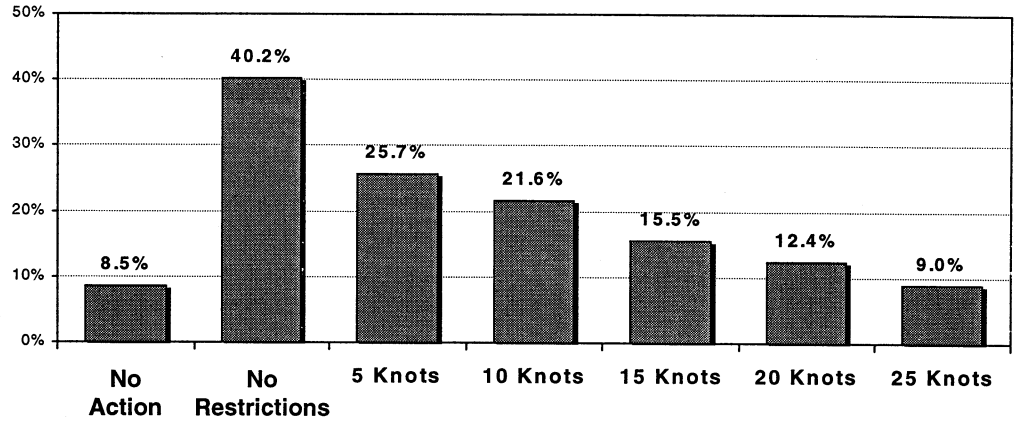
However, restricting the use of Runway 32 has three undesirable consequences:

- The restriction would limit the ability of FAA controllers to increase use of over-the-water flight paths.
- The restriction would increase activity on the north and south runways relative to the unrestricted Preferred Alternative. The north and south runways are already the most heavily utilized runways at Logan.
- The restriction would hamper the ability of air traffic controllers to achieve PRAS goals, including both the annual runway use targets and the short-term goals to limit dwell and persistence.

Over-the-Water Arrivals

The availability of Runway 14/32 and the new three-runway configuration (33/32/27) allows controllers to maximize the use of over-the-water flight paths at Logan. In the 2015 RJ Fleet for example, jet arrivals on Runways 33 and 32 would increase from approximately 22,000 per year (or 9 percent of jet arrivals) under the No Action scenario up to more than 100,000 annual arrivals (or 40 percent of total) with an unrestricted runway.

Figure 4.
Over-Water Jet Arrivals as a Percent of Total

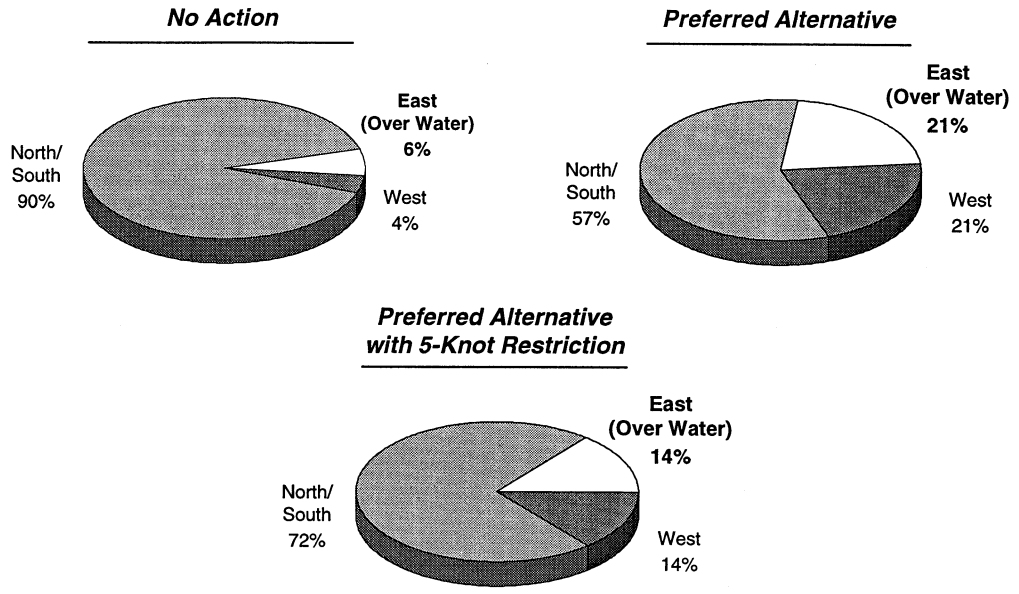


As shown in Figure 4, applying a northwest wind restriction to the use of Runway 32 limits the ability to route more inbound flights over the water. With a 5-knot northwest wind restriction on Runway 32, over-the-water jet arrivals would decline by more than one third to approximately 65,000 annual flights, or 26 percent of total. As the northwest wind restriction is tightened to require higher wind speeds, there is a further loss in the ability to route inbound flights on an over-water approach. With a 25-knot wind restriction on the use of Runway 32, only 23,000 annual jets would arrive on over-water flight paths to Runways 33 or 32, barely above the number of over-water jet arrivals estimated without the new runway under the No Action scenario.

Increased Use of North/South Configurations

While a northwest wind restriction on the use of Runway 32 would lower the utilization of Runways 33, 32 and 27, the restriction would produce a corresponding increase in usage of the north and south runways at Logan. A major advantage of the (unrestricted) runway was that it could provide relief to communities impacted by jet activity on the north/south runway configurations (4R/L, 22R/L, 27 arrivals, 9 departures) that receive the majority of Logan's jet flights. As shown in Figure 5, construction of Runway 14/32 and its unrestricted availability could reduce utilization of these north/south configurations from 90 percent (2015 RJ Fleet) to 57 percent.

Figure 5.
Jet Overflights by Direction – *2015 RJ Fleet*



If use of Runway 32 were restricted to northwest wind conditions, much of this beneficial reduction in north/south runway utilization would be sacrificed. At a 5-knot restriction, use of the north/south runways would reach 72 percent, while at a 15-knot restriction, north/south runway utilization is estimated at 83 percent.

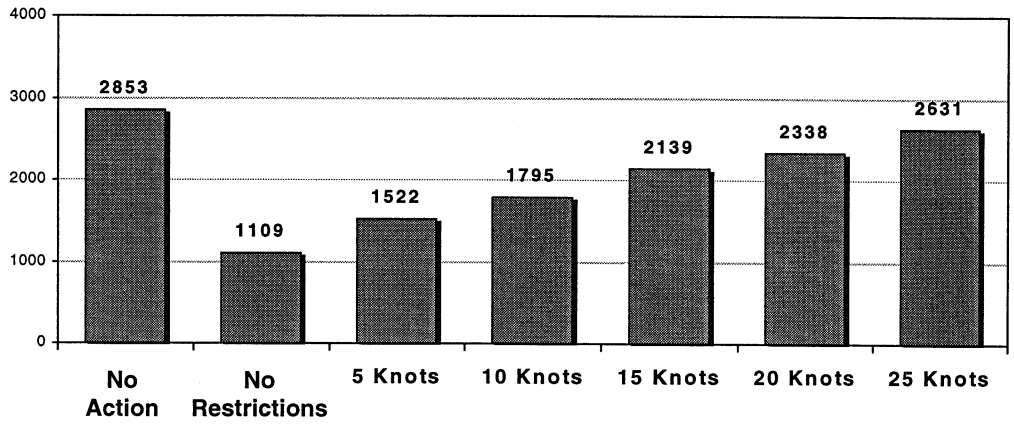
PRAS Performance

By providing a third three-runway configuration at Logan, the new runway would enable controllers to more evenly distribute flight activity across different runways, and thereby enable a significant improvement in the ability to achieve PRAS goals. The PRAS Performance Index (PPI), described previously in Section 4.3.4.7 of this Supplemental Draft, measures the extent to which air traffic controllers are able to achieve the annual runway utilization goals. The more closely actual runway utilization mirrors the PRAS goals, the lower the resulting PPI value.

Figure 6 compares the PRAS Performance Index values for the 2015 RJ Fleet scenario under the No Action scenario, with an unrestricted Runway 14/32, and with various levels of northwest wind restrictions. As illustrated in the graphic, the unrestricted availability of the proposed runway would permit a 61 percent improvement in

achievement of the annual PRAS runway use goals—from an index value of 2853 (No Action) down to 1109 (Preferred Alternative).

Figure 6.
PRAS Performance Index – *2015 RJ Fleet Scenario*



Placing a northwest wind restriction on Runway 32 limits the potential improvement in PRAS performance. At a 5-knot wind restriction, the PRAS index climbs to 1522, sacrificing 23 percent of the improvement permitted with an unrestricted runway. As the wind speed restriction is progressively increased, the potential gain in PRAS performance is further diluted.

In addition to the long-term runway use goals, PRAS also has short-term goals for dwell and persistence, described in Section 4.3.2.2 of this Supplemental Draft. As with the long-term goals, the northwest wind restriction limits the ability of air traffic controllers to improve short-term PRAS performance. Annual dwell exceedance improves from 2,107 hours under the No Action scenario to 1,407 hours with the Preferred Alternative. A 5-knot restriction, allows dwell exceedance to climb back to 1,851 hours, and a 15-knot restriction increases dwell to 1,972 hours. The northwest wind restrictions have a similar impact on persistence exceedance.

Noise Impacted Population

Because restricting the use of Runway 32 would change runway utilization at Logan, the restriction would also impact the airport's noise contour and the resulting noise exposure patterns. To illustrate these changes, noise impacts with a 5-knot northwest wind restriction were compared to projected noise exposure patterns occurring with an unrestricted runway. As shown in Figure 7, restricting the use of Runway 32 would cause more people to experience noise exposure levels of greater than 70 DNL. This increase is concentrated in the communities of Revere and Winthrop, and is the result of greater use of the north/south runway configurations that occurs when use of 33/32/27 is limited by the 5-knot restriction.

Figure 7.
Population Impacts of a 5-Knot Northwest Wind Restriction – *2015 RJ Fleet*

		Preferred Alt.		
Area Impacted	**No Action**	**Unrestricted**	**5-Knot Restriction**	**Change**
DNL 75 and above	222	58	58	-
DNL 70 and above	3,700	2,267	3,144	877
DNL 65 and above	11,493	11,857	11,671	(186)
DNL 60 and above	36,857	50,048	45,582	(4,466)

At the same time, the population experiencing noise exposure above 65 DNL declines by two percent with the northwest wind restriction. This decline takes place because of the lowered utilization of Runway 33 for departures which reduces the number of people in East Boston (Eagle Hill) exposed to noise levels of 65 DNL or above.

Complete population counts by community and noise exposure level are shown in Figure 8.

Figure 8.
Detailed Population Impacts of a 5-Knot Northwest Wind Restriction

Day-Night Sound Level	No Action	Preferred Alternative Unrestricted	Preferred Alternative 5-Knot Restriction	Change
Chelsea				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	-	392	454	62
DNL 60 and above	1,601	8,117	7,206	(911)
Everett				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	-	-	-	-
DNL 60 and above	-	-	-	-
E. Boston - Eagle Hill				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	120	3,133	2,079	(1,054)
DNL 60 and above	3,956	11,247	8,489	(2,758)
E. Boston - Orient Hts/Bayswater St.				
DNL 75 and above	58	58	58	-
DNL 70 and above	355	239	239	-
DNL 65 and above	1,135	606	606	-
DNL 60 and above	4,213	3,287	3,740	453
Other East Boston				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	986	649	766	117
DNL 60 and above	3,940	4,091	4,091	-
Total East Boston				
DNL 75 and above	58	58	58	-
DNL 70 and above	355	239	239	-
DNL 65 and above	2,241	4,388	3,451	(937)
DNL 60 and above	12,109	18,625	16,320	(2,305)
Long Island				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	-	-	-	-
DNL 60 and above	-	-	-	-
Revere				
DNL 75 and above	-	-	-	-
DNL 70 and above	2,260	1,389	2,141	752
DNL 65 and above	3,854	3,428	3,428	-
DNL 60 and above	7,901	6,052	6,898	846
South Boston				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	1,080	765	872	107
DNL 60 and above	3,479	6,950	4,275	(2,675)
Boston (Other)				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	-	-	-	-
DNL 60 and above	674	482	621	139

- continued -

Figure 8 / continued
Detailed Population Impacts of a 5-Knot Northwest Wind Restriction

Day-Night Sound Level	No Action	Preferred Alternative Unrestricted	Preferred Alternative 5-Knot Restriction	Change
Winthrop - Point Shirley				
DNL 75 and above	164	-	-	-
DNL 70 and above	697	417	482	65
DNL 65 and above	1,542	1,305	1,452	147
DNL 60 and above	2,527	2,291	2,401	110
Winthrop - Court Road				
DNL 75 and above	-	-	-	-
DNL 70 and above	388	222	282	60
DNL 65 and above	1,661	1,128	1,234	106
DNL 60 and above	3,387	3,387	3,387	-
Rest of Winthrop				
DNL 75 and above	-	-	-	-
DNL 70 and above	-	-	-	-
DNL 65 and above	1,115	451	780	329
DNL 60 and above	5,179	4,144	4,474	330
Total Winthrop				
DNL 75 and above	164	-	-	-
DNL 70 and above	1,085	639	764	125
DNL 65 and above	4,318	2,884	3,466	582
DNL 60 and above	11,093	9,822	10,262	440
Total Population summary				
DNL 75 and above	222	58	58	-
DNL 70 and above	3,700	2,267	3,144	877
DNL 65 and above	11,493	11,857	11,671	(186)
DNL 60 and above	36,857	50,048	45,582	(4,466)

Findings

In summary, the proposed northwest wind restriction on Runway 32 would have the following consequences:

1. A northwest wind restriction would sacrifice a portion of the delay reduction benefits that could be realized through unrestricted usage of the runway. Even at the least severe 5 knot wind restriction, Logan would experience 17,000 more hours of annual aircraft delay under the 2015 RJ Fleet scenario than it would with an unrestricted runway. As the wind speed criteria is increased, further limiting the circumstances in which the runway could be used, the delay benefits of the runway are progressively eroded.

2. The proposed restriction does limit the increase in jet departures off Runway 27 that results from its use in combination with Runways 33 and 32. With a 5-knot northwest wind restriction, usage of Runway 27 declines from 29 percent to 18 percent of total Logan jet departures. The utilization of Runway 27 for departures drops further as the wind speed criteria on Runway 32 is increased.

3. However, the decreased usage of Runway 27 corresponds with other, less desirable changes in runway utilization at Logan. Restrictions on the use of Runway 32 would limit the number of aircraft using over-the-water routings to Runways 32 and 33. The proposed restriction also sacrifices potential relief to residents of communities impacted by the prevailing north/south runway configurations at Logan.

4. Restricting the use of Runway 32 would reduce the ability of air traffic controllers to achieve the PRAS goals, including the annual runway use goals and the short-term goals designed to limit dwell and persistence of overflights impacting individual communities.

5. A wind restriction on the use of Runway 32 would increase the number of people exposed to the highest noise levels above 70 DNL (compared to an unrestricted runway). However, the restriction would at the same time lower the population exposed to noise levels greater than 65 DNL. These impacts occur due to changes in runway utilization patterns that result from restricting the use of proposed Runway 14/32.

Appendix E
Noise

- E.1 Letter from FAA Approving INM Modifications
- E.2 Letter to FAA Requesting INM Modifications
- E.3 Memorandum to FAA regarding Noise Screening Procedures for Certain Air Traffic Actions Above 3,000 feet
- E.4 2015 Noise Results
- E.5 Comparison of Noise Results for All Alternatives Excerpted from the Airside Project Draft EIS/Draft EIR/Cumulative Population Summaries
- E.6 Noise Metrics
- E.7 Logan 2015: Runway Use by INM Group after Delay Adjustments
- E.8 Logan 2015: Operations After Delay Adjustments
- E.9 School Day/Year Noise Contour

U.S. Department
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**Federal Aviation
Administration**

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East Boothbay, ME 04544

Dear Ken:

This is in response to your letter dated March 14, requesting approval to modify the Integrated Noise Model (INM) 5.0 aircraft profiles for use in the Massport Logan Airside Improvements Planning Project Environmental Impact Statement (EIS) and Report (EIR). These modifications will improve the agreement between H-;M results and measured noise data obtained from the Boston Logan International Airport (BOS) permanent noise monitoring system.

You are hereby authorized to modify aircraft takeoff profiles by adjusting thrust values at the start of the takeoff roll point and at the liftoff point to increase the SEL during ground roll by 6 dB. You are also authorized to modify aircraft landing profiles by adjusting thrust values at the 1,000 foot altitude point and at the touchdown point to increase the SEL during the final phase of landing by 4 dB. These changes are warranted given the differences due to excess ground attenuation over water at BOS versus what is modeled in INM over grass covered ground. Additionally, the modifications are warranted because the comparisons were made using the large amount of data obtained from the BOS permanent noise monitoring system.

Please understand that this approval applies only to the modification of takeoff profiles at ground roll and of approach profiles during final phase of landing as part of this BOS EIS and EIR. Any additional projects or non-standard]NM input for BOS will require separate approval. If you have any questions or need additional assistance, please contact Donna Warren by phone at (202) 267-3571, by FAX at (202) 267-5594, or by EMAIL at donna-warffen@mail.hq.faa.gov.

Sincerely,

Jake A. Plante
Manager, Analysis and Evaluation
Branch, AEE-120
Office of Environment and Energy

M\LD\06599\

Ken
Eldred
Engineering

TELEPHONE and FAX 207 633-6414
MEADOW COVE BOX 501 EAST BOOTHBAY e MAINE 04544 * USA

March 14, 1996

Mr. John M. Gulding
Office of Environment and Energy
FAA-AEE-120
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591

Subject: **Request to Modify Profiles in E'~M 5.0 to Improve Agreement Between INM Calculated and Measured Values of DNL at Boston Logan International Airport for Use in the Massport Logan Airside Improvements Planning Project EIS/EIR**

Dear Mr. Gulding,

This letter contains a request to the FAA to approve adjustments to the Prof pts.dbf data base in the FAA Integrated Noise Model (INM) Version 5.0 to adjust part of the differences between the measured and calculated values of Day-night Sound Level (DNL) at locations that are close to Logan International Airport. The measurements were made by the permanent noise monitoring system at the airport, and the calculations were made by various versions of the Federal Aviation Administration (FAA) -Integrated Noise Model (INM). Differences of 4 to 9 Decibels (0) were observed at several of the noise monitoring stations, with the calculated values lower than the measured values in all but one site.

The adjusted INM calculations are to be used in the noise analysis of the Logan Airside Improvements Planning Project. This project will evaluate the impacts of a series of runway, taxiway and administrative improvements which are directed at reducing current and future congestion and delay conditions at Logan. These analyses will be published in a Federal Draft Environmental Impact Statement (Draft EIS) which will be issued jointly with a Draft Environmental Impact Report (DEIR) prepared pursuant to the Massachusetts Environmental Policy Act.

Since 1981 the noise contours at Logan have been calculated with the INM Version 3.9. In the intervening years the INM database has been upgraded three times from database # 9 to 11 and to INM 5.0. The current database contains data on 103 airplanes, 23 more than in database 9, and include many new models that are needed for the analysis of airport noise in future years. The basic computer program has also been upgraded and the newest version 5.0 became available in mid 1995. Version 5.0 is significantly enhanced in its capabilities over Version 3.9, particularly with respect to

the variety of output data available and its graphics. Because Version 5.0, with its database, is the most appropriate available airport noise model for predicting airport noise in future years, it is proposed to be used in the Airside Improvements Planning Project.

Because of the prior history of differences between calculated and measured values of DNL at close-in locations, an analysis was undertaken of the measured and calculated results for 1993 operations at Logan. The purpose of the analysis was to ascertain the magnitudes and possible causes for the differences, and examining the improvements that could be obtained by adjusting the INM. Table I contains the comparison of 1993 measured DNL values at the sound monitoring stations which are located close to Logan with values calculated by both INM Versions 3.9 and 5.0.. This table shows that both MM versions calculate DNL values that are generally lower than the measured values. The possible reasons for these differences become more evident when the results are grouped by the estimated probable most significant contributor to the DNL value, ie. "airborne takeoffs", "airborne landings", "ground roll during takeoffs" and "all".

The results at these 10 close-in noise monitoring sites show that the INM 3.9 DNL values average 0.2 dB high for "airborne takeoffs", 4.1 dB low for "airborne landings", 7.1 dB low for "ground roll during takeoffs" and 4.6 dB low for "all". The averages for Version 5.0 are similar in magnitude at these locations. The largest difference is associated with noise during the ground-roll segment of takeoff, and the next larger difference is associated with landing noise. The values for "airborne takeoff' are in agreement as would be expected, for this is the condition for which most of the INM validations have been made.

The underprediction of the noise during the ground roll segment of aircraft takeoffs appears to result from the algorithms in the R~M that calculate the noise during ground roll and the excess attenuation experienced by sound propagating over the ground.. The ground roll algorithms provide a reduction in the sound levels behind the aircraft, which appears to overstate the observed reductions at distances greater than 1000 feet. The excess ground attenuation algorithm provides values of attenuation that range from 0 dB at 0 distance up to about 14 dB at distances of 3000 feet or greater. These values of attenuation are in addition to those provided by inverse square loss and air absorption,

Because Logan has water between its runways and most of its closest neighbors, its conditions differ from those of grasscovered ground for which the INM excess ground attenuation was derived. The water does not have the ability to absorb sound as does grass. In addition, the cold temperature of the water probably stabilizes the thermal gradients so that the sound propagating parallel to the ground is not refracted upwards by the daytime sun as it is over ground. Finally, because aircraft generally take off into the wind, the nearest neighbors at Logan are rarely located upwind of an aircraft taking off on the nearest runway. Consequently, the noise that they hear from the ground roll takeoff segment is not often refracted upwards by wind gradients, affecting both the directivity pattern at distance and the excess ground attenuation. For all of these reasons it would be expected that the INM prediction of noise from ground roll is lower than the values experienced by the nearest residents at Logan.

At the two sites identified with "landing" noise the INM computed sound exposure levels for several individual representative aircraft appeared to be lower than data that were obtained for individual flights from the sound monitoring system. This may result from thrust variation during approach and the use of more thrust during the final stage of landing than that contained in the standard profiles in the RW database.

During 1994 we developed an adjustment to R*4M 3.9 to adjust for part of the underprediction of noise from takeoff ground-roll. This adjustment was used in calculating the forecast 1999 DNL 65 dB noise contour for the Home Sound Insulation Program. The adjustment consisted of a change in the algorithm for excess ground attenuation which delayed the full effect of the attenuation until a greater distance from the aircraft. In this analysis adjustments were developed for both takeoff round-roll and arrival profiles to be used with INM 5.0. The proposed takeoff ground-roll adjustment is an addition of 6 decibels to the noise from the airplane during ground-roll. The proposed arrival adjustment is an addition of 4 db to the noise from each type of jet airplane during the last stage of approach. Both adjustments are implemented in the profile points database input to INM 5.0 by increasing the thrust in the region of interest so that the model calculates an appropriately higher value of SEL during that part of the profile. Comparisons of the SEL values at selected locations for a variety of jet aircraft types are presented in Attachment A.

Table 2 contains the data from Table I with the addition of the results calculated from adjustments to the two INM versions. The adjustment to INM 5.0 profiles reduced the average difference between measured and calculated DNL to 2.2 dB, slightly better than resulted from the adjustment to R,TM 3.9. The landing adjustment to INM 5.0 profiles reduced the average difference to 2.3 dB compared to the 4.3 dB for the adjusted R4M 3.9, and the takeoff ground-roll adjustment reduced the average difference to 3.5 dB compared to 3.6 dB for the adjusted RTM 3.9. These adjusted values represent a clear improvement over the unadjusted values in their ability to match the measured values.

These results demonstrate that the noise at close in locations calculated with the adjusted profiles in the INM 5.0 model agrees more closely with the measured values then does the noise calculated with the standard profiles in the MM 5.0 model. Therefore, we request that the adjusted profiles for the INM 5.0 model be approved for use in the for the environmental studies of noise for the Airside Improvements Planning Project at Logan International Airport.

Sincerely,

Kenneth McK. Eldred

TABLE 1

COMPARISONS OF THE MEASURED DAY-NIGHT SOUND LEVEL VALUES AT CLOSE- IN LOGAN NOISE MONITORING SYSTEM LOCATIONS FOR THE 1993 ANNUAL OPERATIONS WITH THE VALUES CALCULATED BY DIFFERENT VERSIONS OF THE FAA INTEGRATED NOISE MODEL (INM)

NMS #	LOCATION	Measured Values	Calculated Values		Comparisons		Major Source
			INM3.9 DB 9	INM5.0 Std. DB	Meas - INM 3.9	Meas. INM 5.0	
3	S. Boston Yacht Club, S. Boston	69.3	63.1	63.3	6.2	6.0	Landing
4	Bayview & Grandview, Winthrop	79.8	81.6	81.0	-1.8	-1.2	Takeoff
5	Harborview& Faun Bar, Winthrop	73.3	71.9	72.2	1.4	1.1	Takeoff
6	Somerset & Johnson, Winthrop	71.1	61.5	62.4	9.6	8.7	Ground-roll
7	Loring Rd. near Court, Winthrop	74.1	69.7	71.1	4.4	3.0	Ground-roll
8	Morton & Amelia, Winthrop	68.4	65.8	66.2	2.6	2.2	All
9	Bayswater & Nancia, E. Boston	76.6	69.7	69.7	5.9	5.9	Ground-roll
10	Bayswater & Shawsheen, E. Boston	71.3	64.5	64.6	6.8	6.7	Ground-roll
14	Jeffries Point Yacht Club, E. Boston	67.4	58.6	59.4	8.8	8.0	T/O & G/R
16	Bradstreet Ave. & Sales, Revere	71.4	69.4	69.4	2.0	2.0	Landing
		Average of All data			4.6	4.2	
		Average of Takeoff data			-0.2	-0.0	
		Average of Landing data			4.1	4.0	
Values from HMMH Comparison		Average of Ground-roll data			7.1	6.5	

TABLE 2

COMPARISONS OF THE MEASURED DAY-NIGHT SOUND LEVEL VALUES AT CLOSE- IN LOGAN NOISE MONITORING SYSTEM LOCATIONS FOR THE 1993 ANNUAL OPERATIONS WITH THE VALUES CALCULATED BY DIFFERENT VERSIONS OF THE FAA INTEGRATED NOISE MODEL (INM)

NMS #	LOCATION	Measured Values	Calculated Values				Comparisons				Major Source
			INM3.9 DB9*	INM5.0 Std. DB	INM3.9 A DB9*	INM5.0 A Adj. DB	Meas - INM 3.9	Meas - INM 5.0	Meas - INM 3.9A	Meas - INM 5.OA	
3	S. Boston Yacht Club, S. Boston	69.3	63.1	63.3	62.8	65.8	6.2	6.0	6.5	3.5	Landing
4	Bayview & Grandview, Winthrop	79.8	81.6	81.0	81.6	81.4	-1.8	-1.2	-1.8	-1.6	Takeoff
5	Harborview& Faun Bar, Winthrop	73.3	71.9	72.2	71.9	72.3	1.4	1.1	1.4	1.0	Takeoff
6	Somerset & Johnson, Winthrop	71.1	61.5	62.4	66.9	66.4	9.6	8.7	4.2	4.7	Ground-roll
7	Loring Rd. near Court, Winthrop	74.1	69.7	71.1	74.4	75.2	4.4	3.0	-0.3	-1.1	Ground-roll
8	Morton & Amelia, Winthrop	68.4	65.8	66.2	66.8	6.7.8	2.6	2.2	1.6	0.6	Ail '
9	Bayswater & Nancia, E. Boston	75.6	69.7	69.7	72.0	70.8	5.9	5.9	3.6	4.8	Ground-roll
10	Bayswater & Shawsheen, E. Boston	71.3	64.5	64.6	67.4	66.1	6.8	6.7	3.9	5.2	Ground-roll
14	Jeffries Point Yacht Club, E. Boston	67.4	58.6	59.4	60.6	63.7	8.8	8.0	6.8	3.7	T/O & G/R
16	Bradstreet Ave. & Sales, Revere	71.4	69.4	69.4	69.4	70.4	2.0	2.0	2.0	1.0	Landing
				Average of AJI data			4.6	4.2	2.8	2.2	
				Average of Takeoff data			-0.2	-0.0	-0.2	-0.3	
				Average of Landing data			4.1	4.0	4.3	2.3	
Values from HMMH Comparison				Average of Ground-roll data			7.1	6.5	3.6	3.5	

Attachment A:

Comparisons of Takeoff and Landing Noise for Typical Jet Aircraft

The changes to the profiles in the INM 5.0 Database involved increasing the thrust at specific profile points in the PROF_PTS.DBF file so that the SEL computed from the appropriate noise table would be calculated at a higher value. This procedure was applied to the 48 INM jet aircraft that are expected to be used in the Boston Logan International Airside Study.

The takeoff profiles were modified to increase the SEL during ground roll by 6 dB at two profile points. They are the start of takeoff roll and the liftoff points, both at zero altitude. An additional point was inserted into the takeoff profile at 100 feet altitude with the standard database value to assure that any changes to the noise would be terminated by 100 foot altitude. The required standard values of thrust, speed and distance from start of roll for the 100 foot altitude point were derived from the database by interpolation between the 0 and 1000 foot datapoints. The approach profiles were modified to increase the SEL during the final phase of landing by 4 dB at two profile points. They are the 1000 foot altitude point and the touchdown point. at zero altitude. The change in thrust at each profile point was calculated by interpolation in the Thrust-SEL database table for each aircraft and stage length using a 1000 foot slant distance.

Table A1 summarizes the changes along a 1000 foot sideline and the centerline for a 727EM1 aircraft. during takeoff and landing. The 727EM1 with Stage Length I has a takeoff roll of 4513 feet and climbs through a 100 foot altitude at 5014 feet from the start of its takeoff roll. Table AIA shows that its noise is 6 dB greater while the aircraft is on the runway (the 0 and 0-5 NM points) and is only 1.4 dB greater at I NM from the start. This 1.4 dB increase over the standard probably results from the addition of the noise from the takeoff roll profile segments. At greater distances, 1. 5 NM from the start of takeoff roll and beyond, the adjustment has no effect. The differences are slightly different along the centerline because the 6 dB increase was calculated for a 1000 foot slant distance and the relationship between SEL and thrust varies with slant distance.

Table A1B gives a similar comparison for landing of the 727EM1 aircraft. The standard profile descends through a 1000 foot altitude at about 3 NM from the landing threshold. The noise for standard and adjusted computations is the same at distances greater than 4 NM . Between 4 and 3 NM from threshold the SEL difference increases to 3.1 dB and averages out 4 dB from 2.5 NM to the threshold at 0 NM. The results along the centerline are essentially similar.

Table A2 gives a comparison of takeoff noise for both the 1000 foot sideline and the centerline for several aircraft types and for Stage Length 1. The results are given for 4 grid points which cover the first 1.5 NM from the start of takeoff roll. The SEL differences along the foot sideline are essentially 6 dB, as planned. Most of the values at 0.5 NM approach 6 dB, except for a few aircraft which have climbed to over 100 feet by the 0.5 NM location. By 1.0 NM from the start of takeoff roll most of the aircraft are above 100 feet and the differences in SEL are approaching zero. At 1.5 NM all of the

differences are essentially zero. The blank entries in the runway centerline data result from the fact that the cumulative contributions of these aircraft to the total noise exposure was less than 3 %.

Table A3 gives a similar comparison for 5 points in the last 2 NM to the landing threshold. The results along the 1000 foot sideline are close to the planned 4 dB. The average difference along the centerline are slightly lower and more variable. This increase in variability probably results from the differences in the slopes of the SEL-Thrust-Distance relationships for the different engine noise characteristics.

TABLE A1A

COMPARISON OF TAKEOFF NOISE FOR STAGE LENGTH 1 727EM1 AIRCRAFT ALONG THE RUNWAY CENTERLINE AND ALONG A 1000 FOOT SIDELINE AT 0.5 NM INTERVALS FROM START OF THE TAKEOF TAKEOFF ROLL CALCULATED WITH BOTH STANDARD AND ADJUSTED INM 5.0 PROFILES

Distance	1000 Feet Sideline			Runway Centerline		
In NM from Start	Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
0.0	108.4	114.4	6.0	151.2	157.0	5.8
0.5	102.8	108.8	6.0	145.4	151.2	5.8
1.0	103.4	104.8	1.4	136.5	142.2	5.7
1.5	105.7	105.6	-0.1	112.9	112.9	0.0
2.0	104.6	104.6	0.0	108.4	108.4	0.0
2.5	103.3	103.3	0.0	105.9	105.9	0.0
3.0	101.7	101.7	0.0	103.8	103.8	0.0
3.5	99.7	99.7	0.0	101.3	101.3	0.0
4.0	97.8	97.8	0.0	99.0	99.0	0.0
4.5	96.4	96.4	0.0	97.3	97.3	0.0
5.0	95.2	95.2	0.0	95.9	95.9	0.0
5.5	94.1	94.1	0.0	94.7	94.7	0.0
6.0	93.1	93.1	0.0	93.6	93.6	0.0
6.5	92.3	92.3	0.0	92.8	92.8	0.0
7.0	91.5	91.5	0.0	91.9	91.9	0.0
7.5	90.8	90.8	0.0	91.2	91.2	0.0
8.0	90.0	90.0	0.0	90.4	90.4	0.0
8.5	89.3	89.3	0.0	89.6	89.6	0.0
9.0	88.5	88.5	0.0	88.8	88.8	0.0
9.5	87.8	87.8	0.0	88.1	88.1	0.0
10.0	87.1	87.1	0.0	87.4	87.4	

TABLE A1B

COMPARISON OF APPROACH NOISE FOR AN 727EMI AIRCRAFT ALONG THE RUNWAY CENTERLINE AND ALONG A 1000 FOOT SIDELINE AT 0.5 NM INTERVALS FROM THE RUNWAY LANDING THRESHOLD CALCULATED WITH BOTH STANDARD AND ADJUSTED INM 5.0 PROFILES

Distance	1000 Feet Sideline			Runway Centerline		
In NM from Threshold	Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
-10.0	72.1	72.1	0.0	72.6	72.6	0.0
-9.5	72.9	72.9	0.0	73.4	73.4	0.0
-9.0	73.6	73.6	0.0	74.2	74.2	0.0
-8.5	74.4	74.4	0.0	76.1	76.1	0.0
-8.0	75.4	75.4	0.0	77.0	77.0	0.0
-7.5	76.2	76.2	0.0	78.2	78.2	0.0
-7.0	77.3	77.3	0.0	79.2	79.2	0.0
-6.5	78.2	78.2	0.0	80.3	80.3	0.0
-6.0	79.2	79.2	0.0	81.4	81.5	0.1
-5.5	80.2	80.2	0.0	82.6	82.6	0.0
-5.0	81.2	81.2	0.0	84.0	84.0	0.0
-4.5	82.2	82.2	0.0	85.3	86.1	0.8
-4.0	83.1	83.9	0.8	86.8	88.3	1.5
-3.5	83.9	85.5	1.6	88.4	91.6	3.2
-3.0	84.9'	88.0	3~ 1	89.8	93.6	3.8
-2-5	85.3	89.2	3.9	91.5	95.3	3.8
-2.0	85.7	89.6	3.9	93.4	97.3	3.9
-1.5	85.9	89.9	4~O	95.8	99.8	4.0
-1.0	85.8	89.8	4.0	99.5	103.6	4.1
-0.5	84.9	89.0	4.1	105.7	109.9	4.2
0.0	82.1	85.8	3.7	87.4	87.4	0.0

TABLE A2

COMPARISON OF TAKEOFF NOISE FOR STAGE LENGTH 1 AIRCRAFT ALONG THE RUNWAY CENTERLINE AND ALONG A 1000 FOOT SIDELINE AT 0.5 NM INTERVALS FROM START OF THE TAKEOFF ROLL FOR SEVERAL AIRCRAFT CALCULATED WITH BOTH STANDARD AND ADJUSTED INM 5.0 PROFILES

Distance In NM from Start	Aircraft Type	1000 Feet Sideline			Runway Centerline		
		Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
0.0	727EMI	102.40	108.40	6.0	145.20	151.00	5.8
0.0	727EM2	105.80	111.80	6.0	148.50	154.40	5.9
0.0	727015	112.20	118.20	6.0	153.00	158.80	5.8
0.0	727Q7	107.70	113.70	6.0	148.70	154.50	5.8
0.0	727Q9	109.20	115.20	6.0	150.00	155.80	5.8
0.0	737400	96.60	102.60	6.0			
0.0	737D17	111.80	117.80	6.0	152.80	158.60	5.8
0.0	737ONH	102.20	108.20	6.0	145.10	148.80	3.7
0.0	74720B	107.20	113.20	6.0	149.10	155.30	6.2
0.0	747400	102-70	108.70	6.0	143.50	148.60	5.1
0.0	767300	103.10	109.10	6.0	141.50	146.20	4.7
0.0	767CF6	97.70	103.70	6.0			
0.0	767JT9	97.20	103.20	6.0			
0.0	A300	97.70	103.70	6.0			
0.0	A31 0	97.60	103.60	6.0			
0.0	DC1010	98.10	104.10	6.0			
0.0	DC1030	101.20	107.20	6.0			
0.0	DC1040	99.60	105.60	6.0			
0.0	DC870	99.50	105.50	6.0			
0.0	DC8QN	108.40	114.40	6.0			
0.0	DC930H	100.90	106.80	5.9			
0.0	DC950	110.00	116.00	6.0			
0.0	DC907	103.30	109.30	6.0			
0.0	DC9Q9	105.20	111.20	6.0			
0.0	F10065	97.20	103.20	6.0			
0.0	F28MK2	108.10	114.10	6.0			
0.0	F28MK4	104.70	110.40	5.7			
0.0	L1011	99.80	105.80	6.0			
0.0	L10115	101.30	107.30	6.0			
0.0	M011GE	98.70	104.70	6.0			
0.0	MD11PW	97.90	104.00	6.1			
0.0	MD81	98.30	104.30	6.0			
0.0	MD82	99.80	105.80	6.0			
0.0	MD83	100.90	106.90	6.0			
0.5	727EMI	96.10	102.00	5.9	138.80	144.60	5.8
0.5	727EM2	100.30	106.30	6.0	142.60	148.40	5.8
0.5	727Q 15	106.00	111.90	5.9	146.40	152.00	5.6
0.5	727Q7	100.30	106.30	6.0	141.30	147.10	5.8
0.5	72709	103.20	109.40	6.2	143.80	149.80	6.0
0.5	737D17	103.30	109.00	5.7	144.10	149.90	5.8
0.5	7370NH	94.40	99.90	5.5	137.10	142.90	5.8
0.5	74720B	98.70	104.70	6.0	140.30	146.50	6.2
0.5	747400	94.60	100.60	6.0	135.60	140.60	5.0
0.5	767300	95.70	98.00	2.3			
0.5	767CF6	89.50	95.20	5.7			
0.5	A300	90.20	95.90	5.7			
0.5	A31 0	89.60	97.40	7.8			
0.5	DC1010	91.80	97.10	5.3	134.60	138.90	4.3
0.5	DC1030	93.90	99.60	5.7	136.20	141.00	4.8
0.5	DC 1040	93.60	100.30	6.7	136.10	141.60	5.5
0.5	DC870	90.90	96.60	5.7	132.40	137.90	5.5
0.5	DC8QN	101.60	107.40	5.8	142.10	147.70	5.6
0.5	DC930H	95.40	100.40	5.0	138.10	141.60	3.5
0.5	OC950	103.40	109.30	5.9	144.30	150.10	5.8
0.5	DC9Q7	102.60	102.60	0.0			
0.5	OCS09	98.80	104.60	5.8	139.80	145.60	5.8
0.5	F28MK2	99.10	104.80	5.7	140.90	147.10	6.2
0.5	F28MK4	96.20	101.80	5.6	138.30	145.00	6.7

TABLE A2 CONTINUED

Distance In NM from Start	Aircraft Type	1000 Feet Sideline			Runway Centerline		
		Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
0.5	L1011	94.30	100.30	6.0	136.50	141.30	4.8
0.5	L10115	94.70	100.70	6.0	137.20	142.00	4.8
0.5	MD11GE	91.40	97.30	5.9	132.70	138.50	5.8
0.5	MD1 1 PW	90.50	96.50	6.0	132.70	138.50	5.8
0.5	MD81	91.40	97.30	5.9	132.10	138.20	6.1
0.5	MD82	92.50	98.30	5.8	133.20	139.30	6-1
0.5	MD83	93.90	99.80	5.9	134.60	140.70	6.1
1.0	727EMI	99.4	102.0	Z6	112.0	112.0	0.0
1.0	727EM2	99.7	100.6	0.9	119.4	119.5	0.1
1.0	727015	104.9	105.8	0.9	122.7	122.8	0.1
1.0	727Q7	103.3	103.2	-0.1	114.2	114.0	-0.2
1.0	727Q9	99.2	104.4	5.2	128.3	133.5	5.2
1.0	737D17	109.3	109.2	-0.1	114.5	114.5	0.0
1.0	737QNH	100.2	100.1	-0.1			
1.0	74720B	103.5	103.4	-0.1	110.3	110.3	0.0
1.0	747400	98.8	98.8	0.0			
1.0,	767300	99.5	99.3	-0.2			
1.0	767CF6	95.1	95.1	0.0			
1.0	767JT9	95.0	94.9	-0.1			
1.0	A300	95.9	95.8	-0.1			
1.0	A31 0	95.5	95.5	0.0			
1.0	A320	93.7	93.7	0.0			
1.0	DC1010	96.5	96.4	-0.1			
1.0	DC1030	99.4	99.4	0.0			
1.0	DC1040	97.3	97.5	0.2			
1.0	DC870	96.6	96.6	0.0			
1.0	DC8QN	106.9	106.9	0.0			
1.0	DC930H	99.2	100.0	0.8			
1.0	DC950	108.9	108.9	0.0	115.9	115.9	0.0
1.0	DC9Q7	103.1	103.1	0.0			
1.0	DC9Q9	104.3	104.2	-0.1	111.9	111.9	0.0
1.0	F28MK2	104.9	104.9	0.0			
1.0	F28MK4	102.1	102.0	-0.1			
1.0	L1011	96.1	96.1	0.0	110.8	110.8	0.0
1.0	L10115	98.5	98.4	-0.1			
1.0	LEAR35	95.6	95.6	0.0			
1.0	MD11GE	96.2	96.2	0.0			
1.0	MD11PW	94.8	94.7	-0.1			
1.0	MD81	96.3	96.3	0.0			
1.0	MD82	97.8	97.8	0.0			
1.0	MD83	98.5	98.5	0.0			
1.5	727EMI	99.6	99.6	0.0	104.4	104.4	0.0
1.5	727EM2	103.0	103.0	0.0	109.3	109.3	0.0
1.5	727Q15	108.4	108.4	0.0	114.0	114.0	0.0
1.5	727Q7	103.6	103.6	0.0	107.9	107.9	0.0
1.5	72709	104.9	104.9	0.0	112.4	112.4	0.0
1.5	7371317	107.9	107.9	0.0	110.2	110.2	0.0
1.5	737QNH	98.3	98.3	0.0	100.8	100.8	0.0
1.5	74720B	102.2	102.2	0.0	104.9	104.9	0.0
1.5	747400	97.8	97.8	0.0	100.6	100.6	0.0
1.5	767300	96.1	96.1	0.0	97.9	97.9	0.0
1.5	767CF6	92.9	93.0	0.1	96.5	96.5	0.0
1.5	A300	94.2	94.2	0.0			
1.5	A31 0	93.6	93.4	-0.2			
1.5	DC1010	95.8	95.8	0.0	99.6	99.6	0.0
1.5	DC1030	97.5	97.5	0.0	100.0	100.0	0.0
1.5	DC1040	97.2	97.2	0.0	101.3	101.4	0.1
1.5	DC870	95.1	95.1	0.0	97.4	97.4	0.0
1.5	DC80N	106.2	106.2	0.0	109.0	109.0	0.0
1.5	DC930H	99.6	99.3	-0.3	103.0	103.0	0.0
1.5	DC950	108.1	108.1	0.0	111.2	111.2	0.0

TABLE A2 CONTINUED

Distance In NM from Start	Aircraft Type	1000 Feet Sideline			Runway Centerline		
		Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
1.5	DC9Q7	98.8	98.7	-0.1	100.5	100.4	-0.1
1.5	DC9Q9	103.7	103.7	0.0	107.1	107.1	0.0
1.5	F28MK2	103.5	103.5	0.0	105.9	105.9	0.0
1.5	F28MK4	100.5	100.5	0.0	103.1	103.1	0.0
1.5	L1011	96.9	96.9	0.0	101.4	101.4	0.0
1.5	L10115	97.6	97.6	0.0	100.9	100.9	0-0
1.5	LEAR35	94.1	94.0	-0.1	97.6	97.6	0.0
1.5	MD11GE	95.1	95.1	0.0	97.8	97.8	0.0
1.5	MD11PW	94.1	94.1	0.0	97.2	97.2	0.0
1.5	MD81	95.8	95.8	0.0	98.9	98.9	0.0
1.5	M082	96.7	96.7	0.0	99.5	99.4	-0.1
1.5	M083	97.8	97.8	0.0	100.8	100.8	0.0

TABLE A3

COMPARISON OF APPROACH NOISE FOR AIRCRAFT ALONG THE RUNWAY CENTERLINE AND ALONG A 1000 FOOT SIDELINE AT 0.5 NM INTERVALS FROM 2 NM OUT FROM THE LANDING THRESHOLD FOR SEVERAL AIRCRAFT CALCULATED WITH BOTH STANDARD AND ADJUSTED INM 5.0 PROFILES

Distance	Aircraft	1000 Feet Sideline			Runway Centerline		
In NM from Threshold	Type	Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
-2.0	727EM1	85.7	89.6	3.9	91.5	95.3	3.8
-2.0	727EM2	86.5	90.5	4.0	91.8	96.1	4.3
-2.0	727015	87.8	91.9	4.1	92.8	96.9	4.1
-2.0	72707	87.5	91.5	4.0	92.5	96.5	4.0
-2.0	72709	87.9	91.8	3.9	92.9	96.8	3.9
-2.0	737300	63.2	87.3	4.1	88.7	92.2	3.5
-2.0	7373B2	93.2	87.3	4.1	88.7	92.2	3.5
-2.0	737400	83.4	87.5	4.1	88.8	92.4	3.6
-2.0	7375W	83.3	87.4	4.1	88.7	92.2	3.5
-2.0	737D17	84.2	88.1	3.9	89.2	93.1	3.9
-2.0	737QN	83.8	87.3	3.5	88.8	92.4	3.6
-2.0	767300	86.4	90.7	4.3	92.0	95.6	3.6
-2.0	767CF6	85.7	90.0	4.3	91.3	94.9	3.6
-2.0	767JT9	85.8	90.0	4.2	91.3	94.9	3.6
-2.0	A300	85.3	89.8	4.5	91.4	95.3	3.9
-2.0	A310	84.9	89.0	4.1	91.0	94.6	3.6
-2.0	BAE146	82.1	86.1	4.0	87.4	91.3	3.9
-2.0	BAE300	82.0	85.6	3.6	87.3	90.9	3.6
-2.0	DC1010	86.0	89.9	3.9	92.2	95.9	3.7
-2.0	DC1030	86.2	90.0	3.8	92.4	95.9	3.5
-2.0	OCIO40	85.4	89.0	3.6	91.6	95.0	3.4
-2.0	DC870	84.8	88.8	4.0	90.0	93.9	3.9
-2.0	DC930H	83.8	93.5	9.7	89.3	93.2	3.9
-2.0	DC950	84.9	88.9	4.0	89.9	93.9	4.0
-2.0	DC907	83.5	87.4	3.9	88.5	92.4	3.9
-2.0	DC909	84.5	88.5	4.0	89.5	93.5	4iO
-2.0	F10062	81.1	85.2	4.1	86.3	90.3	4.0
-2.0	F28MK2	87.5	91.7	4.2	92.7	96.5	3.8
-2.0	F28MK4	87.4	91.4	4.0	92.5	96.2	3.7
-2.0	L1011	88.1	92.0	3.9	94.2	97.9	3.7
-2.0	L10115	88.3	91.9	3.6	94.4	97.8	3.4
-2.0	MD83	81.5	85.2	3.7	86.2	90.2	4.0
-1.5	727EM2	85.9	89.9	4.0	93.4	97.3	3.9
-1.5	727015	86.7	90.8	4.1	93.7	98.0	4.3
-1.5	72707	87.9	92.0	4.1	94.5	98.6	4.1
-1.5	72709	87.6	91.7	4.1	94.2	98.3	4.1
-1.5	737300	88.0	92.0	4.0	94.6	98.5	3.9
-1.5	737382	83.4	87.5	4.1	90.6	93.9	3.3
-1.5	737400	83.4	87.5	4.1	90.6	93.9	3.3
-1.5	737500	83.5	87.6	4.1	90.7	94.0	3.3
-1.5	737DI7	83.4	87.5	4.1	90.6	93.9	3.3
-1.5	737ON	84.3	88.3	4.0	90.9	94.8	3.9
-1.5	74720B	83.9	87.5	3.6	90.5	94.1	3.6
-1.5	747400	92.0	96.1	4.1	99.2	103.0	3.8
-1.5	757PW	90.6	94.6	4.0	98.2	101.7	3.5
-1.5	757RR	84.0	86.8	2.8	91.2	94.0	2.8
-1.5	767300	82.4	88.2	5.8	89.4	94.8	5.4
-1.5	767CF6	86.7	90.9	4.2	93.8	97.2	3.4
-1.5	767JT9	86.0	90.1	4.1	93.1	96.5	3.4
-1.5	A300	86.0	90.2	4.2	93.2	96.6	3.4
-1.5	A31 0	85.6	90.0	4.4	93.5	97.3	3.8
-1.5	BAE146	85.2	89.2	4.0	93.1	96.6	3.5
-1.5	BAE300	82.3	86.3	4.0	89.1	92.7	3.6
-1.5	DC1010	82.2	85.8	3.6	94.5	98.0	3.5
-1.5	DC1030	86.2	90.2	4.0	94.6	98.1	3.5
-1.5	DC1040	85.6	a9.3	3.7	93.9	97.2	3.3
-1.5	DC870	84.9	88.9	4.0	91.8	95.7	3.9
-1.5	DC8QN	89.6	93.7	4.1	98.0	101.0	3.0
-1.5	DC930H	84.0	87.9	3.9	91.1	95.1	4.0
-1.5	DC950	85.0	89.0	4.0	91.6	95.6	4.0
-1.5	DC9Q7	63.6	87.6	4.0	90.2	94.2	4.0
-1.5	DC909	84.6	88.6	4.0	91.2	95.2	4.0

TABLE A3 CONTINUED

Distance In NM from Threshold	Aircraft Type	1000 Feet Sideline			Runway Centerline		
		Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
-1.5	F 10062	81.2	85.3	4.1	88.0	92.0	4.0
-1.5	F28MK2	87.7	91.8	4.1	94.6	98.2	3.6
-1.5	F28MK4	87.6	91.6	4.0	94.2	97.7	3.5
-1.5	L1011	88.3	92.3	4.0	96.3	99.9	3.6
-1.5	L10115	88.5	92.2	3.7	96.5	99.8	3.3
-1.5	MD83	81.5	85.6	4.1	87.6	91.7	4A
-1.0	727EM1	85.8	89.8	4.0	95.8	99.8	4.0
-1.0	727EM2	86.5	90.7	4.2	96.1	100.6	4.5
-1.0	727015	87.7	91.9	4.2	96.7	100.8	4.1
-1.0	727Q7	87.4	91.5	4.1	96.4	100.5	4.1
-1.0	72709	87.8	91.8	4.0	96.8	100.7	3.9
-1.0	737300	83.3	87.3	4.0	93.0	96.1	3.1
-1.0	7373132	83.3	57.3	4.0	93.0	96.1	3.1
-1.0	737400	83.4	87.5	4.1	93.2	96.2	3.0
-1.0	7375W	83.3	87.3	4.0	93.1	96.1	3.0
-1.0	737D17	84.1	88.1	4.0	93.1	97.1	4.0
-1.0	737QN	93.7	a7.3	3.6	92.7	96.3	3.6
-1.0	74720B	91.9	96.0	4.1	101.5	105.3	3.8
-1.0	747400	90.5	94.5	4.0	100.8	104.1	3.3
-1.0	767300	86.6	90.7	4.1	96.2	99.3	3.1
-1.0	767CF6	85.9	90.0	4.1	95.5	98.6	3.1
-1.0	767JTS	86.0	90.0	4.0	95.6	98.7	3.1
-1.0	A300	85.5	89.9	4.4	96.2	99.8	3.6
-1.0	A310	85.1	89.2	4.1	95.9	99.2	3.3
-1.0	BAE146	82.1	86.1	4.0	91.4	95.4	4.0
-1.0	ELAE300	82.1	85.7	3.6	91.4	95.0	3.6
-1.0	DC1010	86.2	90.1	3.9	97.3	100.8	3.5
-1.0	D01030	86.4	90.2	3.8	97.5	100.8	3.3
-1.0	DC1040	85.6	89.2	3.6	96.8	100.0	3.2
-1.0	DC870	84.8	88.8	4.0	94.2	98.0	3.8
-1.0	DC8QN	89.6	93.6	4.0	100.9	103.5	2-6
-1.0	DC930H	83.8	87.9	4.1	93.6	97.6	4.0
-1.0	DC950	84.8	88.9	4.1	93.8	97.8	4.0
-1.0	DC9Q7	83.4	87.4	4.0	92.4	96.4	4.0
-1.0	DC9Q9	84.4	88.5	4.1	93.4	97.4	4.0
-1.0	F10062	81.1	85.2	4.1	90.2	94.1	3.9
-1.0	F28MK2	87.5	91.6	4.1	97.1	100.3	32
-1.0	F28MK4	87.4	91.4	4.0	96.5	99.8	3.3
-1.0	L1011	88.2	92.2	4.0	99.1	102.7	3.6
-1.0	L10115	88.4	92.2	3.8	99.3	102.6	3.3
-1.5	727EMI	84.9	89.0	4.1	99.5	103.6	4.1
-1.5	727EM2	85.6	89.9	4.3	99.7	104.3	4.6
-1.5	727Q15	86.8	91.0	4.2	99.7	103.9	4-2
-1.5	727Q7	86.5	90.6	4.1	99.5	103.6	4.1
-1.5	727Q9	86.9	90.9	4.0	99.8	103.8	4.0
-1.5	737300	82.4	86.4	4.0	96.7	99.3	2-6
-1.5	7373132	82.4	86.4	4.0	96.7	99.3	2-6
-1.5	737400	82.5	86.6	4.1	96.8	99.4	2-6
-1.5	737500	82.4	86.4	4.0	96.8	99.4	2-6
-1.5	7371317	63.2	87.2	4.0	96.1	100.2	4.1
-1.5	737QN	$2.8	86.4	3.6	95.8	99.4	3.6
-1.5	74720B	91.0	95.1	4.1	104.9	108.7	3.8
-1.5	747400	89.7	93.7	4.0	104.7	107.5	2-8
-1.5	767300	85.8	89.8	4.0	99.7	102.1	2-4
-1.5	767CF6	85.1	89.1	4.0	99.0	101.5	2-5
-1.5	767JTS	85.1	89.1	4.0	99.0	101.6	2-6
-1.5	A300	84.7	89A	4.4	100.2	103.5	3.3
-1.5	A310	84.3	88.3	4.0	99.9	102.9	3.0
-1.5	BAE146	81.2	85.3	4.1	94.6	98.6	4.0
-1.5	BAE300	81.2	84.8	3.6	94.5	98.2	3-7
-1.5	DC1010	85.3	89.3	4.0	101.5	104.8	3.3
-1.5	DC1030	85.6	89.3	3.7	101.7	104.8	3-1
-1.5	DC1040	84.7	88.4	3.7	101.0	104.0	3.0
-1.5	DC870	83.9	87.9	4.0	97.8	101.6	3.8
-1.5	DC8QN	88.7	92.7	4.0	105.1	107.1	2-0
-1.5	DC930H	83.0	87.0	4.0	97.4	101.3	3-9
-1.5	DC950	83.9	88.0	4.1	96.9	100.9	4.0

TABLE A3 CONTINUED

Distance In NM from Threshold	Aircraft Type	1000 Feet Sideline			Runway Centerline		
		Standard SEL in dB	Adjusted SEL in dB	Difference in dB	Standard SEL in dB	Adjusted SEL in dB	Difference in dB
-1.5	DC9Q7	82.5	86.5	4.0	95.5	99.5	4.0
-1.5	DC9Q9	83.5	87.6	4.1	96.5	100.5	4.0
-1.5	F10062	80.1	84.3	4.2	93.3	97.3	4.0
-1.5	F28MK2	86.5	90.6	4.1	100.7	103.4	2-7
-1.5	F28MK4	86.5	90.5	4.0	99.9	103.0	3-1
-1.5	L1011	87.3	91.4	4.1	103.1	106.5	3.4
-1.5	L10115	87.5	91.3	3.8	103.3	106.5	3-2
0.0	727EM1	82.1	85.8	3.7	105.7	109.9	4.2
0.0	727EM2	82.9	86.7	3.8	106.0	110.6	4.6
0.0	727015	84.0	87.8	3.8	106.0	110.1	4.1
0.0	72707	83.6	$7.5	3.9	105.7	109.9	4.2
0.0	72709	83.9	87.8	3.9	106.0	110.1	4.1
0.0	737300	79.2	83.1	3.9	163.0	105.6	2.6
0.0	737382	79.2	83.1	3.9	103.0	105.6	2.6
0.0	737400	79.4	83.3	3.9	103.1	105.7	2.6
0.0	737500	79.2	83.1	3.9	103.0	105.7	2.7
0.0	737017	81.1	84.3	3.2	102.4	106.5	4.1
0.0	737ON	80.4	83.4	3.0	102.0	105.7	3.7
0.0	74720B	87.9	91.8	3.9	111.2	115.0	3.8
0.0	747400	86.4	90.4	4.0	111.0	113.8	2.8
0.0	767300	82.6	86.6	3-8	106.0	108.4	2.4
0.0	767CF6	81.9	85.8	3.9	105.2	107.8	2.6
0.0	767JT9	82.0	85.8	3.8	105.3	107.8	2.5
0.0	A300	81.7	85.8	4.1	106.6	109.8	3.2
0.0	A310	81.3	85.1	3.8	106.2	109.2	3.0
0.0	BAE146	78.1	82.0	3.9	100.8	104.9	4.1
0.0	BAE300	78.1	81.5	3.4	100.8	104.5	3.7
0.0	DC1010	82.3	86.1	3.8	107.8	111.1	3.3
0.0	DC1030	82.8	86.1	3.3	108.0	111.1	3.1
0.0	DC1040	82.0	85.4	3.4	107.3	110.3	3.0
0.0	DC870	80.8	84.7	3.9	104.1	107.9	3.8
0.0	DC80N	85.9	89.6	3.7	111.4	113.4	2.0
0.0	DC930H	80.2	83.9	3.7	103.7	107.6	3.9
0.0	DC950	81.5	85.0	3.5	~103.1	107.2	4.1
0.0	DC9Q7	79.9	83.5	3.6	101.7	105.8	4.1
0.0	DC9Q9	80.8	84.5	3.7	IG2.7	106.8	4.1
0.0	F 10062	63.6	81.0	-2.6	99.6	103.6	4.0
0.0	F28MK2	83.5	87.4	3.9	106.9	109.7	2.8
0.0	F2aMK4	84.2	87.3	3.1	106.1	109.2	3.1
0.0	L1011	84.5	88.2	3.7	109.4	112.9	3.5
0.0	L10115	79.6	88.2	8.6	109.6	112.8	3.2

Memorandum from FTA to the FAA Regarding Noise Screening Procedures

MEMO

To: Federal Aviation Administration, New England Region
Attention: ANE-520.4, Terry Flieger, Airspace Branch
From: Flight Transportation Associates, Inc
Date: February 19, 1999
Subject: Application of FAA Notice 7210.360 *Noise Screening Procedure for Certain Air Traffic Actions Above 3,000' AGL* to Proposed Runway 14/32 Operations

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1. Purpose: This memorandum provides information on potential increases in noise exposure above 3,000' above ground level (AGL) due to future jet traffic on the proposed unidirectional Runway 14/32 at Boston's Logan International Airport. FAA Notice 7210.360 provides a method for the screening of air traffic changes that may result in increased aircraft noise exposure. The notice applies only to airports where 1) there are at least 1,500 large jet airplanes[1] operations per year (either current or projected), 2) modifications represent a permanent or a planned test; 3) changes concern arrival/departure routes or tracks, used by large airplanes, between 3,000 and 7,000 feet AGL (arrivals) or 3,000 and 18,000 feet (departures) AGL.[2]

2. Background: As part of the Logan Airside Improvements Program a new unidirectional Runway 14/32 is proposed. During the EIS process, thorough investigation of potential aircraft noise impacts below 3,000 feet AGL was conducted using the FAA Integrated Noise Model. To further evaluate potential noise impacts for jet operations above 3,000 feet AGL, FAA Notice 7210.360 may be applied. This FAA notice originates from Order 1050.1 D.

a. FAA Order 1050.1 D, *Policies and Procedures for Considering Environmental Impacts,* establishes policy and procedures and assigns responsibility for ensuring agency compliance with the environmental procedures set forth in the Council on Environmental Quality regulation for implementing the procedural provisions of the National Environmental Policy Act. Typically, the establishment of airways, jet routes or revised air traffic control procedures above 3,000 feet AGL are excluded from the requirement for an Environmental Assessment (EA). However, even in cases where changes will result in noise levels well below the standard criteria for a finding of a significant impact, changes may be considered controversial and thus should be further investigated. Order 1050.1 D provides that actions involving jet aircraft which may generate an increase in the average day/night sound level (DNL) of 5 decibels should be the subject of further analysis. Notice 7210.360 provides a means to assist decision makers as to whether changes normally excluded from the EA process should in fact be the subject of further investigation.[3]

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[1] For purpose of this memo, the term "larger jet" refers only to jet aircraft of 75,000 lbs or greater.

[2] FAA Notice 7210.360, page 2, FAA, 9/14/90

[3] Ibid.

b. Logan Airside Improvements Project (LAIP). The ongoing efforts to improve Logan Airport efficiency and reduce congestion have included a number of recent projects. LAIP focuses on the airside features of Logan including runway and taxiway improvements. A key proposal involves the building of a new unidirectional Runway 14/32 on the southwestern edge of the airfield, near-parallel with Runway 15R/33L. The proposed runway is to be an "over water" operation with departures only in the 14 direction and arrivals only in the 32 direction. Primarily a regional services runway, it will be used most often by turboprop aircraft with jet traffic limited to those capable of operating on the 5,000 ft. runway.

c. Because the application of N7210.360 involves the examination of large jet operations (over 75,000 lbs.) the LAIP 2010 45 Million passenger, high-operations planning scenario (45MH) was selected for the screening analysis. Of all the forecast scenarios used in LAIP, the 45MH fleet contains the largest number of jet operations (all are Stage 3). It is a "worse case" scenario unlikely to actually occur. This projected fleet contains an average of 520 daily large jet arrivals and an equivalent number of departures. Of the arrivals, approximately 3 percent will use Runway 32 while approximately 1 percent will use Runway 14. All remaining large jet operations will use currently existing runways. For purposes of the N7210.360 screening, the "minimum number of average daily large jet operations" is used. This is determined by comparing 5 percent of the total number of Stage 3 operations with the "threshold operations" provided in the notice.

d. New Jet Flight Tracks proposed for Runway 14/32 are shown in Figure 1. As part of LAIP, actual ARTS data was used to develop INM flight tracks for all operating directions at Logan. The INM tracks were assigned aircraft based on INM type. This allowed the segregation of jet tracks/operations from prop tracks/operations necessary for the screening. Only jet tracks are considered or shown in this analysis. The specific number and type of aircraft assigned to each track was based on actual operations and forecasts developed for LAIP.

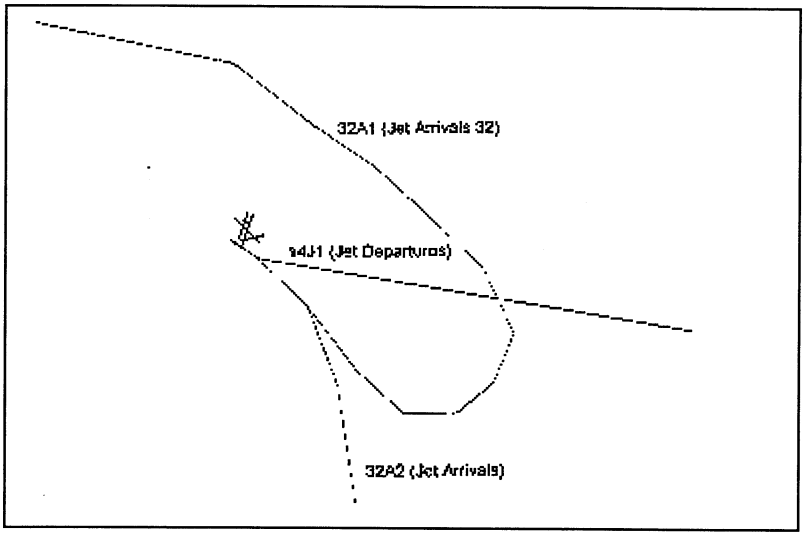


Figure I Runway 14/32 Jet Tracks

New jet tracks for a unidirectional Runway 14/32 were proposed based on safety, efficiency, minimal changes to existing airspace and procedures, and to avoid overflying of residential areas. Track 32A1 coincides with the existing right downwind for 33L until merging with the final for Runway 32 below 3,000 feet. Tracks 32A2 and 14J1 are close enough to existing jet tracks such that no overflights of new areas are considered to occur (see Table 2).

3. Procedure: The application of FAA Notice 7210.360 involves a four-step screening process. Step 1 compares the minimum number of average daily large jet operations[4] on each track with an altitude-based threshold number to determine whether further review is needed. Next, Step 2 considers the proximity of new or changed jet tracks/routes to existing tracks/routes. In Step 3, the change in operations (action versus no action) is translated into approximate decibel levels. For cases where changes or additions result in a 5 dB DNL or greater increase over the no change scenario, Step 4 is applied to determine whether the potential increase is significant based on the land use. If so, further investigation including an EA may be indicated.

4. Step 1, Does the proposed action introduce noise exposure from large jet airplanes which may require further review of the noise impacts as defined in Table 1 of **N7210.360?** According to N7210.360, "The noise screening procedure for air traffic actions applies to *new* or *modified* arrival /departure procedures..." This indicates that only new or altered large jet tracks need be analyzed. The three new jet tracks proposed to serve Runway 14/32 are shown in Figure 1. No changes to existing jet tracks are proposed.

a. In Table 1A, the application of Step 1 to the new jet tracks reveals that five percent of the Stage 3 aircraft that will operate on either Track 14J1 (Runway 14 jet departures) or Tracks A321 and 32A2 (Runway 32 arrivals) for each altitude do not exceed the threshold limits established by N7210.360. As a result, no further analysis is required. Two of the new tracks are completely over water and no significant noise increase will result from their use. Track 32A1 is coincidental with the existing 33L right base pattern until below 3,000 feet where aircraft would transition to the Runway 32 final approach course. It is essentially an addition of traffic to an existing track and no significant increase in aircraft noise exposure will result as shown in Table 1 A. However, because changes in jet operations on other existing tracks may also result in changes in aircraft noise exposure, as in the case of Track 32A1, all jet tracks were analyzed for the LAIP build (Alternative 1A) and no-build (Alternative 4) cases.

b. Due to the number and proximity of tracks used at Logan, all aircraft tracks used by large jets of 75,000 lbs or more were identified and then organized into arrival and departure corridors. A total of 16 arrival and 13 departure corridors were defined (See Figures 2 - 5). Corridors were defined by grouping tracks by direction of flight. Typically, tracks within the same corridor were within 1 to 3 miles of each other. The minimum number of forecasted Stage 3 operations were compared to N7210.360 established threshold levels. This time, however, a comparison of traffic levels within each unique corridor was made rather than on only the two new tracks. The average number of daily Stage 3 operations for each track were estimated using INIVI input files developed for the LAIP EIS/ER. These figures were added for each group of tracks within a common corridor. Since all of these operations are Stage 3 aircraft, the effective number used for the screening procedure was taken as 5 percent of the total average daily operations for each corridor. The screening was completed for both LAIP Alternatives 1A and 4 (See Tables 1 B and 1 C).

c. It was found that in most cases, *existing* flight corridors had *fewer* operations in the build than in the no-build alternative. The only exception to this involved departure operations to the southwest (corridor DSW, primarily from Runway 27), and arrivals from the northwest (corridor ANW, landing on 32/33L). Only the departure operations were found to be above the established threshold levels. This finding led to the need to continue with Step 3 of the notice.

[4] The minimum average number of daily large jet operations is estimated using 5 percent of the daily average number of Stage 3 operations.

Table M Analysis of New Tracks For Runway 14/32

Application of Step 1, Table 1, FAA Notice 7210.360

Alternative 1A (build) with 45MH fleet

Departures

Altitude (AGL)	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	18,000
7210.360 Threshold'	2	4	6	10	14	20	26	34	191
Trk 14J1- 5.0 % of 3 Average Daily Runway 14 Stage III Departures 2	0	0	0	0	0	0	0	0	0

Arrivals

Altitude (Feet AGL)	3,000	4,000	5,000	6,000	7,000
7210.360 Threshold	65	116	198	305	455
Trk 32A2: 5.0 % of 8 Average Daily Runway 32 Stage III Arrivals	0	0	0	0	0
Trk 32A1: 5.0 % of 22 Average Daily Runway 32 Stage III Arrivals	1	1	1	1	1

Since the estimated number of daily operations on the affected tracks are less than the thresholds, no further analysis is required.

1 Represents the minimum number of daily operations by large airplanes required to increase noise levels by 5 dB DNL or more.

2 Average daily operations source: LAIP INIVI data files

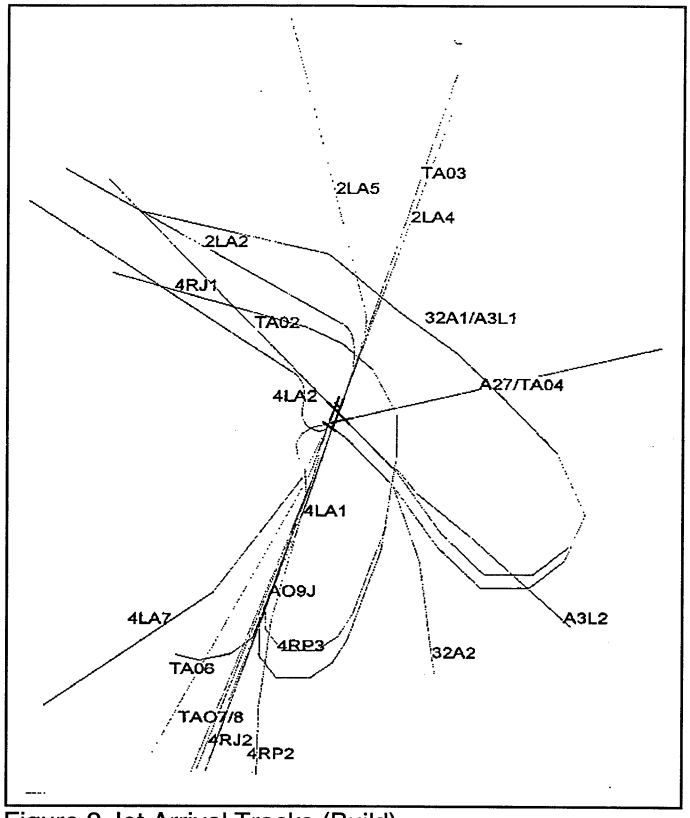


Figure 2 Jet Arrival Tracks (Build)

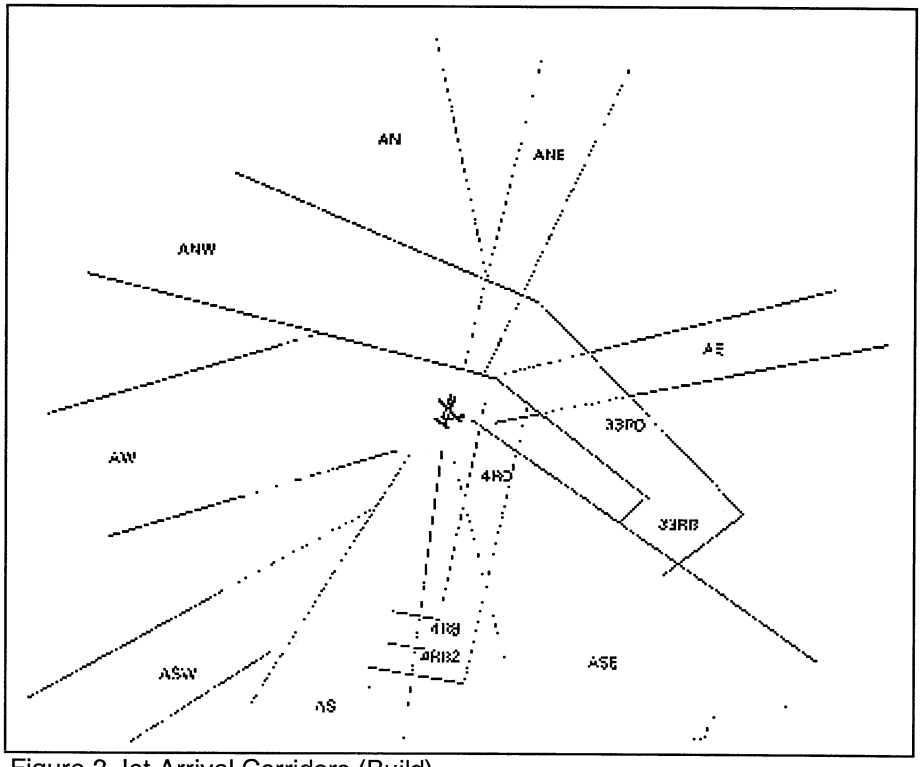


Figure 3 Jet Arrival Corridors (Build)

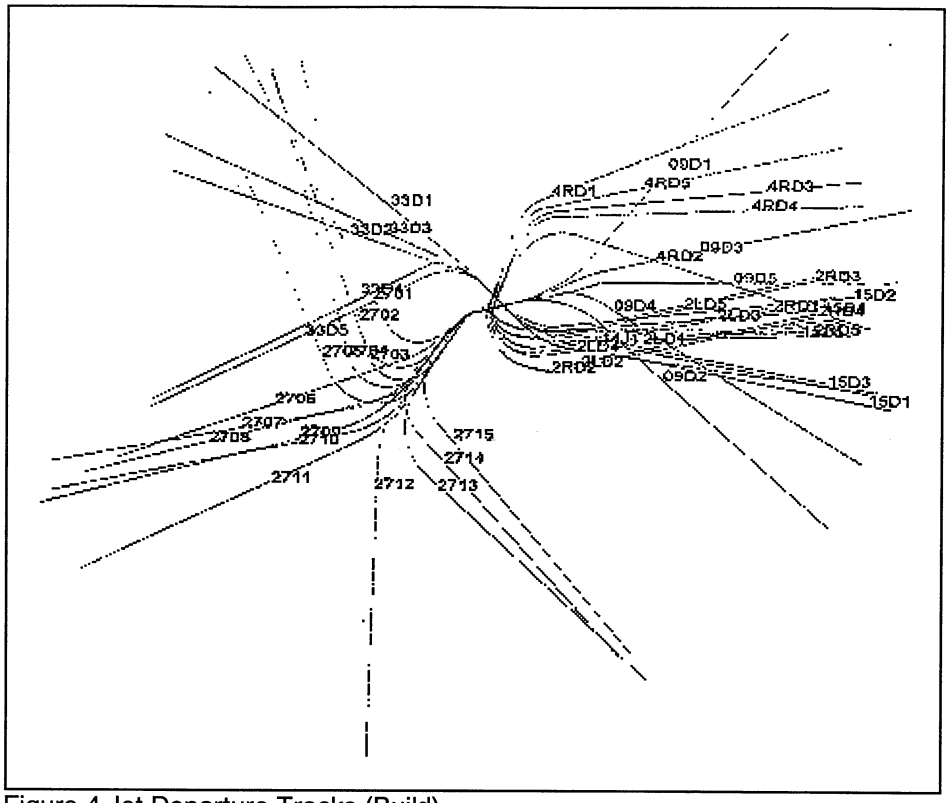


Figure 4 Jet Departure Tracks (Build)

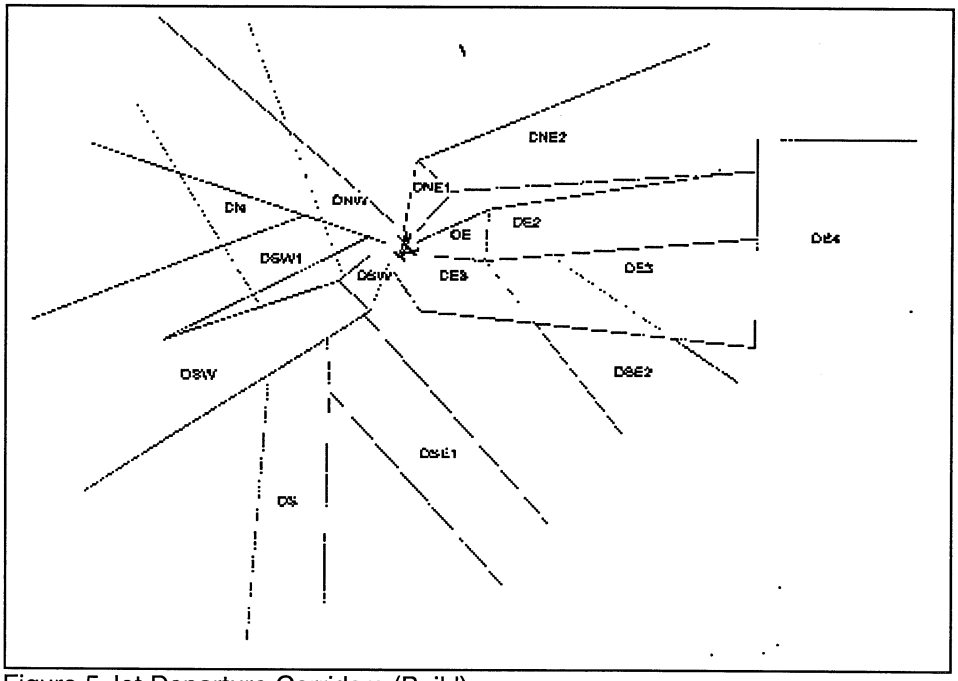


Figure 5 Jet Departure Corridors (Build)

Table 1B: Analysis of Flight Corridors

Application of Step 1, Table 1, FAA Notice 7210.360

Alternative 1A (build) with 45MH fleet

	Departures (5.0 % of Stage III Operations)								
	Altitude (AGL)	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	18,000
	7210.360 Threshold	2	4	6	10	14	20	26	34	191
Departure Corridors	DE	8	0	0	0	0	0	0	0	0
	DE2	0	8	8	0	0	0	0	0	0
	DE3	3	3	3	0	0	0	0	0	0
	DE4	0	0	0	11	11	11	11	11	11
	DN	0	2	2	2	2	2	2	2	2
	DNE1	3	0	0	0	0	0	0	0	0
	DNE2	0	3	3	0	0	0	0	0	0
	DNW	1	1	1	1	1	1	1	1	1
	DS	0	0	0	0	0	0	0	0	0
	DSE1	0	1	1	1	1	1	1	1	1
	DSE2	4	4	4	6	6	6	6	6	6
	DSW	7	3	3	4	4	4	4	4	4
	DSW1	1	1	1	1	1	1	1	1	1

	Arrivals (5.0% of Stage III Operations)					
	Altitude (Feet AGL)	3,000	4,000	5,000	6,000	7,000
	7210.360 Threshold	65	116	198	305	455
Arrival Corridors	33RB	5	0	0	0	0
	33RD	0	5	0	0	0
	4RB	8	0	0	0	0
	4RB2	0	0	0	0	0
	4RD	0	8	0	0	0
	AE	1	1	1	1	1
	AN	0	0	0	0	0
	ANE	2	2	2	2	2
	ANW	1	1	3	13	13
	AS	6	6	6	6	6
	ASE	4	4	4	4	4
	ASW	0	0	0	0	0
	AW	0	0	0	0	0

Shaded boxes indicate that the threshold has been exceeded and further analysis (Steps 2, 3, and/or 4 of the N7210.360 process) is necessary.

Table 1C: Analysis of Flight Corridors

Application of Step 1, Table 1, FAA Notice 7210.360

Alternative 4 (no-build) with 45MH fleet

	Departures (5.0 % of Stage III Operations)									
	Altitude (AGL)	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	18,000
	7210.360 Threshold	2	4	6	10	14	20	26	34	191
Departure Corridors	DE	9	0	0	0	0	0	0	0	0
	DE2	0	9	9	0	0	0	0	0	0
	DE3	9	9	9	0	0	0	0	0	0
	DE4	0	0	0	18	18	18	18	18	18
	DN	0	0	0	0	0	0	0	0	0
	DNE1	3	0	0	0	0	0	0	0	0
	DNE2	0	3	3	0	0	0	0	0	0
	DNW	0	0	0	0	0	0	0	0	0
	DS	0	0	0	0	0	0	0	0	0
	DSE1	0	0	0	0	0	0	0	0	0
	DSE2	4	4	4	7	7	7	7	7	7
	DSW	1	0	0	0	0	0	0	0	0
	DSW1	0	0	0	0	0	0	0	0	0

	Arrivals (5.0% of Stage III Operations)					
	Altitude (Feet AGL)	3,000	4,000	5,000	6,000	7,000
	7210.360 Threshold	65	116	198	305	455
Arrival Corridors	33RB	1	0	0	0	0
	33RD	0	1	0	0	0
	4RB	9	0	0	0	0
	4RB2	0	0	0	0	0
	4RD	0	9	0	0	0
	AE	6	6	6	6	6
	AN	0	0	0	0	0
	ANE	3	3	3	3	3
	ANW	0	0	10	10	10
	AS	8	8	8	8	8
	ASE	1	1	1	1	1
	ASW	0	0	0	0	0
	AW	0	0	0	0	0

Shaded boxes indicate that the threshold has been exceeded and further analysis (Steps 2, 3, and/or 4 of the N7210.360 process) is necessary

5. Step 2, Does this action introduce large jet airplanes over residential areas which are not routinely exposed to noise from large jet airplanes as defined in Table 2 of N7210.360? In both the build an no-build scenarios, departure operations were found to exceed the established thresholds. As a result, Step 2 of the process was applied. This involved comparing the proximity of new tracks to existing tracks at various altitudes (See Table 2). Since all of the new jet tracks were found to be within the "no change lateral minima" of existing tracks, the answer to the above question was no. This finding required application of Step 3.

Table 2: Analysis of New Tracks For Runway 14/32

Application of Step 2, Table 2, FAA N7210.360

Aircraft Altitude (ft. AGL)	No Change Lateral Minima (nm)
3,000 - 6,000	**1**
6,000 - 12,000	**2**
above 12,000	3

6. Step 3, In the case of a proposed action which only changes the aircraft altitudes andlor numbers of daily operations of large jet airplanes on an existing route or track will these changes result in a 5 decibel increase in aircraft noise as defined in Table 3 of N7210.360? Although Step 2 resulted in the finding that no additional residential areas would be subject to overflights by large jets, it is apparent that the introduction of Runway 14/32 would allow an increase in the number of operations on specific existing routes. Currently, jet operations using Runway 33L arrive from the northwest (down wind leg 33L) or from the southeast over water (straight-in approach). All jet departures to the east/southeast (Runways 9 and 15R) are over water. Given unidirectional operation, these are the same routes that would be used by Runway 14/32 operations. Step 3 examines the percentage change in the number of operations on existing routes between the action vs no action cases (build over no-build) to determine if an increase of 5 dB DNL or greater may result. The percentage change values were determined for each corridor and compared to the values given in the FAA notice (see Table 3). Table 3 in the FAA notice associates percentage increases or decreases in operations with a dB level. Nearly half of the percentage changes were decreases in the noise levels of existing corridors when compared to the No Build scenario. Of the increases, only one departure and three arrival corridors were identified. These included departures to the southwest (Corridor DSW, primarily departures from Runway 27), arrivals from northwest (Corridors 33RB and 33RD aircraft from the northwest arriving over water via a right-downwind to 32/33L), and arrivals from the southeast (32/33L arrivals over water). This finding required application of the fourth and final step in the N7210.360 screening process.

Table 3: Comparison of Operations Build vs No-Build by Corridors

Application of Step 3, Table 3 FAA Notice 7210.360 (5.0 % of Stage III Operations by Corridor)

Departures					
Corridor	**No-Build**	**Build**	**Operations Change**	**Altitude Change**	**Change in Noise Exposure**
DE	9	8	-11%	0%	0
DE2	9	8	-11%	0%	0
DE3	9	3	-67%	0%	-5
DE4	18	11	-39%	0%	-2
DN	0	2	100%	0%	3
DNE1	3	3	0%	0%	0
DNE2	3	3	0%	0%	0
DNW	0	1	100%	0%	3
IDS	0	0	0%	0%	3
DSE1	0	1	100%	0%	0
IDSE2	7	6	-14%	0%	3
DSW	1	7	600%	0%	>8
DSW1	0	1	100%	0%	3
Arrivals					
Corridor	**No-Build**	**Build**	**Operations Change**	**Altitude Change**	**Change in Noise Exposure**
33RB	1	5	400%	0%	>8
33RD	1	5	400%	0%	>8
4RI3	9	8	-11%	0%	0
4RB2	0	0	0%	0%	0
4RD	9	8	-11%	0%	0
AE	6	1	-83%	0%	-8
AN	0	0	0%	0%	0
ANE	3	2	-33%	0%	-2
ANW	10	13	30%	0%	1
AS	8	6	-25%	0%	-2
ASE	1	4	300%	0%	>8
ASW	0	0	0%	0%	0
AW	0	0	0%	0%	0

Shaded areas indicate possibly significant increases in noise levels and require application of Step 4 of the 7210.360 process.

6. Step 4, Taking into account the type of residential community, will the noise from large jet airplanes result in a 5 decibel increase to <u>the overall noise</u> exposures as defined in Table 4 of N7210.360? Since increases in aircraft noise exposure of 5 dB DNL or more were discovered, Step 4 was applied. In addition to the baseline threshold levels provided in the FAA notice additional levels are provided for overflights given various land-use types. In Step 1 of the analysis, only thresholds for the baseline "Quiet Suburb" land use category was considered. The "Quiet Suburb" consists of residential communities where the primary land use is considered to be single family detached dwellings on large lots. Step 4 introduces additional categories including "Normal Suburb" which consists of single family detached dwellings on 1/4 to 1/3 acre lots; "Urban" and "Noisy Urban." No arrival operations exceeded the thresholds for the Quiet Suburb classification and so further analysis was not required. A few departure operations exceeded the Quiet Suburb threshold (see Table 4). Primarily departures to the southwest (the initial departure from runway 27) were involved. Since these tracks are over areas that may be defined as Urban or Noisy Urban, and operations did not exceed the thresholds for Normal Suburb areas, further action was not indicated. This final step concluded the N7210.360 screening process.

Table 4: Analysis of Minimum Number of Daily Large Jet Departure Operations within the Affected Corridor

Application of Step 4, Table 4, FAA Notice 7210.360

Aircraft Altitude (ft. AGL)	Jet Departures using Corridor DSW		Residential Community (see below)			
	Build	No Build	Quiet Suburb	Normal Suburb	Urban	Noisy Urban
3,000	7	1	2	7	22	68
4,000	3	0	4	12	38	119
5,000	3	0	6	20	63	198
6,000	4	0	10	30	95	300
7,000	4	0	14	44	139	438
8,000	4	0	20	62	195	
9,000	4	0	26	83	262	
10,000	4	0	34	109	343	
11,000	4	0	45	142	450	
12,000	4	0	65	205		
13,000	4	0	72	229		
14,000	4	0	89	282		
15,000	4	0	109	343	> 500	
16,000	4	0	130	412		
17,000	4	0	159			
18,000	4	0	191			

Residential Community	Description
Quiet Suburb	Single family detached dwellings on large lots
Normal Suburb	Single family detached dwellings on 1/4 to 1/3 acre lots
Urban	Multi-family dwellings (apartment buildings, row housing, etc.)
Noisy Urban	Multi-family dwellings (high-rise apartments) near busy roads or industrial areas

7. Conclusion

Application of FAA Notice 7210.36 to the Logan Airside Improvements, including unidirectional Runway 14/32, concludes that further noise review is not necessary based on the noise screening procedure for certain air traffic actions above 3,000 feet AGL. The 7210.360 checklist is attached to this memo.

Noise Screening Procedure for Certain Air Traffic Actions Above 3,000 lost AGL

Checklist

Application

The screening procedure applies to new or modified arrival/departure procedures and new or modified airways which meet the following conditions:

(Check appropriate boxes)

- ✈ Involves airports with more than 1,500 large jet airplane (greater than 75,000 lbs.) operations per year, either current or projected whichever is most appropriate..... ☒

and

- ✈ Represents a permanent change or planned test..... ☒

and

- ✈ Concerns changes to departure routes or tracks, used by large jet airplanes, between 3,000 and 18,000 feet AGL/

or

- ✈ Changes to arrival routes or tracks, used by large jet airplanes, between 3,000 and 7,000 feet AGL..... ☒

(If at lease 3 boxes have been checked, proceed to screening procedure.)

Noise Screening Procedure

STEP 1. Does the proposed action introduce noise exposure from large jet airplanes (>75,000 lbs.) which may require further review of the noise impacts as defined in Table 1 (see page 7)?

(Check appropriate boxes)

- ✈ If the estimated number of daily operations on the affected route are greater than the minimum, the answer is YES and proceed to STEP 2 to answer whether the proposed action introduces jet aircraft noise for the first time on a routine basis.

- ✈ If the estimated number of daily operations on the affected route are less than the minimum, the answer is NO and further noise review is NOT necessary. Refer to FAA Order 1050.1D for guidance on the extraordinary factors to consider..... ☐

STEP 2. Does this action introduce large jet airplanes over residential areas which are not routinely exposed to jet aircraft noise as defined in Table 2 (see page 8)?

(Check appropriate boxes)

- ✈ If the location of any existing route or track is at least 3 n. mi. from the new route or track, the answer is YES and proceed to STEP 4 to determine the need for further action..... ☐

- ✈ If the new or moved route or track lies within the No Change lateral minimum of an existing route or track, the answer is NO and proceed to STEP 3 to determine whether the action will cause a 5 decibel increase in existing aircraft noise exposure. ..... ☒

- ✈ If the new or moved route or track lies outside the NO Change lateral minimum of an existing route, the answer is YES and proceed to STEP 4 to determine whether the action represents a 5 decibel increase in the overall noise exposure. ..... ☐

STEP 3. In the case of a proposed action which only changes the aircraft altitudes and/or numbers of daily operations of large jet airplanes on an existing route, will these changes result in a 5 decibel increase in aircraft noise exposure as defined in Table 3 (see page 9)?

(Check appropriate boxes)

- ✈ If the change in aircraft noise exposure is equal to or greater than 5 decibels, the answer is YES and proceed to STEP 4 to determine whether the change in aircraft noise exposure is also a 5 decibel increase in the overall noise exposure. ..... ☒

- ✈ If the change in aircraft noise exposure is less than 5 dB, the answer is NO, and further noise review is NOT necessary. Refer to FAA Order 1050.1D for guidance on the extraordinary factors to consider. ..... ☐

STEP 4. Taking into account the type of residential community, will the noise from large jet airplanes result in a 5 decibel increase in the overall noise exposure as defined in Table 4 (see page 10)?

(Check appropriate boxes)

- ✈ If the estimated number of daily operations on the affected route are greater than the minimum, the answer is YES, consult with the appropriate policy offices and the Regional Assistance Chief Counsel, and refer to FAA Order 1050.1D for guidance or additional procedures to use in considering the environmental consequences ... ☐

- ✈ If the estimated number of daily operations on the affected route are less than the minimum, the answer is NO and further noise review is NOT necessary. Refer to FAA Order 1050.1D for guidance on the extraordinary factors to consider. ..... ☒

Further Environmental Review

STEP 4 was the last step of the noise screening procedure. In reaching this point, the screening procedure has established that the proposed action may cause at least a 5 decibel increase in the overall noise exposure. This information becomes one factor in the determination as to whether the action is likely to be highly controversial and therefore not eligible for a categorical exclusion.

(Check appropriate boxes)

- ✈ Refer to FAA Order 1050.1D for guidance on additional factors to consider and the procedure to follow ..... ☐

- ✈ Consult with the appropriate policy offices and the Regional Assistant Chief Counsel to determine the applicability of the pertinent sections of Order 1050.1D dealing with environmental assessments..... ☐

- ✈ If the screening procedure predicts a 5 decibel increase in the overall noise exposure, out the decision has been made not to do an environmental assessment, prepare supporting Record of Decision ..... ☐

2015 Noise Results

APPENDIX E -- NOISE

Supplemental Results of 2015 High Regional Jet Fleet Analyses

Tables E-1 through E-5 below provide data for each of the study alternatives examined as part of the analysis of the 2015 High Regional Jet Fleet. Except for the Time-Above-Threshold calculations, the tables duplicate the results for the No-Action and Preferred Alternatives (4 and 1A) that were presented in the body of the text but provide the additional information on Alternatives 1 and 2/3 for the first time here. In the case of the Time-Above calculations, results for ALL alternatives are reported here in the Appendix.

Table E.1
INM-Computed Day-Night Sound Levels at Specific Points for 1998 and for All Study Alternatives --- 2015 High Regional Jet Fleet

Noise Monitor	Location	1998 Existing Fleet	Alternative 4 No Action	Alternative 1A Full Build Without Peak Period Pricing	Alternative 1 Full Build With Peak Period Pricing	Alternatives 2/3 Other Improvements
1	Andrews Street, South End	58.7	51.5	56.0	55.6	51.1
2	B & Bolton, South Boston	66.7	58.1	63.0	62.6	57.7
3	South Boston Yacht Club, South Boston	64.5	68.4	66.6	65.6	67.6
4	Bayview & Grandview, Winthrop	79.4	75.9	73.9	73.8	75.4
5	Harborview & Faun Bar, Winthrop	71.4	68.1	66.6	66.0	67.4
6	Somerset & Johnson, Winthrop	68.2	64.7	64.7	64.5	64.7
7	Loring Road Near Court Road, Winthrop	76.1	75.9	73.5	73.5	75.9
8	Morton & Amelia, Winthrop	67.5	66.0	64.7	64.5	66.2
9	Bayswater & Nancia, East Boston	72.4	73.0	71.5	71.2	73.1
10	Bayswater & Shawsheen, East Boston	66.3	65.6	64.3	64.2	65.8
11	Don Orione, East Boston	62.2	60.4	59.3	59.1	60.6
12	East Boston Yacht Club, East Boston	74.0	70.2	68.2	68.2	70.1
13	East Boston High School, East Boston	64.2	60.4	64.9	65.2	60.2
A	Sumner near Lamson, East Boston	N/a	58.8	59.1	59.0	58.4
14	Jeffries Point Yacht Club, East Boston	64.9	60.8	60.9	60.6	60.4
15	Admiral's Hill, Chelsea	61.1	58.4	63.0	63.2	58.2
16	Bradstreet Avenue & Sales, Revere	69.0	72.8	71.1	70.7	72.8
17	Carey Circle, Revere	58.3	62.4	60.7	60.4	62.5
23	Myrtlebank/Hiltop, Dorchester	52.0	56.5	54.9	54.4	56.0
24	Cunningham Park, Milton	51.9	54.6	53.2	52.9	54.3
25	Squaw Rock Park, Quincy	51.2	49.9	48.4	48.2	49.6
26	Hull High School, Hull	58.1	53.3	55.7	55.6	53.2
E	Farragut @ 2nd, South Boston	N/a	68.1	66.3	65.2	67.2

Table E.2
INM-Computed Nighttime Equivalent Sound Levels at Specific Points for All Study Alternatives – 2015 High Regional Jet Fleet

Noise Monitor	Location	Alternative 4 No Action	Alternative 1A Full Build Without Peak Period Pricing	Alternative 1 Full Build With Peak Period Pricing	Alternatives 2/3 Other Improvements
1	Andrews Street South End	44.6	48.2	44.0	47.6
2	B & Bolton, South Boston	51.4	55.4	50.9	55.0
3	South Boston Yacht Club, South Boston	60.9	58.6	59.8	57.4
4	Bayview & Grandview, Winthrop	68.4	66.5	67.9	66.4
5	Harborview & Faun Bar, Winthrop	60.8	59.1	60.1	58.6
6	Somerset & Johnson, Winthrop	57.7	57.5	57.6	57.2
7	Loring Road Near Court Road, Winthrop	69.1	67.0	69.0	66.8
8	Morton & Amelia, Winthrop	59.1	58.0	59.2	57.5
9	Bayswater & Nancia, East Boston	66.2	64.9	66.2	64.4
10	Bayswater & Shawsheen, East Boston	58.6	57.5	58.7	57.1
11	Don Orione, East Boston	53.4	52.4	53.4	52.0
12	East Boston Yacht Club, East Boston	63.3	61.6	63.1	61.4
13	East Boston High School, East Boston	54.0	57.9	53.7	58.2
A	Sumner near Lamson, East Boston	51.9	52.0	51.5	51.9
14	Jeffries Point Yacht Club, East Boston	53.8	53.6	53.3	53.3
15	Admiral's Hill, Chelsea	52.1	56.2	51.8	56.4
16	Bradstreet Avenue & Sales, Revere	66.1	64.8	66.0	64.3
17	Carey Circle, Revere	49.1	47.2	48.4	46.7
23	Myrtlebank/Hiltop, Dorchester	47.3	45.6	46.9	45.3
24	Cunningham Park, Milton	42.7	41.2	42.4	40.9
25	Squaw Rock Park, Quincy	46.7	48.5	46.6	48.3
26	Hull High School, Hull	60.5	58.3	59.4	56.9
E	Farragut @ 2nd, South Boston	44.6	48.2	44.0	47.6

Table E-3
Comparison of Maximum Sound Levels (Lmax) for All Alternatives – 2015 High Regional Jet Fleet

Noise Monitor	Location	Alternative 4 No Action	Alternative 1A Full Build Without Peak Period Pricing	Alternative 1 Full Build With Peak Period Pricing	Alternatives 2/3 Other Improvements
1	Andrews Street, South End	84.5	84.5	84.5	84.5
2	B & Bolton, South Boston	93.0	93.0	93.0	93.0
3	South Boston Yacht Club, South Boston	91.8	91.8	91.8	91.8
4	Bayview & Grandview, Winthrop	101.4	101.4	101.4	101.4
5	Harborview & Faun Bar, Winthrop	93.3	93.3	93.3	93.3
6	Somerset & Johnson, Winthrop	81.9	81.9	81.9	81.9
7	Loring Road near Court Road, Winthrop	97.1	97.1	97.1	97.1
8	Morton & Amelia, Winthrop	97.3	97.3	97.3	97.3
9	Bayswater & Nancia, E. Boston	103.9	103.9	103.9	103.9
10	Bayswater & Shawsheen, East Boston	90.1	90.1	90.1	90.1
11	Don Orione, East Boston	83.8	83.8	83.8	83.8
12	East Boston Yacht Club, East Boston	85.8	85.8	85.8	85.8
13	East Boston High School, East Boston	97.0	97.0	97.0	97.0
A	Sumner near Lamson, East Boston	81.2	81.2	81.2	81.2
14	Jeffries Point Yacht Club, East Boston	82.3	82.3	82.3	82.3
15	Admiral's Hill, Chelsea	96.4	96.4	96.4	96.4
16	Bradstreet Avenue & Sales, Revere	97.7	97.7	97.7	97.7
17	Carey Circle, Revere	87.1	87.1	87.1	87.1
23	Myrtlebank/Hiltop, Dorchester	79.7	79.7	79.7	79.7
24	Cunningham Park, Milton	75.8	75.8	75.8	75.8
25	Squaw Rock Park, Quincy	73.5	73.5	73.5	73.5
26	Hull High School, Hull	81.0	81.0	81.0	81.0
E	Farragut @ 2nd, South Boston	91.9	91.9	91.9	91.9

Table E-4
Calculated Time-Above-Threshold Values for a 24-Hour Period — 2015 High Regional jet Fleet (Units are Minutes Per Day Above Specified Sound Levels)

Noise Monitor	Location	Alternative 4 No Action			Alternative 1A Full Build Without Peak Period Pricing			Alternative 1 Full Build With Peak Period Pricing			Alternatives 2/3 Other Improvements		
		85 dB	75 dB	65 dB	85 dB	75 dB	65 dB	85 dB	75 dB	65 dB	85 dB	75 dB	65 dB
1	Andrews St, South End	0.0	0.1	4.2	0.0	0.5	18.8	0.0	0.5	18.5	0.0	0.1	4.0
2	B & Bolton, South Boston	0.0	1.4	9.8	0.1	8.1	44.5	0.1	8.1	43.1	0.0	1.4	9.3
3	South Boston Yacht Club, South Boston	2.5	20.4	90.3	1.9	15.4	68.2	1.4	12.7	61.3	2.1	18.2	85.9
4	Bayview & Grandview, Winthrop	14.4	66.0	151.0	9.3	46.5	119.8	8.6	42.1	109.5	13.1	60.4	137.9
5	Harborview & Faun Bar, Winthrop	0.6	26.5	116.4	0.5	20.5	86.6	0.4	17.4	78.1	0.6	23.3	106.5
6	Somerset & Johnson, Winthrop	0.0	5.0	86.0	0.0	3.8	109.4	0.0	4.5	110.6	0.0	6.0	88.3
7	Loring Road near Court Road, Winthrop	11.5	50.3	250.0	4.9	23.6	113.6	5.8	27.5	127.5	12.3	55.1	261.1
8	Morton & Amelia, Winthrop	0.5	8.2	74.6	0.4	5.9	37.7	0.4	7.2	43.0	0.5	10.6	82.5
9	Bayswater & Nancia, East Boston	6.7	37.3	120.0	3.9	19.6	62.6	4.4	22.1	68.3	7.5	41.4	128.0
10	Bayswater & Shawsheen, East Boston	0.2	11.4	69.4	0.2	7.6	43.2	0.2	8.7	46.6	0.2	13.7	75.9
11	Don Orione, East Boston	0.0	1.8	34.5	0.0	1.4	22.8	0.0	1.4	24.7	0.0	2.0	38.7
12	East Boston Yacht Club, East Boston	0.1	36.7	230.2	0.1	16.4	120.9	0.1	18.6	133.9	0.1	37.8	235.4
13	East Boston High School, East Boston	0.1	1.6	6.2	0.5	8.9	32.2	0.5	9.5	34.6	0.1	1.5	5.7
A	Sumner near Lamson, East Boston	0.0	0.0	13.7	0.0	0.0	19.2	0.0	0.0	18.4	0.0	0.0	12.0
14	Jeffries Point Yacht Club, E.ast Boston	0.0	0.0	35.0	0.0	0.1	44.7	0.0	0.1	41.9	0.0	0.0	31.5
15	Admiral's Hill, Chelsea	0.1	1.0	5.5	0.3	4.7	23.9	0.3	4.9	26.0	0.1	1.0	5.1
16	Bradstreet Avenue & Sales, Revere	6.2	26.9	59.8	3.0	14.0	32.2	3.2	15.7	35.4	6.5	29.5	65.8
17	Carey Circle, Revere	0.0	6.3	38.6	0.0	3.1	19.6	0.0	3.3	22.1	0.0	6.6	42.3
23	Myrtlebank/Hiltop, Dorchester	0.0	0.0	16.5	0.0	0.0	12.6	0.0	0.0	11.2	0.0	0.0	15.5
24	Cunningham Park, Milton	0.0	0.0	14.0	0.0	0.0	10.9	0.0	0.0	10.4	0.0	0.0	14.0
25	Squaw Rock Park, Quincy	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2
26	Hull High School, Hull	0.0	0.0	4.3	0.0	0.0	15.8	0.0	0.0	15.8	0.0	0.0	4.3
E	Farragut @ 2nd, South Boston	2.6	16.3	82.1	1.9	12.1	62.5	1.5	9.6	55.9	2.2	14.1	77.1

Table E-5
Calculated Time-Above-Threshold Values for Nighttime Hours (10:00 PM to 7:00 AM) -- 2015 High Regional Jet Fleet
(Units are Minutes Per Day Above Specified Sound Levels)

Noise Monitor	Location	Alternative 4 No Action			Alternative 1A Full Build Without Peak Period Pricing			Alternative 1 Full Build With Peak Period Pricing			Alternatives 2/3 Other Improvements		
		85 dB	75 dB	65 dB	85 dB	75 dB	65 dB	85 dB	75 dB	65 dB	85 dB	75 dB	65 dB
1	Andrews St, South End	0.0	0.0	0.9	0.0	0.1	15.0	0.0	0.1	1.9	0.0	0.0	0.8
2	B & Bolton, South Boston	0.0	0.4	2.1	0.1	0.9	1.9	0.1	0.9	4.0	0.0	0.3	1.7
3	South Boston Yacht Club, South Boston	0.4	3.2	15.7	0.1	1.4	4.0	0.1	1.4	8.9	0.3	2.5	13.6
4	Bayview & Grandview, Winthrop	2.3	9.6	23.1	1.3	5.4	8.9	1.3	5.4	15.0	2.0	8.2	19.9
5	Harborview & Faun Bar, Winthrop	0.2	4.2	17.5	0.1	2.4	15.0	0.1	2.4	10.5	0.2	3.5	15.1
6	Somerset & Johnson, Winthrop	0.0	1.6	17.9	0.0	1.5	10.5	0.0	1.5	16.7	0.0	1.7	16.7
7	Loring Road near Court Road, Winthrop	2.6	11.6	49.8	1.5	6.9	16.7	1.5	6.9	29.0	2.5	11.3	46.8
8	Morton & Amelia, Winthrop	0.2	1.8	16.9	0.1	1.3	29.0	0.1	1.3	10.9	0.2	2.0	16.7
9	Bayswater & Nancia, East Boston	1.7	8.5	24.6	1.1	5.4	10.9	1.1	5.4	15.6	1.7	8.4	23.6
10	Bayswater & Shawsheen, East Boston	0.1	2.3	14.5	0.1	1.5	15.6	0.1	1.5	10.4	0.1	2.4	14.2
11	Don Orione, East Boston	0.0	0.4	6.6	0.0	0.3	10.4	0.0	0.3	4.7	0.0	0.4	6.6
12	East Boston Yacht Club, East Boston	0.1	8.7	45.2	0.1	5.5	4.7	0.1	5.5	29.9	0.1	8.3	42.3
13	East Boston High School, East Boston	0.1	0.4	2.0	0.2	1.4	29.9	0.2	1.4	5.1	0.1	0.4	1.9
A	Sumner near Lamson, East Boston	0.0	0.0	5.2	0.0	0.1	5.1	0.0	0.0	5.7	0.0	0.0	4.9
14	Jeffries Point Yacht Club, E.ast Boston	0.0	0.0	9.1	0.1	0.8	8.4	0.0	0.1	8.4	0.0	0.0	8.1
15	Admiral's Hill, Chelsea	0.0	0.3	1.2	1.2	4.3	3.6	0.1	0.8	3.6	0.0	0.3	1.2
16	Bradstreet Avenue & Sales, Revere	1.8	6.6	14.4	0.0	1.2	9.4	1.2	4.3	9.4	1.8	6.5	14.2
17	Carey Circle, Revere	0.0	1.9	9.7	0.0	0.0	1.6	0.0	1.2	6.3	0.0	1.8	9.5
23	Myrtlebank/Hiltop, Dorchester	0.0	0.0	2.9	0.0	0.0	1.7	0.0	0.0	1.6	0.0	0.0	2.5
24	Cunningham Park, Milton	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	2.4
25	Squaw Rock Park, Quincy	0.0	0.0	0.1	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.1
26	Hull High School, Hull	0.0	0.0	1.6	0.0	0.0	5.7	0.0	0.0	3.0	0.0	0.0	1.6
E	Farragut @ 2nd, South Boston	0.4	2.2	14.7	0.1	0.8	8.4	0.1	0.8	8.4	0.3	1.7	12.7

School Day Noise Contours for Preferred Alternative 1A -- 29 Million Low Fleet

Also supplementing the analyses included in this document is a depiction of the noise exposure extending over an 8-hour school day. The exposure levels reported here are comparable to the Nighttime Equivalent Sound Levels reported elsewhere in the Noise Sections of this document as Leq(N). In this case, however, the period covered by the metric is an average weekday between 15 September and 15 June, covering the hours from 8:00 a.m. to 4:00 p.m. The metric is referred to as Leq(8). The contours shown in the accompanying Figure E-1 represent the exposure resulting from the operations projected to occur during this 8-hour period under the 29 Million Low Fleet and Preferred Alternative 1A with the new unidirectional Runway 14/32. The 29 Million Low Fleet was selected for this analysis because it represents the greatest degree of impact as measured by numbers of people exposed to DNL values greater than 65 dB.

The figure shows the Leq(8) noise contours at values of 60, 65, and 70 dB of exposure overlaid on a basemap showing local schools in the vicinity of Logan Airport. An Leq(8) of 60 dB represents the probable lower limit of any area where school sound insulation of an untreated building is likely to benefit. Though there is no firm standard which guides the sound insulation of classrooms, a normal goal for such programs is to design for at least 5 decibels of reduction and achieve an interior 8-hour equivalent sound level of no more than 45 decibels. With an outdoor Leq(8) of 60 dB (which would exist for any school located on the 60 dB contour in Figure E-1), achievement of an interior level of 45 dB requires only 15 decibels of noise reduction. That degree of reduction occurs in normal school construction, even with windows open.

Given that no schools fall within the 60 dB Leq(8) contour for the Preferred Alternative under the 29 Million Low Fleet, it is expected that no sound insulation of schools will be necessary.

Figure E-1 – 8-Hour Equivalent Sound Levels During an Average School Day for the 29M Low Fleet and Preferred Alternative 1A

Comparison of Noise Results for all Alternatives
Excerpted from the Draft EIS/EIR

Excerpt from the Airside Draft EIS/EIR Noise Results

Table 6.2-1
1999 and 2010 Logan Average Daily Operations—Without Peak Period Pricing (Alternatives 1A and 4)

	Stage 2 Aircraft		Stage 3 Aircraft		Turboprop Aircraft		Totals	
Fleet Forecast	Day	Night	Day	Night	Day	Night	Day	Night
1999 - 29M Low	16	5	715	90	562	10	1292	105
1999 - 29M High[1]	20	2	724	60	653	54	1396	115
2010 - 37.5M Low	0	0	814	102	562	11	1376	113
2010 - 37.5 High	0	0	877	118	658	13	1534	130
2010 - 45M High	0	0	954	126	707	13	1660	139

Note: "Day" defined as 7:00 AM to 9:59 PM and "Night" defined as 10:00 PM to 6:59 AM.
(1) The 1999 29M High Fleet forecast reflects a greater proportion of turboprop aircraft in both day and night than do the other four fleets.

Table 6.2-2
1999 and 2010 Logan Average Daily Operations—With Peak Period Pricing (Alternatives 1, 2 and 3)

	Stage 2 Aircraft		Stage 3 Aircraft		Turboprop Aircraft		Totals	
Fleet Forecast	Day	Night	Day	Night	Day	Night	Day	Night
1999 - 29M Low	16	5	715	90	551	10	1282	105
1999 - 29M High	20	2	724	60	591	54	1334	115
2010 - 37.5M Low	0	0	814	102	543	11	1358	113
2010 - 37.5M High	0	0	877	118	504	13	1580	130
2010 - 45M High	0	0	954	125	536	13	1490	138

Note: "Day" defined as 7:00 AM to 9:59 PM and "Night" defined as 10:00 PM to 6:59 AM.

Table 6.2-3
Effective Arrivals by Fleet and Runway End

	Percent Effective Arrivals by Fleet			
	1993	1999 - 29M	2010 - 37.5M	
Runway End and Improvement Concept	Base	Low	Low	High
Runway 4L/R				
PRAS Goal	**21.1**	**21.1**	**21.1**	**21.1**
Alternative 1 - All Actions	--	24.6	33.4	30.0
Alternative 1A - All Except Peak Period Pricing	--	24.6	34.0	29.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	34.1	41.2	45.4
Alternative 4 - No Action	35.8	34.8	42.3	47.3
Runway 15L/R				
PRAS GOAL	**8.4**	**8.4**	**8.4**	**8.4**
Alternative 1 - All Actions	--	7.7	6.1	6.0
Alternative 1A - All Except Peak Period Pricing	--	7.7	6.0	4.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	4.1	1.8	2.1
Alternative 4 - No Action	3.7	4.9	1.4	1.2
Runway 22L/R				
PRAS Goal	**6.5**	**6.5**	**6.5**	**6.5**
Alternative 1 - All Actions	--	12.2	14.0	12.0
Alternative 1A - All Except Peak Period Pricing	--	12.3	14.1	16.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	12.1	15.2	13.9
Alternative 4 - No Action	11.7	12.4	16.0	21.6
Runway 27				
PRAS Goal	**21.7**	**21.7**	**21.7**	**21.7**
Alternative 1 - All Actions	--	18.6	12.9	16.0
Alternative 1A - All Except Peak Period Pricing	--	18.6	12.7	13.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	14.6	16.2	23.7
Alternative 4 - No Action	16.9	14.6	16.4	15.7
Runways 33L and 32				
PRAS Goal	**42.3**	**42.3**	**42.3**	**42.3**
Alternative 1 - All Actions	--	36.8	33.6	35.9
Alternative 1A - All Except Peak Period Pricing	--	36.8	33.2	37.0
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	35.0	25.5	14.9
Alternative 4 - No Action	31.8	33.2	23.7	14.2

Table 6.2-4
Effective Departures By Fleet and Runway End

Runway End and Improvement Concept	Percent Effective Departures by Fleet			
	1993	1999 - 29M	2010 - 37.5M	
	Base	Low	Low	High
Runway 4L/R				
PRAS Goal	**5.6**	**5.6**	**5.6**	**5.6**
Alternative 1 - All Actions	--	7.6	7.1	11.1
Alternative 1A - All Except Peak Period Pricing	--	7.8	7.1	6.7
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	7.0	6.6	13.9
Alternative 4 - No Action	10.3	7.7	6.9	7.7
Runway 15L/R and 14				
PRAS Goal	**23.3**	**23.3**	**23.3**	**23.3**
Alternative 1 - All Actions	--	18.1	14.1	11.6
Alternative 1A - All Except Peak Period Pricing	--	18.0	14.1	14.6
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	13.0	9.9	9.5
Alternative 4 - No Action	12.9	12.5	9.3	12.2
Runway 22L/R				
PRAS Goal	**28.0**	**28.0**	**28.0**	**28.0**
Alternative 1 - All Actions	--	26.9	22.7	24.8
Alternative 1A - All Except Peak Period Pricing	--	27.0	22.8	25.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	26.1	31.0	37.3
Alternative 4 - No Action	27.5	26.3	32.0	33.4
Runway 27				
PRAS Goal	**17.9**	**17.9**	**17.9**	**17.9**
Alternative 1 - All Actions	--	17.0	16.5	17.1
Alternative 1A - All Except Peak Period Pricing	--	16.9	16.5	20.5
Alternative 2/3 - All Except Runway 14/32 and No Build	--	15.2	8.6	5.4
Alternative 4 - No Action	12.3	14.1	7.8	5.5
Runway 33L/R				
PRAS Goal	**11.9**	**11.9**	**11.9**	**11.9**
Alternative 1 - All Actions	--	12.0	10.8	9.8
Alternative 1A - All Except Peak Period Pricing	--	12.0	10.7	9.9
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	11.5	9.5	1.7
Alternative 4 - No Action	11.7	11.1	9.1	3.0
Runway 9				
PRAS Goal	**13.3**	**13.3**	**13.3**	**13.3**
Alternative 1 - All Actions	--	18.5	28.7	25.7
Alternative 1A - All Except Peak Period Pricing	--	18.4	28.7	23.1
Alternatives 2/3 - All Except Runway 14/32 and No Build	--	27.3	34.3	32.3
Alternative 4 - No Action	25.2	28.3	35.0	38.2

Table 6.2-5
Achievement of Annual PRAS Runway Use Goals

	Variance from Annual PRAS Goals by Fleet[1]			
	1993	1999 - 29M	2010 - 37.5M	
Improvement Concept	Base	Low	Low	High
Perfect PRAS Compliance	0.0	0.0	0.0	0.0
Alternative 1 - All Actions	N/A	33.2	73.5	64.8
Alternative 1A - All Except Peak Period Pricing	N/A	33.4	74.8	63.6
Alternatives 2 and 3 - All Except Runway 14/32 and No Build	N/A	68.1	107.8	140.5
Alternative 4 - No Action	73.3	73.4	115.5	147.5

(1) Variance from PRAS Goals is measured as the sum of absolute deviations from PRAS Goals. An improvement in PRAS compliance is measured as a decline in the sum of absolute percentage deviations. Zero represents perfect PRAS compliance.

Table 6.2-6
Population Summary

Day-Night Sound Level in dB	1993	All Actions Alternative 1	All Except Peak Period Pricing Alternative 1A	All Except Runway 14/32 and No Build Alternatives 2 and 3	No Action Alternative 4
1999 - 29M Low Fleet					
Greater or equal to 75 dB	568	77	77	222	257
Greater or equal to 70 dB	6,380	1,382	1,459	1,445	1,521
Greater or equal to 65 dB	34,386	17,677	17,909	16,892	17,531
2010 - 37.5M Low Fleet					
Greater or equal to 75 dB	568	0	58	58	135
Greater or equal to 70 dB	6,380	670	730	1,676	2,208
Greater or equal to 65 dB	34,386	10,481	10,481	10,239	10,450
2010 - 37.5M High Fleet					
Greater or equal to 75 dB	568	58	58	257	257
Greater or equal to 70 dB	6,380	1,213	1,028	3,321	3,828
Greater or equal to 65 dB	34,386	13,351	12,007	11,548	11,499

1. Estimated cumulative numbers of people living in areas where the noise from aircraft flight operations equals or exceeds the indicated value of the annual average Day-Night Sound Level.
2. All estimates are based on runway use chosen to most nearly meet PRAS goals and reflect the effects of delayed aircraft as determined by the DELAYSIM model.

Table 6.2-7
Comparison of the Noise-exposed Population for Alternatives 1, 1a, 2 and 3 to the No Action Alternative

	Percent Difference Compared to No Action (Alternative 4)		
Day-Night Sound Level in dB	**Alternative 1**	**Alternative 1A**	**Alternatives 2 and 3**
1999 - 29M Low Fleet			
Greater or equal to 75 dB	-70%	-70%	-14%
Greater or equal to 70 dB	-9%	-4%	-5%
Greater or equal to 65 dB	1%	2%	-4%
2010 - 37.5M Low Fleet			
Greater or equal to 75 dB	-100%	-57%	-57%
Greater or equal to 70 dB	-70%	-67%	-24%
Greater or equal to 65 dB	0%	0%	-2%
2010 - 37.5M High Fleet			
Greater or equal to 75 dB	-77%	-77%	0%
Greater or equal to 70 dB	-68%	-73%	-13%
Greater or equal to 65 dB	16%	4%	0%

1. Percentage reductions in estimated cumulative numbers of people living in areas where the noise of aircraft flight operations equals or exceeds the indicated value of the annual average day-night sound level.
2. All estimates are based on runway use chosen to most nearly meet PRAS goals.

Table 6.2-8
Cumulative Population Summary by Town or Neighborhood Area 1999 – 29M Low Fleet

Town	Interval	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
Chelsea	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	6,140	3,171	3,300	2,900	3,056
East Boston - Eagle Hill	75 dB & more	0	0	0	0	0
	70 dB & more	2,079	280	280	280	280
	65 dB & more	8,285	4,134	4,134	4,134	4,134
East Boston - Orient Heights/Bayswater	75 dB & more	58	0	0	58	58
	70 dB & more	402	58	118	118	157
	65 dB & more	2,439	751	751	612	612
Other East Boston	75 dB & more	0	0	0	0	0
	70 dB & more	341	0	0	0	0
	65 dB & more	3,940	2,371	2,371	2,371	2,371
Total East Boston[1]	75 dB & more	58	0	0	58	58
	70 dB & more	2,822	338	398	398	437
	65 dB & more	14,644	7,256	7,256	6,915	7,117
Revere	75 dB & more	0	0	0	0	0
	70 dB & more	1,335	0	0	0	0
	65 dB & more	4,679	2,896	2,999	2,999	3,001
South Boston - D Street Area[2]	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	1,043	98	98	66	66
Winthrop - Point Shirley	75 dB & more	353	77	77	164	199
	70 dB & more	1,305	656	673	825	862
	65 dB & more	2,195	1,649	1,649	1,863	1,924
Winthrop - Court Road	75 dB & more	157	0	0	0	0
	70 dB & more	815	388	388	222	222
	65 dB & more	3,387	1,763	1,763	1,369	1,523
Rest of Winthrop	75 dB & more	0	0	0	0	0
	70 dB & more	103	0	0	0	0
	65 dB & more	2,298	844	844	780	844
Total Winthrop	75 dB & more	510	77	77	164	199
	70 dB & more	2,223	1,044	1,061	1,047	1,084
	65 dB & more	7,880	4,256	4,256	4,012	4,291
Totals - Population Summary	75 dB & more	568	77	77	222	257
	70 dB & more	6,380	1,382	1,459	1,445	1,521
	65 dB & more	34,386	17,677	17,909	16,892	17,531

(1) The population within the 65 dB contour for the Jeffries Point neighborhood is 0 for all alternatives.
(2) The only area of South Boston included within 65 dB is the D Street Area.
(3) Total counts do not include Deer Island or Long Island (institutional population only).

Table 6.2-9
Cumulative Population Summary by Town or Neighborhood Area 2010 - 37.5M Low Fleet

Town	Interval	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
Chelsea	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	6,140	1,807	1,807	0	0
East Boston - Eagle Hill	75 dB & more	0	0	0	0	0
	70 dB & more	2,079	0	0	0	0
	65 dB & more	8,265	2,079	2,079	618	1,406
East Boston - Orient Heights/Bayswater	75 dB & more	58	0	0	24	0
	70 dB & more	402	0	0	24	0
	65 dB & more	2,439	0	0	24	0
East Boston – Jeffries Point	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	0	2,371	2,371	2,371	2,371
Other East Boston	75 dB & more	0	0	0	0	0
	70 dB & more	341	0	0	0	0
	65 dB & more	3,940	716	716	641	1,394
Total East Boston	75 dB & more	58	0	58	58	58
	70 dB & more	2,822	58	118	157	157
	65 dB & more	14,644	3,197	3,197	3,412	3,412
Revere	75 dB & more	0	0	0	0	0
	70 dB & more	1,335	0	0	689	1,047
	65 dB & more	4,679	2,808	2,808	3,293	3,357
South Boston - D Street Area[1]	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	1,043	0	0	18	18
Winthrop - Point Shirley	75 dB & more	353	0	0	0	77
	70 dB & more	1,305	455	455	673	782
	65 dB & more	2,195	1,395	1,395	1,649	1,649
Winthrop - Court Road	75 dB & more	157	0	0	0	0
	70 dB & more	815	157	157	157	222
	65 dB & more	3,387	1,007	850	1,234	1,234
Rest of Winthrop	75 dB & more	0	0	0	0	0
	70 dB & more	103	0	0	0	0
	65 dB & more	2,298	267	267	253	780
Total Winthrop	75 dB & more	510	77	77	164	199
	70 dB & more	2,223	1,044	1,061	1,047	1,084
	65 dB & more	7,880	4,256	4,256	4,012	4,291
Totals - Population Summary	75 dB & more	568	0	58	58	135
	70 dB & more	6,380	670	730	1,676	2,208
	65 dB & more	34,386	10,481	10,481	10,239	10,450

(1) The only area of South Boston included with 65 dB is the D Street Area.
(2) Total counts do not include Deer Island or Long Island (institutional population only).

Table 6.2-10
Cumulative Population Summary by Town or Neighborhood Area 2010 - 37.5M High Fleet

Town	Interval	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
Chelsea	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	6,140	2,064	1,415	0	0
East Boston - Eagle Hill	75 dB & more	0	0	0	0	0
	70 dB & more	2,079	120	0	0	0
	65 dB & more	8,265	2,593	2,593	237	237
East Boston - Orient Heights/Bayswater	75 dB & more	58	58	58	58	58
	70 dB & more	402	157	157	285	355
	65 dB & more	2,439	745	596	1,170	1,170
Other East Boston	75 dB & more	0	0	0	0	0
	70 dB & more	341	0	0	0	0
	65 dB & more	3,940	931	1,058	1,045	1,599
Total East Boston[1]	75 dB & more	58	58	58	58	58
	70 dB & more	2,822	277	157	285	355
	65 dB & more	14,644	4,269	4,247	2,452	3,006
Revere	75 dB & more	0	0	0	0	0
	70 dB & more	1,335	172	172	1,823	2,260
	65 dB & more	4,679	3,357	3,293	3,799	3,799
South Boston – City Point Area	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	0	0	0	854	37
South Boston - D Street Area	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	1,043	18	48	18	18
Total South Boston	75 dB & more	0	0	0	0	0
	70 dB & more	0	0	0	0	0
	65 dB & more	1,043	18	48	872	55
Winthrop - Point Shirley	75 dB & more	353	0	0	199	199
	70 dB & more	1,305	482	417	825	825
	65 dB & more	2,195	1,452	1,395	1,649	1,863
Winthrop - Court Road	75 dB & more	157	0	0	0	0
	70 dB & more	815	282	282	388	388
	65 dB & more	3,387	1,356	1,234	1,661	1,661
Rest of Winthrop	75 dB & more	0	0	0	0	0
	70 dB & more	103	0	0	0	0
	65 dB & more	2,298	835	375	1,115	1,115
Total Winthrop	75 dB & more	510	0	0	199	199
	70 dB & more	2,223	764	699	1,213	1,213
	65 dB & more	7,880	3,643	3,004	4,425	4,639
Totals - Population Summary	75 dB & more	568	58	58	257	257
	70 dB & more	6,380	1,213	1,028	3,321	3,828
	65 dB & more	34,386	13,351	12,007	11,548	11,499

(1) The population within the 65dB contour for the Jeffries Point neighborhood is 0 for all alternatives.
(2) Total counts do not include Deer Island or Long Island (institutional population only).

Table 6.2-11
Calculated Day-Night Sound Level Values in dB from Flight Operations for the 1999 – 29 Million Passenger Low Fleet

Noise Monitor	Location	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
1	Andrews Street, South End	57.9	56.9	56.9	56.1	56.0
2	B & Bolton, South Boston	66.2	64.5	64.5	63.6	63.4
3	South Boston Yacht Club, South Boston	64.1	61.4	61.3	62.8	62.8
4	Bayview & Grandview, Winthrop	78.1	75.2	75.2	75.9	76.1
5	Harborview & Faun Bar, Winthrop	71.5	68.1	68.1	69.5	69.8
6	Somerset & Johnson, Winthrop	68.0	65.5	65.5	65.1	65.3
7	Loring Road Near Court Road, Winthrop	78.0	75.1	75.1	73.4	73.6
8	Morton & Amelia, Winthrop	68.5	64.6	64.7	64.4	64.8
9	Bayswater & Nancia, East Boston	73.8	70.2	70.4	70.3	70.6
10	Bayswater & Shawsheen, East Boston	68.2	65.1	65.1	64.4	64.7
11	Don Orione, East Boston	63.3	60.3	60.4	60.1	60.3
12	East Boston Yacht Club, East Boston	72.7	70.0	70.0	70.0	70.1
13	East Boston High School, East Boston	68.5	66.0	66.0	66.2	66.2
A	Sumner near Lamson, East Boston	63.0	61.2	61.2	61.1	61.2
14	Jeffries Point Yacht Club, East Boston	64.5	62.4	62.5	62.5	62.6
15	Shurtleff & Essex, Chelsea	66.6	63.7	63.7	63.7	63.7
16	Bradstreet Avenue & Sales, Revere	70.6	68.6	68.7	68.8	69.1
17	Carey Circle, Revere	60.4	58.6	58.7	58.8	59.0
23	Myrtlebank/Hiltop, Dorchester	53.3	52.0	52.0	53.2	53.4
24	Cunningham Park, Milton	52.4	51.0	51.0	52.1	52.3
25	Squaw Rock Park, Quincy	50.8	48.6	48.7	49.0	49.1
26	Hull High School, Hull	55.6	54.9	55.0	54.7	54.8
E	Farragut @ 2nd, South Boston	64.4	61.3	61.3	62.5	62.5
Average change from 70 dB and above in 1993 (6 sites)		**0.0**	**-2.9**	**-2.9**	**-2.8**	**-2.6**
Average change from 65 dB and above in 1993 (12 sites)		**0.0**	**-2.9**	**-2.8**	**-2.9**	**-2.7**
Average change from all values in 1993 (23 sites)		**0.0**	**-2.4**	**-2.4**	**-2.3**	**-2.1**

Table 6.2-12
Calculated Day-Night Sound Level Values in dB from Flight Operations for the 2010 - 37.5 Million Passenger Low Fleet

Noise Monitor	Location	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
1	Andrews Street, South End	57.9	55.2	55.2	52.7	52.5
2	B & Bolton, South Boston	66.2	61.9	61.9	59.1	58.9
3	South Boston Yacht Club, South Boston	64.1	63.0	62.9	64.1	64.4
4	Bayview & Grandview, Winthrop	78.1	74.0	74.0	75.0	75.3
5	Harborview & Faun Bar, Winthrop	71.5	67.0	67.1	68.1	68.3
6	Somerset & Johnson, Winthrop	68.0	64.3	64.3	64.2	64.3
7	Loring Road Near Court Road, Winthrop	78.0	73.4	73.5	73.5	73.8
8	Morton & Amelia, Winthrop	68.5	63.1	63.2	64.1	64.3
9	Bayswater & Nancia, East Boston	73.8	69.5	69.6	70.7	70.9
10	Bayswater & Shawsheen, East Boston	68.2	63.6	63.7	63.9	64.1
11	Don Orione, East Boston	63.3	59.0	59.1	59.6	59.7
12	East Boston Yacht Club, East Boston	72.7	68.3	68.4	70.0	70.2
13	East Boston High School, East Boston	68.5	63.5	63.5	63.0	62.9
A	Sumner near Lamson, East Boston	63.0	59.6	59.6	59.5	59.6
14	Jeffries Point Yacht Club, East Boston	64.5	61.1	61.2	61.2	61.3
15	Shurtleff & Essex, Chelsea	66.6	61.6	61.6	60.8	60.6
16	Bradstreet Avenue & Sales, Revere	70.6	69.1	69.2	70.3	70.6
17	Carey Circle, Revere	60.4	59.2	59.3	60.4	60.7
23	Myrtlebank/Hiltop, Dorchester	53.3	53.9	54.0	55.0	55.2
24	Cunningham Park, Milton	52.4	52.9	53.1	53.9	54.2
25	Squaw Rock Park, Quincy	50.8	49.0	49.1	49.9	50.1
26	Hull High School, Hull	55.6	54.6	54.6	54.4	54.4
E	Farragut @ 2nd, South Boston	64.4	62.0	61.9	63.1	63.4
Average change from 70 dB and above in 1993 (6 sites)		0.0	-3.9	-3.8	-2.8	-2.6
Average change from 65 dB and above in 1993 (12 sites)		0.0	-4.1	-4.1	-3.8	-3.7
Average change from all values in 1993 (23 sites)		0.0	-3.1	-3.1	-2.8	-2.6

Table 6.2-13
Calculated Day-Night Sound Level Values in dB from Flight Operations for the 2010 - 37.5 Million Passenger High Fleet

Noise Monitor	Location	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
1	Andrews Street, South End	57.9	56.2	56.9	52.0	52.3
2	B & Bolton, South Boston	66.2	63.1	63.8	58.5	58.7
3	South Boston Yacht Club, South Boston	64.1	64.7	62.6	67.1	65.4
4	Bayview & Grandview, Winthrop	78.1	74.7	74.1	76.1	76.2
5	Harborview & Faun Bar, Winthrop	71.5	67.3	67.0	68.5	69.4
6	Somerset & Johnson, Winthrop	68.0	64.9	64.7	65.2	65.2
7	Loring Road Near Court Road, Winthrop	78.0	74.0	74.1	75.7	75.5
8	Morton & Amelia, Winthrop	68.5	65.2	64.0	66.4	66.0
9	Bayswater & Nancia, East Boston	73.8	71.1	70.5	72.4	72.7
10	Bayswater & Shawsheen, East Boston	68.2	65.0	64.3	66.1	65.9
11	Don Orione, East Boston	63.3	60.1	59.5	61.2	61.2
12	East Boston Yacht Club, East Boston	72.7	68.9	68.8	70.3	70.4
13	East Boston High School, East Boston	68.5	64.5	64.4	59.5	60.9
A	Sumner near Lamson, East Boston	63.0	59.6	60.1	59.1	60.0
14	Jeffries Point Yacht Club, East Boston	64.5	61.3	61.6	61.0	61.7
15	Shurtleff & Essex, Chelsea	66.6	62.7	62.5	57.6	58.8
16	Bradstreet Avenue & Sales, Revere	70.6	69.9	70.1	71.2	72.3
17	Carey Circle, Revere	60.4	60.2	60.3	61.5	62.5
23	Myrtlebank/Hiltop, Dorchester	53.3	54.2	54.0	56.1	56.3
24	Cunningham Park, Milton	52.4	52.7	53.1	54.4	55.3
25	Squaw Rock Park, Quincy	50.8	49.1	49.4	50.4	51.0
26	Hull High School, Hull	55.6	55.5	55.6	54.3	54.4
E	Farragut @ 2nd, South Boston	64.4	64.4	61.7	66.7	64.5
Average change from 70 dB and above in 1993 (6 sites)		0.0	-3.9	-3.8	-2.8	-2.6
Average change from 65 dB and above in 1993 (12 sites)		0.0	-4.1	-4.1	-3.8	-3.7
Average change from all values in 1993 (23 sites)		0.0	-3.1	-3.1	-2.8	-2.6

Table 6.2-14
Average Change in In-flight Noise at Locations Where 1993 Day-Night Sound Levels Equaled or Exceeded 70 dB (6 Sites)

	All Actions (Alternative 1)	All Actions except Peak Period Pricing (Alternative 1A)	All Actions except Runway 14/32 and No Build (Alternatives 2 and 3)	No Action (Alternative 4)	Difference (Alternative 4 and Alternative1)	Difference (Alternative 4 and Alternative 1A)
1999 - 29M Low	-2.9	-2.9	-2.8	-2.6	-0.3	-0.3
2010 - 37.5M Low	-3.9	-3.8	-2.8	-2.6	-1.3	-1.2
2010 - 37.5M High	-3.1	-3.3	-1.7	-1.4	-1.7	-1.9

Table 6.2-15
Average Change in In-flight Noise at Locations Where 1993 Day-Night Sound Levels Equaled or Exceeded 65 dB (12 Sites)

	All Actions (Alternative 1)	All Actions except Peak Period Pricing (Alternative 1A)	All Actions except Runway 14/32 and No Build (Alternatives 2 and 3)	No Action (Alternative 4)	Difference (Alternative 4 and Alternative1)	Difference (Alternative 4 and Alternative 1A)
1999 - 29M Low	-2.9	-2.9	-2.9	-2.7	-0.2	-0.2
2010 - 37.5M Low	-4.1	-4.1	-3.8	-3.7	-0.4	-0.4
2010 - 37.5M High	-3.0	-3.5	-3.1	-3.0	0	-.05

Table 6.2-16
Comparisons of the Calculated Nighttime Equivalent Sound Level Values In dB from Flight Operations for the 1999 - 29m Low Fleet

Noise Monitor	Location	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
1	Andrews Street, South End	49.6	45.9	46.0	49.0	48.8
2	B & Bolton, South Boston	57.9	53.1	53.2	56.5	56.3
3	South Boston Yacht Club, South Boston	53.9	54.1	54.1	53.9	54.0
4	Bayview & Grandview, Winthrop	68.4	67.7	67.7	66.8	67.3
5	Harborview & Faun Bar, Winthrop	62.2	61.0	61.1	61.3	61.8
6	Somerset & Johnson, Winthrop	58.8	57.6	57.7	57.4	57.6
7	Loring Road Near Court Road, Winthrop	68.1	68.3	68.3	64.7	65.1
8	Morton & Amelia, Winthrop	56.7	56.3	56.7	55.1	55.8
9	Bayswater & Nancia, East Boston	62.3	62.4	62.6	61.4	62.0
10	Bayswater & Shawsheen, East Boston	57.5	57.3	57.5	55.4	55.9
11	Don Orione, East Boston	53.1	52.6	52.8	51.3	51.8
12	East Boston Yacht Club, East Boston	63.7	63.0	63.0	62.1	62.3
13	East Boston High School, East Boston	61.8	57.9	57.8	60.1	60.1
A	Sumner near Lamson, East Boston	55.2	53.9	54.0	54.2	54.4
14	Jeffries Point Yacht Club, East Boston	56.2	54.8	54.8	55.3	55.5
15	Shurtleff & Essex, Chelsea	59.9	55.3	55.3	57.5	57.5
16	Bradstreet Avenue & Sales, Revere	60.3	61.7	61.8	61.2	61.6
17	Carey Circle, Revere	50.2	51.5	51.6	51.0	51.3
23	Myrtlebank/Hiltop, Dorchester	43.4	44.9	45.0	44.7	44.9
24	Cunningham Park, Milton	43.1	43.9	44.1	43.7	44.0
25	Squaw Rock Park, Quincy	41.4	41.3	41.4	40.8	41.1
26	Hull High School, Hull	47.7	47.2	47.3	47.8	47.9
E	Farragut @ 2nd, South Boston	54.2	53.7	53.7	53.7	53.7

Table 6.2-17
Calculated Night Equivalent Sound Level Values in dB from Flight Operations for the 2010 - 37.5m Low Fleet

Noise Monitor	Location	1993 Actual Fleet	Alternative 1 Full Build With Peak Period Pricing	Alternative 1A Full Build Without Peak Period Pricing	Alternatives 2 and 3 Without Runway 14/32 and No Build	Alternative 4 No Action
1	Andrews Street, South End	49.6	44.3	44.1	45.4	45.1
2	B & Bolton, South Boston	57.9	50.9	50.7	52.1	51.9
3	South Boston Yacht Club, South Boston	53.9	54.3	54.2	54.6	55.0
4	Bayview & Grandview, Winthrop	68.4	66.2	66.3	66.2	66.7
5	Harborview & Faun Bar, Winthrop	62.2	59.0	59.2	59.6	60.1
6	Somerset & Johnson, Winthrop	58.8	56.1	56.2	56.4	56.6
7	Loring Road Near Court Road, Winthrop	68.1	66.8	66.9	65.5	66.0
8	Morton & Amelia, Winthrop	56.7	55.4	55.5	55.9	56.4
9	Bayswater & Nancia, East Boston	62.3	62.3	62.4	62.9	63.4
10	Bayswater & Shawsheen, East Boston	57.5	55.8	56.0	55.3	55.7
11	Don Orione, East Boston	53.1	50.8	51.0	50.8	51.2
12	East Boston Yacht Club, East Boston	63.7	61.5	61.6	62.4	62.7
13	East Boston High School, East Boston	61.8	55.4	55.3	56.8	56.7
A	Sumner near Lamson, East Boston	55.2	51.9	51.9	52.3	52.4
14	Jeffries Point Yacht Club, East Boston	56.2	53.0	53.1	53.6	53.8
15	Shurtleff & Essex, Chelsea	59.9	53.3	53.2	54.5	54.4
16	Bradstreet Avenue & Sales, Revere	60.3	62.5	62.6	63.2	63.6
17	Carey Circle, Revere	50.2	52.6	52.7	53.2	53.7
23	Myrtlebank/Hiltop, Dorchester	43.4	45.8	46.0	46.3	46.8
24	Cunningham Park, Milton	43.1	44.9	45.2	45.5	45.9
25	Squaw Rock Park, Quincy	41.4	41.1	41.3	41.6	42.0
26	Hull High School, Hull	47.7	46.8	46.8	47.7	47.7
E	Farragut @ 2nd, South Boston	54.2	52.9	52.7	53.2	53.6

Table 6.2-18
Maximum Sound Level (Lmax) Values in dB from Flight Operations - Alternatives 1 and 1A

			Alternative 1			Alternative 1A		
		1993	1999	2010	2010	1999	2010	2010
Noise Monitor	Location	Actual Fleet	29M Low	37.5M Low	37.5M High	29M Low	37.5M Low	37.5M High
1	Andrews Street, South End	91.3	89.5	84.5	84.5	89.5	84.5	84.5
2	B & Bolton, South Boston	101.6	99.2	93.0	93.0	99.2	93.0	93.0
3	South Boston Yacht Club, South Boston	94.4	94.4	91.8	91.8	94.4	86.8	86.8
4	Bayview & Grandview, Winthrop	120.5	112.3	106.1	106.1	112.3	106.1	106.1
5	Harborview & Faun Bar, Winthrop	99.7	100.7	94.3	94.3	100.7	94.3	94.3
6	Somerset & Johnson, Winthrop	89.7	90.4	81.9	81.9	90.4	81.9	81.9
7	Loring Road near Court Road, Winthrop	104.7	104.7	97.1	97.1	104.7	97.1	97.1
8	Morton & Amelia, Winthrop	103.6	102.5	97.3	97.3	102.5	96.1	97.3
9	Bayswater & Nancia, E. Boston	110.0	107.7	103.9	103.9	107.7	103.9	103.9
10	Bayswater & Shawsheen, East Boston	96.5	96.5	90.1	90.1	96.5	90.1	90.1
11	Don Orione, East Boston	90.3	90.3	83.8	83.8	90.3	83.8	83.8
12	East Boston Yacht Club, East Boston	93.0	93.0	85.8	85.8	93.0	85.8	85.8
13	East Boston High School, East Boston	103.4	102.0	97.0	97.0	102.0	97.0	97.0
A	Sumner near Lamson, East Boston	81.8	82.2	81.2	81.2	82.2	81.2	74.5
14	Jeffries Point Yacht Club, East Boston	84.8	85.3	82.3	82.3	85.3	82.3	77.3
15	Shurtleff & Essex, Chelsea	102.7	101.1	96.4	96.4	101.1	96.4	96.4
16	Bradstreet Avenue & Sales, Revere	104.1	102.5	97.7	97.7	102.5	97.7	97.7
17	Carey Circle, Revere	92.3	89.6	87.1	87.1	89.6	87.1	87.1
23	Myrtlebank/Hiltop, Dorchester	81.1	79.7	79.7	79.7	79.7	79.1	79.7
24	Cunningham Park, Milton	77.3	75.8	75.8	75.8	75.8	75.8	75.8
25	Squaw Rock Park, Quincy	78.7	78.7	73.5	73.5	78.7	73.5	73.5
26	Hull High School, Hull	86.0	87.4	83.7	83.7	87.4	83.7	83.7
E	Farragut @ 2nd, South Boston	94.5	94.5	91.9	91.9	94.5	83.9	83.9

Table 6.2-19
Calculated Time-above Threshold Values for a 24-hour Period from Flight Operations for 1999 - 29M Low Fleet Scenario (minutes per day)

Identity		Alternative 1					Alternative 1A					Alternative 4				
Number	Location	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB
1	Andrews St, South End	0	0	3	23	79	0	0	3	23	80	0	0	1	8	42
2	B & Bolton, South Boston	0	1	12	41	110	0	1	12	41	110	0	1	4	16	68
3	South Boston Yacht Club, South Boston	0	0	4	35	161	0	0	3	34	158	0	0	9	70	235
4	Bayview & Grandview, Winthrop	1	10	28	74	211	1	10	28	74	212	2	17	51	119	273
5	Harborview & Faun Bar, Winthrop	0	1	13	54	170	0	1	13	54	171	0	3	26	91	237
6	Somerset & Johnson, Winthrop	0	0	12	102	409	0	0	12	102	408	0	0	10	95	376
7	Loring Road near Court Road, Winthrop	0	8	39	145	446	0	8	39	146	449	1	11	51	200	557
8	Morton & Amelia, Winthrop	0	1	9	49	201	0	1	9	49	202	0	1	11	63	265
9	Bayswater & Nancia, East Boston	0	4	20	72	218	0	4	20	72	220	0	5	28	99	254
10	Bayswater & Shawsheen, East Boston	0	1	10	56	195	0	1	10	56	196	0	1	12	66	197
11	Don Orione, East Boston	0	0	3	32	142	0	0	3	31	142	0	0	4	39	155
12	East Boston Yacht Club, East Boston	0	2	24	148	407	0	2	25	149	412	0	3	33	191	500
13	East Boston High School, East Boston	0	1	10	39	137	0	1	10	40	141	0	0	3	19	95
A	Sumner near Lamson, East Boston	0	0	2	42	234	0	0	2	42	235	0	0	2	32	222
14	Jeffries Point Yacht Club, E.ast Boston	0	0	4	60	283	0	0	4	60	284	0	0	4	50	287
15	Shurtleff & Essex, Chelsea	0	1	7	28	89	0	1	7	28	92	0	0	3	13	60
16	Bradstreet Avenue & Sales, Revere	0	2	12	33	93	0	2	12	33	93	0	3	17	45	120
17	Carey Circle, Revere	0	0	3	17	45	0	0	3	17	45	0	0	3	24	64
23	Myrtlebank/Hiltop, Dorchester	0	0	0	4	38	0	0	0	4	36	0	0	0	9	76
24	Cunningham Park, Milton	0	0	0	5	30	0	0	0	5	28	0	0	0	10	59
25	Squaw Rock Park, Quincy	0	0	0	1	24	0	0	0	1	24	0	0	0	1	36
26	Hull High School, Hull	0	0	0	14	79	0	0	0	15	79	0	0	0	9	55
E	Farragut @ 2nd, South Boston	0	0	4	46	207	0	0	3	45	204	0	0	8	71	275

Table 6.2-20
Calculated Time-above Threshold Values for the Nighttime (10:00 PM to 7:00 AM) from Flight Operations for 1999 - 29M Low (minutes per day)

Identity		Alternative 1					Alternative 1A					Alternative 4				
Number	Location	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB	95 dB	85 dB	75 dB	65 dB	55 dB
1	Andrews St, South End	0	0	0	1	4	0	0	0	1	4	0	0	0	2	6
2	B & Bolton, South Boston	0	0	0	2	6	0	0	0	2	6	0	0	1	3	9
3	South Boston Yacht Club, South Boston	0	0	1	7	23	0	0	1	7	24	0	0	1	7	25
4	Bayview & Grandview, Winthrop	0	2	4	12	34	0	2	4	12	34	0	1	4	12	35
5	Harborview & Faun Bar, Winthrop	0	0	2	9	27	0	0	2	9	27	0	0	3	9	27
6	Somerset & Johnson, Winthrop	0	0	2	15	46	0	0	2	15	46	0	0	2	16	50
7	Loring Road near Court Road, Winthrop	0	2	10	29	68	0	2	10	29	69	0	1	6	21	57
8	Morton & Amelia, Winthrop	0	0	1	9	31	0	0	1	9	31	0	0	1	8	30
9	Bayswater & Nancia, East Boston	0	1	3	11	29	0	1	3	11	30	0	1	3	10	30
10	Bayswater & Shawsheen, East Boston	0	0	2	11	36	0	0	2	11	36	0	0	1	9	31
11	Don Orione, East Boston	0	0	0	5	25	0	0	1	5	26	0	0	0	4	22
12	East Boston Yacht Club, East Boston	0	1	6	30	69	0	1	6	30	69	0	0	6	25	59
13	East Boston High School, East Boston	0	0	1	5	17	0	0	1	5	17	0	0	2	6	19
A	Sumner near Lamson, East Boston	0	0	1	8	35	0	0	1	8	35	0	0	1	9	37
14	Jeffries Point Yacht Club, E.ast Boston	0	0	1	10	37	0	0	1	10	38	0	0	1	11	41
15	Shurtleff & Essex, Chelsea	0	0	1	3	11	0	0	1	3	11	0	0	1	4	13
16	Bradstreet Avenue & Sales, Revere	0	1	2	5	15	0	1	2	5	15	0	1	2	5	14
17	Carey Circle, Revere	0	0	1	3	7	0	0	1	3	7	0	0	1	3	7
23	Myrtlebank/Hiltop, Dorchester	0	0	0	1	6	0	0	0	1	7	0	0	0	1	7
24	Cunningham Park, Milton	0	0	0	1	6	0	0	0	1	6	0	0	0	1	6
25	Squaw Rock Park, Quincy	0	0	0	0	5	0	0	0	0	5	0	0	0	0	5
26	Hull High School, Hull	0	0	0	2	12	0	0	0	2	12	0	0	0	2	12
E	Farragut @ 2nd, South Boston	0	0	0	7	26	0	0	0	7	27	0	0	0	7	28

Table 6.2-21
Change in Day-Night Sound Levels from Ground Operations by Noise Monitoring Site
DNL Change: Full Build (Alternatives 1 and 1A) Over No Action (Alternative 4)

Fleet	Loring/ Court Road Winthrop (NMS #7)	Bayswater and Shawsheen, East Boston (NMS #10)	East Boston Yacht Club, East Boston (NMS #12)	Somerset and Johnson, Winthrop (NMS #6)	Sumner/ Lamson, East Boston (NMS #A)	Jeffries Point Yacht Club, East Boston (NMS #14)	Farragut @ 2nd S. Boston (NMS #E)
Average Propagation Conditions							
1999 29M Low	-0.2	-0.8	-1.0	-0.8	0.4	0.6	1.4
2010 37.5M Low	-4.6	-5.0	-3.2	-0.6	-0.6	-0.7	0.7
2010 37.5M High	-4.7	-1.5	-1.4	-1.5	-0.3	-0.3	0.2
Average Change dB	-3.2	-2.4	-1.9	-1.0	-0.2	-0.1	0.8
Maximum Propagation Conditions							
1999 29M Low	-0.6	-1	-1.2	-0.8	0.2	0.6	-1.1
2010 37.5M Low	-4.7	-5	-3.4	-0.3	-0.8	-1.0	-1.6
2010 37.5M High	-4.6	-1.3	-1.2	-1.3	-0.3	-0.3	-2.1
Average Change dB	-3.3	-2.4	-1.9	-0.8	-0.3	-0.2	-1.6

Table 6.2-22
Comparison of Day-Night Sound Levels from Ground Operations for Location NMS #6: Somerset and Johnson, Winthrop

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	DNL	Change	DNL	Change	DNL	Change	DNL
Average Propagation Conditions							
1993							38.6
1999 - 29M Low	37.4	-0.8	37.3	-0.9	38.2	0.0	38.2
2010 - 37.5M Low	37.9	-0.6	37.3	-1.2	38.3	-0.2	38.5
2010 - 37.5M High	38.2	-1.5	37.5	-2.2	38.6	-1.1	39.7
Average Change dB		-1.0		-1.4		-0.4	
Maximum Propagation Conditions							
1993							53.6
1999 - 29M Low	53.0	-0.8	53.0	-0.8	53.8	0.0	53.8
2010 - 37.5M Low	53.3	-0.3	52.6	-1.0	53.5	-0.1	53.6
2010 - 37.5M High	53.6	-1.3	52.8	-2.1	53.9	-1.0	54.9
Average Change dB		-0.8		-1.3		-0.5	

Change = Change over No Action (Alternative 4)

Table 6.2-23
Comparison of Day-Night Sound Levels from Ground Operations for Location NMS #7: Loring Road Near Court Road, Winthrop

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							51.6
1999 - 29M Low	45.1	-0.2	45.5	0.2	45.3	0.0	45.3
2010 - 37.5M Low	47.2	-4.6	51.3	-0.5	51.4	-0.4	51.8
2010 - 37.5M High	45.3	-4.7	48.1	-1.9	49.3	-0.7	50.0
Average Change dB		-3.2		-0.7		-.06	
Maximum Propagation Conditions							
1993							66.7
1999 - 29M Low	60.3	-0.6	60.9	0.0	60.9	0.0	60.9
2010 - 37.5M Low	62.2	-4.7	66.4	-0.5	66.5	-0.4	66.9
2010 - 37.5M High	60.5	-4.6	63.3	-1.8	64.4	-0.7	65.1
Average Change dB		-3.3		-1.2		-0.6	

Change = Change over No Action (Alternative 4)

Table 6.2-24
Comparison of Day-Night Sound Levels from Ground Operations for Location NMS #10: Bayswater and Shawsheen, East Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							45.8
1999 - 29M Low	42.1	-0.8	43.4	0.5	42.9	0.0	42.9
2010 - 37.5M Low	42.5	-5.0	46.5	-1.0	47.1	-0.4	47.5
2010 - 37.5M High	43.6	-1.5	45.9	0.8	44.5	-0.6	45.1
Average Change dB		-2.4		0.1		-0.3	
Maximum Propagation Conditions							
1993							60.9
1999 - 29M Low	57.3	-1.0	58.6	0.3	58.3	0.0	58.3
2010 - 37.5M Low	57.4	-5.0	61.3	-1.1	62.1	-0.3	62.4
2010 - 37.5M High	58.5	-1.3	60.9	1.1	59.5	-0.3	59.8
Average Change dB		-2.4		0.1		-0.2	

Change = Change over No Action (Alternative 4)

Table 6.2-25
Comparison of Day-Night Sound Levels from Ground Operations for Location NMS #12: East Boston Yacht Club, East Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							49.4
1999 - 29M Low	47.3	-1.0	48.2	-0.1	48.3	0.0	48.3
2010 - 37.5M Low	47.0	-3.2	49.5	-0.7	49.9	-0.3	50.2
2010 - 37.5M High	48.4	-1.4	50.1	0.3	49.3	-0.5	49.8
Average Change dB		-1.9		-0.2		-0.3	
Maximum Propagation Conditions							
1993							64.3
1999 - 29M Low	62.6	-1.2	63.4	-0.4	63.8	0.0	63.8
2010 - 37.5M Low	61.8	-3.4	64.3	-0.9	64.9	-0.3	65.2
2010 - 37.5M High	63.4	-1.2	65.0	0.4	64.2	-0.4	64.6
Average Change dB		-1.9		-0.3		-0.2	

Change = Change over No Action (Alternative 4)

Table 6.2-26
Comparison of Day-Night Sound Levels from Ground Operations for Location NMS #14: Jeffries Point Yacht Club, East Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							39.6
1999 - 29M Low	40.8	0.6	40.7	0.5	40.1	-0.1	40.2
2010 - 37.5M Low	38.2	-0.7	39.2	0.3	38.8	-0.1	38.9
2010 - 37.5M High	39.7	-0.3	40.0	0.0	39.5	-0.5	40.0
Average Change dB		-0.1		0.3		-0.2	
Maximum Propagation Conditions							
1993							55.7
1999 - 29M Low	56.5	0.6	56.5	0.6	55.9	0.0	55.9
2010 - 37.5M Low	53.2	-1.0	54.5	0.3	54.1	-0.1	54.2
2010 - 37.5M High	55.1	-0.3	55.7	0.3	55.2	-0.2	55.4
Average Change dB		-0.2		0.4		-0.1	

Change = Change over No Action (Alternative 4)

Table 6.2-27
Comparison of Day-Night Sound Levels from Ground Operations for Location A: Sumner near Lamson, East Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							41.8
1999 - 29M Low	40.2	0.4	40.2	0.4	39.8	0.0	39.8
2010 - 37.5M Low	40.9	-0.6	41.4	-0.1	41.3	-0.2	41.5
2010 - 37.5M High	41.5	-0.3	41.4	-0.4	41.3	-0.5	41.8
Average Change dB		-0.2		-0.0		-0.2	
Maximum Propagation Conditions							
1993							57.6
1999 - 29M Low	55.2	0.2	55.4	0.4	55.0	0.0	55.0
2010 - 37.5M Low	55.7	-0.8	56.4	-0.1	56.4	-0.1	56.5
2010 - 37.5M High	56.6	-0.3	56.6	-0.3	56.5	-0.4	56.9
Average Change dB		-0.3		0.0		-0.2	

Change = Change over No Action (Alternative 4)

Table 6.2-28
Comparison of Day-Night Sound Levels from Ground Operations for Location E: Farragut @ 2nd, South Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**DNL**	**Change**	**DNL**	**Change**	**DNL**	**Change**	**DNL**
Average Propagation Conditions							
1993							22.9
1999 - 29M Low	22.9	1.4	24.1	2.6	21.3	-0.2	21.5
2010 - 37.5M Low	24.2	0.7	25.1	1.6	23.2	-0.3	23.5
2010 - 37.5M High	24.3	0.2	24.9	0.8	22.9	-1.2	24.1
Average Change dB		0.8		1.7		-0.6	
Maximum Propagation Conditions							
1993							39.4
1999 - 29M Low	37.1	-1.1	39.9	1.7	38.1	-0.1	38.2
2010 - 37.5M Low	38.6	-1.6	40.7	0.5	40.0	-0.2	40.2
2010 - 37.5M High	38.8	-2.1	40.6	-0.3	39.7	-1.2	40.9
Average Change dB		-1.6		0.6		-0.5	

Change = Change over No Action (Alternative 4)

Table 6.2-29
Comparison of Nighttime Equivalent Sound Levels (10:00 PM to 7:00 AM) from Ground Operations For Location NMS #12: East Boston Yacht Club, East Boston

	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
Fleet	**Leq**	**Change**	**Leq**	**Change**	**Leq**	**Change**	**Leq**
Average Propagation Conditions							
1993							39.7
1999 - 29M Low	38.7	0.6	38.2	0.1	37.9	-0.2	38.1
2010 - 37.5M Low	39.6	-1.8	40.8	-0.6	40.9	-0.5	41.4
2010 - 37.5M High	41.2	-0.5	42.3	0.6	41.2	-0.5	41.7
Average Change dB		-0.6		0.0		-0.4	
Maximum Propagation Conditions							
1993							54.4
1999 - 29M Low	53.9	0.5	53.4	0.0	53.2	-0.2	53.4
2010 - 37.5M Low	54.2	-2.0	55.5	-0.7	55.7	-0.5	56.2
2010 - 37.5M High	56.2	-0.1	57.2	0.9	56.1	-0.2	56.3
Average Change dB		-0.5		0.1		-0.3	

Change = Change over No Action (Alternative 4)

Table 6.2-30
Comparison of Maximum A-weighted Sound Levels from Ground Operations for Location NMS #12: East Boston Yacht Club, East Boston

Fleet	Full Build (Alternative 1/1A)		All Actions Except Runway 14/32 (Alternative 2)		No Build (Alternative 3)		No Action (Alternative 4)
	L_{max}	Change	L_{max}	Change	L_{max}	Change	L_{max}
Average Propagation Conditions							
1993							59.0
1999 - 29M Low	59.0	0.0	61.0	2.0	59.0	0.0	59.0
2010 - 37.5M Low	61.0	2.0	61.0	2.0	59.0	0.0	59.0
2010 - 37.5M High	59.0	0.0	59.0	0.0	59.0	0.0	59.0
Average Change dB		0.7		1.3		0.0	
Maximum Propagation Conditions							
1993							75.0
1999 - 29M Low	75.0	0.0	77.0	2.0	75.0	0.0	75.0
2010 - 37.5M Low	77.0	2.0	77.0	2.0	75.0	0.0	75.0
2010 - 37.5M High	75.0	0.0	75.0	0.0	75.0	0.0	75.0
Average Change dB		0.7		1.3		0.0	

Change = Change over No Action (Alternative 4)

Table 6.2-31
Comparison of Time-Above Nighttime Threshold Values in Minutes Per Day from Ground Operations at NMS #12: East Boston Yacht Club, East Boston

Fleet	Full Build (Alternative 1/1A)			All Actions Except Runway 14/32 (Alternative 2)			No Build (Alternative 3)			No Action (Alternative 4)		
	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB	75 dB	65 dB	55 dB
Average Propagation Conditions												
1993	--	--	--	--	--	--	--	--	--	0.0	0.0	1.0
1999 - 29M Low	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0
1999 - 29M High	0.0	0.0	3.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0
2010 - 37.5M Low	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0
2010 - 37.5M High	0.0	0.0	3.0	0.0	0.0	4.0	0.0	0.0	1.0	0.0	0.0	1.0
2010 - 45M High	0.0	0.0	2.0	0.0	0.0	4.0	0.0	0.0	3.0	0.0	0.0	3.0
Maximum Propagation Conditions												
1993	--	--	--	--	--	--	--	--	--	0.0	7.0	64.0
1999 - 29M Low	0.0	5.0	69.0	0.0	3.0	73.0	0.0	4.0	64.0	0.0	4.0	67.0
1999 - 29M High	0.0	9.0	81.0	0.0	6.0	70.0	0.0	5.0	84.0	0.0	6.0	91.0
2010 - 37.5M Low	0.0	6.0	63.0	0.0	9.0	84.0	0.0	10.0	85.0	0.0	11.0	96.0
2010 - 37.5M High	0.0	10.0	111.0	0.0	13.0	127.0	0.0	10.0	121.0	0.0	11.0	127.0
2010 - 45M High	0.0	6.0	63.0	0.0	15.0	164.0	0.0	15.0	155.0	0.0	18.0	205.0

Table 6.2-32
Comparison of Time-Above 24-hour Threshold Values in Minutes Per Day from Ground Operations at NMS #12: East Boston Yacht Club, East Boston

	Full Build (Alternative 1/1A)			All Actions Except Runway 14/32 (Alternative 2)			No Build (Alternative 3)			No Action (Alternative 4)		
Fleet	**75 dB**	**65 dB**	**55 dB**	**75 dB**	**65 dB**	**55 dB**	**75 dB**	**65 dB**	**55 dB**	**75 dB**	**65 dB**	**55 dB**
Average Propagation Conditions												
1993	--	--	--	--	--	--	--	--	--	**0.0**	0.0	30.0
1999 - 29M Low	0.0	0.0	14.0	**0.0**	0.0	22.0	**0.0**	0.0	21.0	**0.0**	0.0	21.0
1999 - 29M High	0.0	0.0	12.0	**0.0**	0.0	20.0	**0.0**	0.0	17.0	**0.0**	0.0	17.0
2010 - 37.5M Low	0.0	0.0	7.0	**0.0**	0.0	24.0	**0.0**	0.0	27.0	**0.0**	0.0	27.0
2010 - 37.5M High	0.0	0.0	10.0	**0.0**	0.0	23.0	**0.0**	0.0	9.0	**0.0**	0.0	8.0
2010 - 45M High	0.0	0.0	7.0	**0.0**	0.0	22.0	**0.0**	0.0	18.0	**0.0**	0.0	16.0
Maximum Propagation Conditions												
1993	--	--	--	--	--	--	--	--	--	**0.0**	140.0	981.0
1999 - 29M Low	0.0	67.0	727.0	**0.0**	118.0	1014.0	**0.0**	148.0	1114.0	**0.0**	146.0	1112.0
1999 - 29M High	0.0	45.0	675.0	**0.0**	78.0	879.0	**0.0**	84.0	953.0	**0.0**	85.0	1008.0
2010 - 37.5M Low	0.0	35.0	429.0	**0.0**	110.0	915.0	**0.0**	136.0	1123.0	**0.0**	138.0	1144.0
2010 - 37.5M High	0.0	47.0	569.0	**0.0**	102.0	886.0	**0.0**	95.0	982.0	**0.0**	108.0	1168.0
2010 - 45M High	0.0	38.0	675.0	**0.0**	87.0	934.0	**0.0**	111.0	1105.0	**0.0**	127.0	1136.0

FIGURE 6.2-5: DWELL EXCEEDANCE BY NOISE AREA

1999 29M Low (510,000 Ops)

Annual Hours of Dwell Exceedance

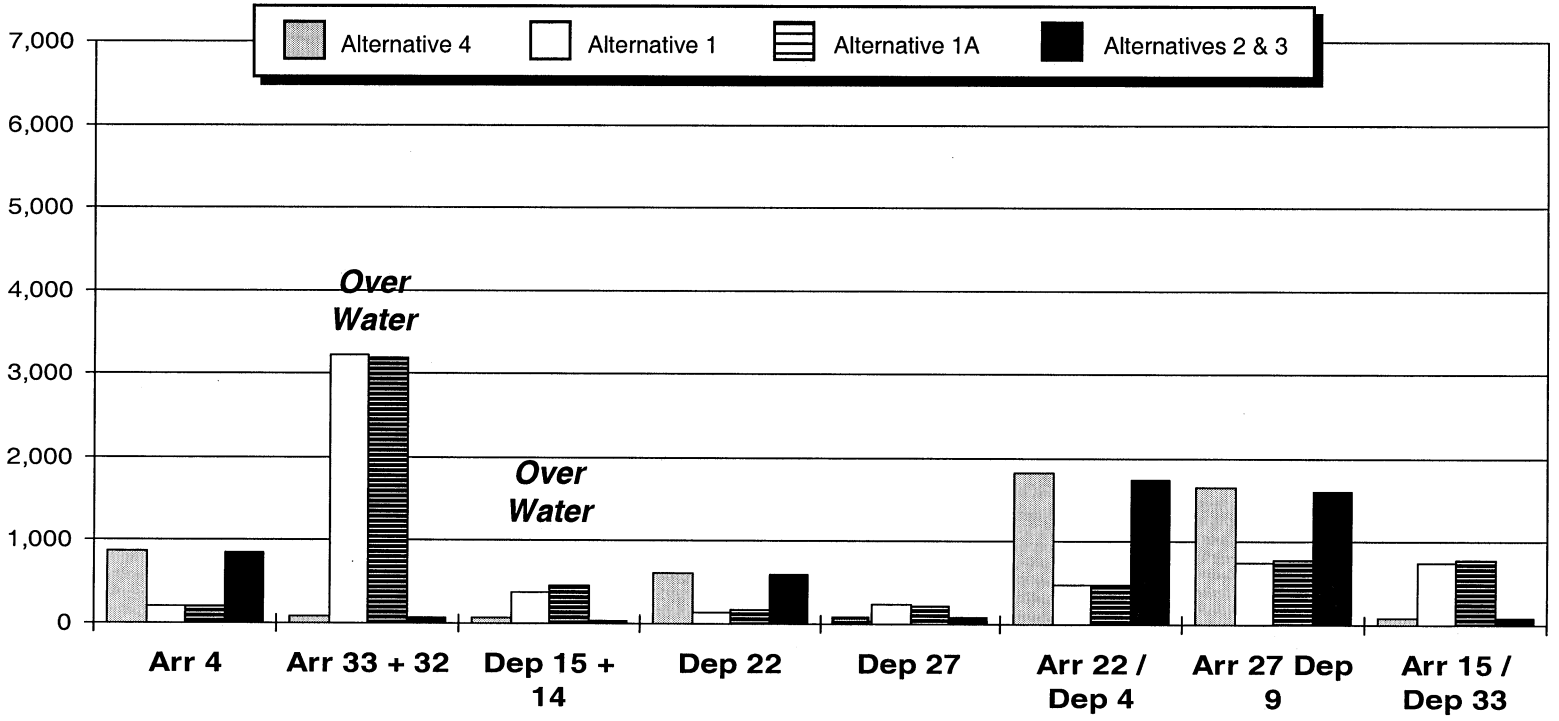


FIGURE 6.2-6: DWELL EXCEEDANCE BY NOISE AREA

2010 37.5M Low (543,000 Ops)

Annual Hours of Dwell Exceedance

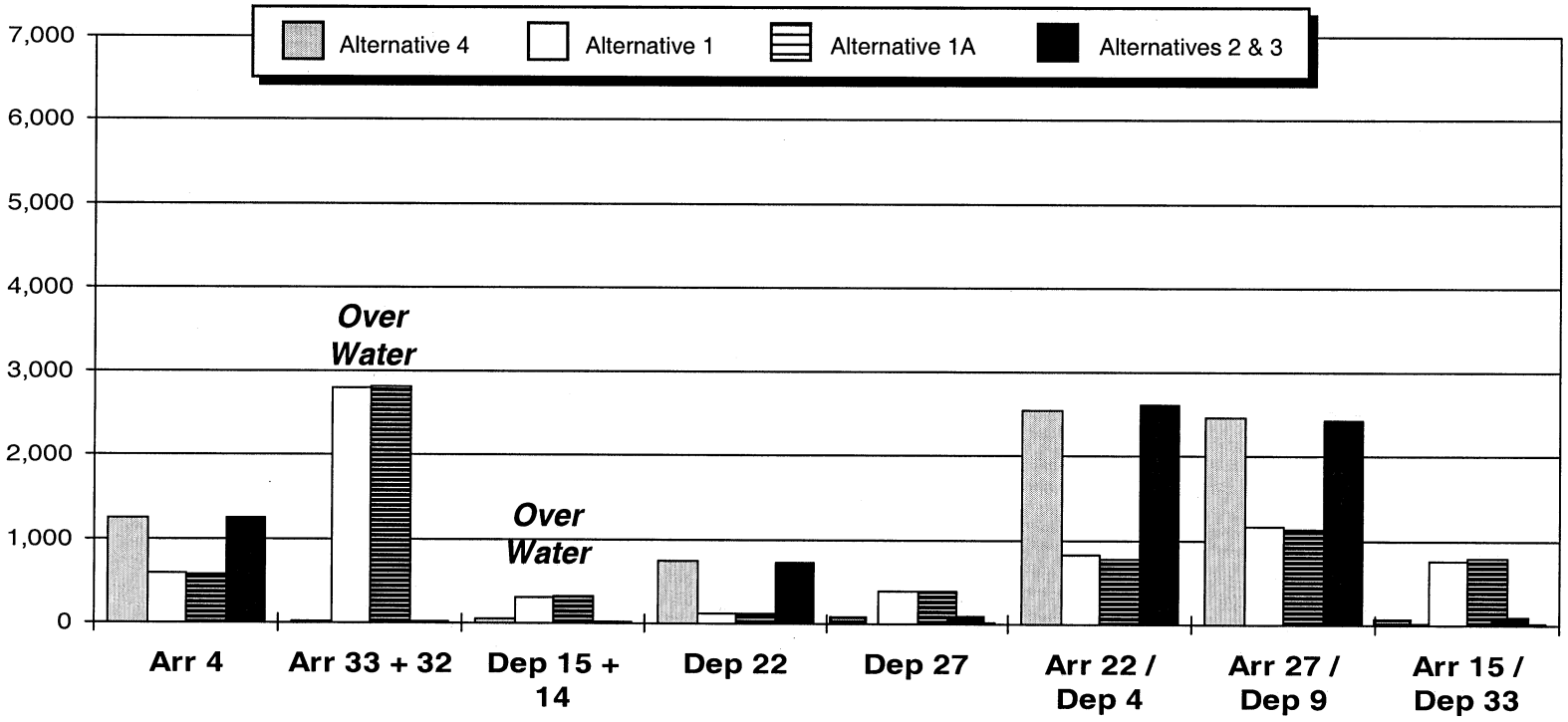


FIGURE 6.2-7: PERSISTENCE EXCEEDANCE BY NOISE AREA

1999 29M Low (510,000 Ops)

Annual Hours of Persistence Exceedance

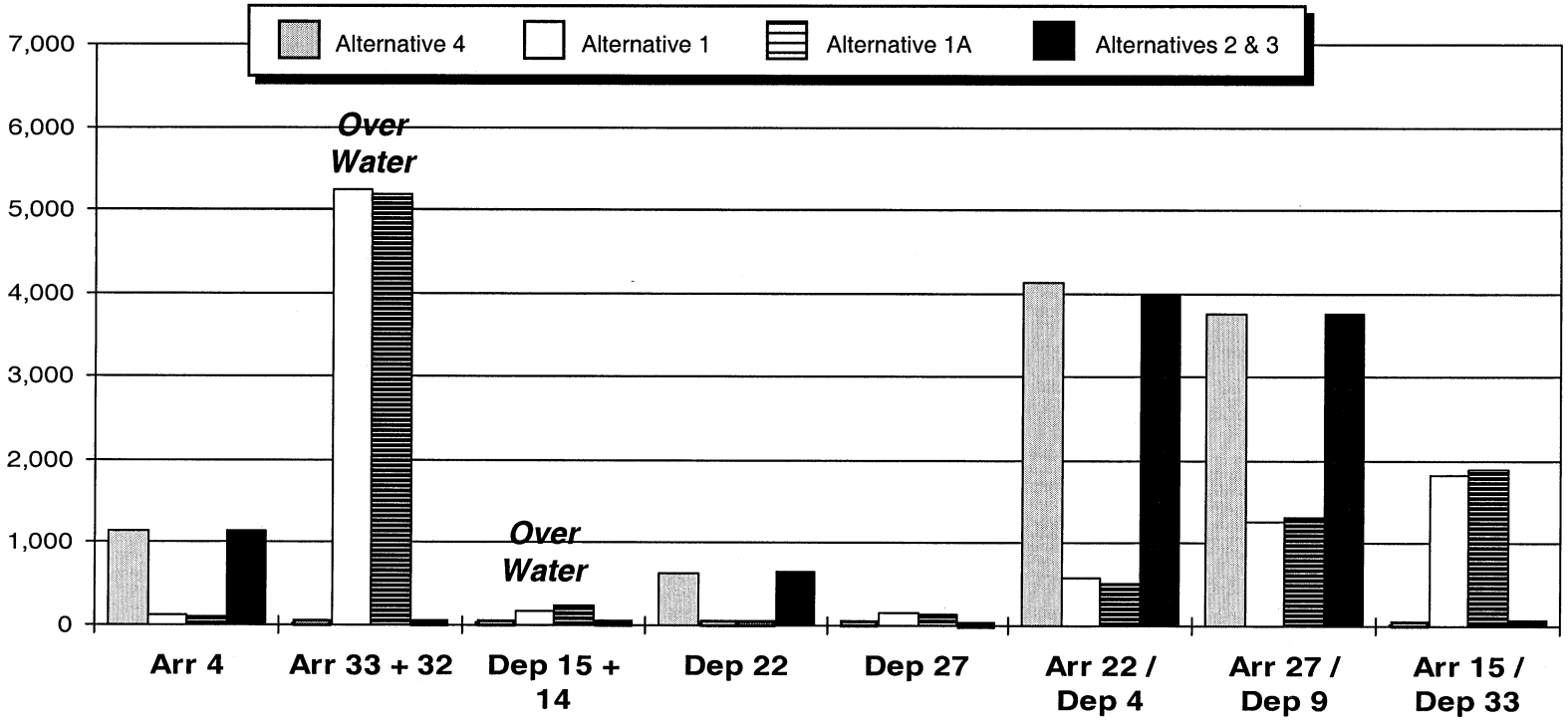
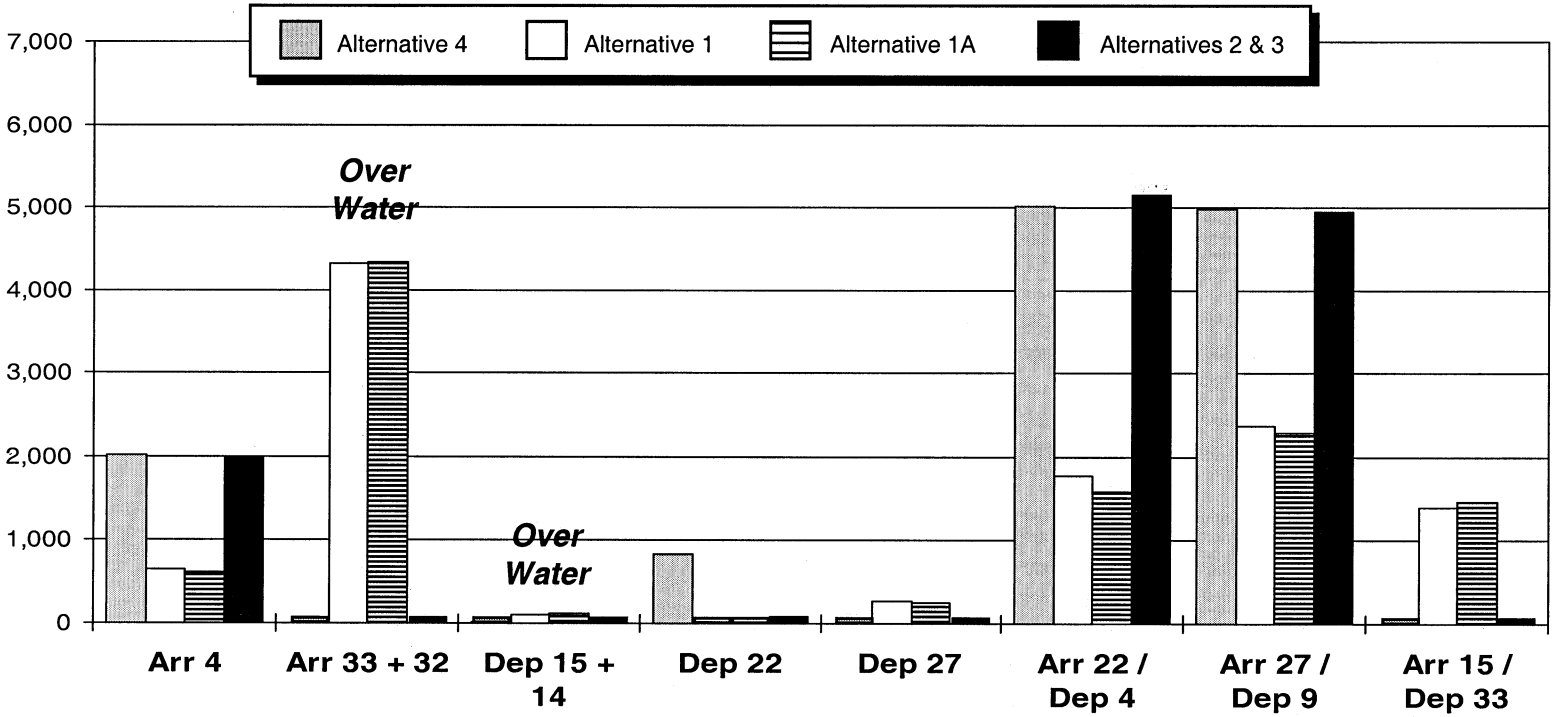


FIGURE 6.2-8: PERSISTENCE EXCEEDANCE BY NOISE AREA

2010 37.5M Low (543,000 Ops)

Annual Hours of Persistence Exceedance



II. CUMMULATIVE POPULATION SUMMARIES

Table 1.1

Cumulative Population Summary by Town or Neighborhood
1999 29 Million Passenger Low Fleet

Town	Sound Level	1993	No Action (Alt. 4)	All Actions (Alt. 1)	All Actions ex. PHP (Alt. 1A)	No Runway/ No Build (Alt. 2/3)
BOSTON (OTHER*)	Greater than or equal to 75 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 70 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 65 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 60 dB	3,270	0	0	0	0
CHELSEA	Greater than or equal to 75 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 70 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 65 dB	6,140	3,056	3,171	3,300	2,900
CHELSEA	Greater than or equal to 60 dB	13,357	10,232	10,282	10,370	10,232
EAST BOSTON	Greater than or equal to 75 dB	58	58	0	0	58
EAST BOSTON	Greater than or equal to 70 dB	2,822	437	338	398	398
EAST BOSTON	Greater than or equal to 65 dB	14,644	7,117	7,256	7,256	6,915
EAST BOSTON	Greater than or equal to 60 dB	28,780	24,193	24,318	24,318	23,623
E BOSTON (Jeff Pt.)	Greater than or equal to 75 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 70 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 65 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 60 dB	2,288	1,842	1,842	1,842	1,842
EVERETT	Greater than or equal to 75 dB	0	0	0	0	0
EVERETT	Greater than or equal to 70 dB	0	0	0	0	0
EVERETT	Greater than or equal to 65 dB	0	0	0	0	0
EVERETT	Greater than or equal to 60 dB	766	220	340	340	0
QUINCY	Greater than or equal to 75 dB	0	0	0	0	0
QUINCY	Greater than or equal to 70 dB	0	0	0	0	0
QUINCY	Greater than or equal to 65 dB	0	0	0	0	0
QUINCY	Greater than or equal to 60 dB	0	0	0	0	0
REVERE	Greater than or equal to 75 dB	0	0	0	0	0
REVERE	Greater than or equal to 70 dB	1,335	0	0	0	0
REVERE	Greater than or equal to 65 dB	4,679	3,001	2,896	2,999	2,999
REVERE	Greater than or equal to 60 dB	10,070	5,227	5,115	5,115	5,115
SOUTH BOSTON	Greater than or equal to 75 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 70 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 65 dB	1,043	66	98	98	66
SOUTH BOSTON	Greater than or equal to 60 dB	12,507	6,010	6,603	6,603	6,182
WINTHROP	Greater than or equal to 75 dB	510	199	77	77	164
WINTHROP	Greater than or equal to 70 dB	2,223	1,084	1,044	1,061	1,047
WINTHROP	Greater than or equal to 65 dB	7,880	4,291	4,256	4,256	4,012
WINTHROP	Greater than or equal to 60 dB	15,126	11,799	11,252	11,328	11,380
Population Summary						
All	Greater than or equal to 75 dB	568	257	77	77	222
All	Greater than or equal to 70 dB	6,380	1,521	1,382	1,459	1,445
All	Greater than or equal to 65 dB	34,386	17,531	17,677	17,909	16,892
All	Greater than or equal to 60 dB	86,164	59,523	59,752	59,916	58,374

* "BOSTON (OTHER)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End
Total counts do not include Deer Island or Long Island (institutional population only)

Table 1.2

Cumulative Population Summary by Town or Neighborhood
1999 29 Million Passenger High Fleet

Town	Sound Level	1993	No Action (Alt. 4)	All Actions (Alt. 1)	All Actions ex. PHP (Alt. 1A)	No Runway/ No Build (Alt. 2/3)
BOSTON (OTHER*)	Greater than or equal to 75 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 70 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 65 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 60 dB	3,270	0	0	0	0
CHELSEA	Greater than or equal to 75 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 70 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 65 dB	6,140	0	2,613	2,613	0
CHELSEA	Greater than or equal to 60 dB	13,357	6,906	8,966	9,112	7,069
EAST BOSTON	Greater than or equal to 75 dB	58	0	0	0	0
EAST BOSTON	Greater than or equal to 70 dB	2,822	157	295	295	58
EAST BOSTON	Greater than or equal to 65 dB	14,644	3,585	4,589	4,684	3,721
EAST BOSTON	Greater than or equal to 60 dB	28,780	17,162	19,355	19,355	18,315
E BOSTON (Jeff Pt.)	Greater than or equal to 75 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 70 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 65 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 60 dB	2,288	151	662	662	151
EVERETT	Greater than or equal to 75 dB	0	0	0	0	0
EVERETT	Greater than or equal to 70 dB	0	0	0	0	0
EVERETT	Greater than or equal to 65 dB	0	0	0	0	0
EVERETT	Greater than or equal to 60 dB	766	0	144	144	0
QUINCY	Greater than or equal to 75 dB	0	0	0	0	0
QUINCY	Greater than or equal to 70 dB	0	0	0	0	0
QUINCY	Greater than or equal to 65 dB	0	0	0	0	0
QUINCY	Greater than or equal to 60 dB	0	0	0	0	0
REVERE	Greater than or equal to 75 dB	0	0	0	0	0
REVERE	Greater than or equal to 70 dB	1,335	0	0	0	0
REVERE	Greater than or equal to 65 dB	4,679	3,091	2,340	2,471	2,896
REVERE	Greater than or equal to 60 dB	10,070	5,447	4,774	4,774	5,244
SOUTH BOSTON	Greater than or equal to 75 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 70 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 65 dB	1,043	18	55	80	18
SOUTH BOSTON	Greater than or equal to 60 dB	12,507	3,986	5,104	6,023	4,368
WINTHROP	Greater than or equal to 75 dB	510	164	0	0	77
WINTHROP	Greater than or equal to 70 dB	2,223	1,047	639	639	1,047
WINTHROP	Greater than or equal to 65 dB	7,880	3,710	2,914	2,932	3,334
WINTHROP	Greater than or equal to 60 dB	15,126	11,017	9,481	9,633	10,450
Population Summary						
All	Greater than or equal to 75 dB	568	164	0	0	77
All	Greater than or equal to 70 dB	6,380	1,204	934	934	1,105
All	Greater than or equal to 65 dB	34,386	10,404	12,511	12,780	9,969
All	Greater than or equal to 60 dB	86,164	44,669	48,486	49,703	45,597

* "BOSTON (OTHER)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End
Total counts do not include Deer Island or Long Island (institutional population only)

Table 1.3

Cumulative Population Summary by Town or Neighborhood
2010 37.5 Million Passenger Low Fleet

Town	Sound Level	1993	No Action (Alt. 4)	All Actions (Alt. 1)	All Actions ex. PHP (Alt. 1A)	No Runway/ No Build (Alt. 2/3)
BOSTON (OTHER*)	Greater than or equal to 75 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 70 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 65 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 60 dB	3,270	623	429	432	621
CHELSEA	Greater than or equal to 75 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 70 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 65 dB	6,140	0	1,807	1,807	0
CHELSEA	Greater than or equal to 60 dB	13,357	6,544	8,215	8,215	6,575
EAST BOSTON	Greater than or equal to 75 dB	58	58	0	58	58
EAST BOSTON	Greater than or equal to 70 dB	2,822	157	58	118	157
EAST BOSTON	Greater than or equal to 65 dB	14,644	3,412	3,197	3,197	3,412
EAST BOSTON	Greater than or equal to 60 dB	28,780	15,533	15,820	16,151	15,533
E BOSTON (Jeff Pt.)	Greater than or equal to 75 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 70 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 65 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 60 dB	2,288	582	662	662	151
EVERETT	Greater than or equal to 75 dB	0	0	0	0	0
EVERETT	Greater than or equal to 70 dB	0	0	0	0	0
EVERETT	Greater than or equal to 65 dB	0	0	0	0	0
EVERETT	Greater than or equal to 60 dB	766	0	144	144	0
QUINCY	Greater than or equal to 75 dB	0	0	0	0	0
QUINCY	Greater than or equal to 70 dB	0	0	0	0	0
QUINCY	Greater than or equal to 65 dB	0	0	0	0	0
QUINCY	Greater than or equal to 60 dB	0	0	0	0	0
REVERE	Greater than or equal to 75 dB	0	0	0	0	0
REVERE	Greater than or equal to 70 dB	1,335	1,047	0	0	689
REVERE	Greater than or equal to 65 dB	4,679	3,357	2,808	2,808	3,293
REVERE	Greater than or equal to 60 dB	10,070	5,826	4,603	4,603	5,575
SOUTH BOSTON	Greater than or equal to 75 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 70 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 65 dB	1,043	18	0	0	18
SOUTH BOSTON	Greater than or equal to 60 dB	12,507	2,002	4,232	4,029	2,008
WINTHROP	Greater than or equal to 75 dB	510	77	0	0	0
WINTHROP	Greater than or equal to 70 dB	2,223	1,004	612	612	830
WINTHROP	Greater than or equal to 65 dB	7,880	3,663	2,669	2,669	3,516
WINTHROP	Greater than or equal to 60 dB	15,126	10,846	9,442	9,487	10,320
Population Summary						
All	Greater than or equal to 75 dB	568	135	0	58	58
All	Greater than or equal to 70 dB	6,380	2,208	670	730	1,676
All	Greater than or equal to 65 dB	34,386	10,450	10,481	10,481	10,239
All	Greater than or equal to 60 dB	86,164	41,956	43,547	43,723	40,783

* "BOSTON (OTHER)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End
Total counts do not include Deer Island or Long Island (institutional population only)

Table 1.4

Cumulative Population Summary by Town or Neighborhood
2010 37.5 Million Passenger High Fleet

Town	Sound Level	1993	No Action (Alt. 4)	All Actions (Alt. 1)	All Actions ex. PHP (Alt. 1A)	No Runway/ No Build (Alt. 2/3)
BOSTON (OTHER*)	Greater than or equal to 75 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 70 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 65 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 60 dB	3,270	674	378	432	625
CHELSEA	Greater than or equal to 75 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 70 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 65 dB	6,140	0	2,064	1,415	0
CHELSEA	Greater than or equal to 60 dB	13,357	3,095	8,661	8,488	2,727
EAST BOSTON	Greater than or equal to 75 dB	58	58	58	58	58
EAST BOSTON	Greater than or equal to 70 dB	2,822	355	277	157	285
EAST BOSTON	Greater than or equal to 65 dB	14,644	3,006	4,269	4,247	2,452
EAST BOSTON	Greater than or equal to 60 dB	28,780	14,126	19,293	19,770	12,054
E BOSTON (Jeff Pt.)	Greater than or equal to 75 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 70 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 65 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 60 dB	2,288	662	582	1,230	151
EVERETT	Greater than or equal to 75 dB	0	0	0	0	0
EVERETT	Greater than or equal to 70 dB	0	0	0	0	0
EVERETT	Greater than or equal to 65 dB	0	0	0	0	0
EVERETT	Greater than or equal to 60 dB	766	0	238	0	0
QUINCY	Greater than or equal to 75 dB	0	0	0	0	0
QUINCY	Greater than or equal to 70 dB	0	0	0	0	0
QUINCY	Greater than or equal to 65 dB	0	0	0	0	0
QUINCY	Greater than or equal to 60 dB	0	0	0	0	0
REVERE	Greater than or equal to 75 dB	0	0	0	0	0
REVERE	Greater than or equal to 70 dB	1,335	2,260	172	172	1,823
REVERE	Greater than or equal to 65 dB	4,679	3,799	3,357	3,293	3,799
REVERE	Greater than or equal to 60 dB	10,070	8,472	6,079	5,658	7,690
SOUTH BOSTON	Greater than or equal to 75 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 70 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 65 dB	1,043	55	18	48	872
SOUTH BOSTON	Greater than or equal to 60 dB	12,507	3,094	6,338	6,002	3,418
WINTHROP	Greater than or equal to 75 dB	510	199	0	0	199
WINTHROP	Greater than or equal to 70 dB	2,223	1,213	764	699	1,213
WINTHROP	Greater than or equal to 65 dB	7,880	4,639	3,643	3,004	4,425
WINTHROP	Greater than or equal to 60 dB	15,126	11,536	10,457	10,071	11,365
Population Summary						
All	Greater than or equal to 75 dB	568	257	58	58	257
All	Greater than or equal to 70 dB	6,380	3,828	1,213	1,028	3,321
All	Greater than or equal to 65 dB	34,386	11,499	13,351	12,007	11,548
All	Greater than or equal to 60 dB	86,164	41,659	52,026	51,651	38,030

* "BOSTON (OTHER)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End
Total counts do not include Deer Island or Long Island (institutional population only)

Table 1.5

Cumulative Population Summary by Town or Neighborhood
2010 45 Million Passenger High Fleet

Town	Sound Level	1993	No Action (Alt. 4)	All Actions (Alt. 1)	All Actions ex. PHP (Alt. 1A)	No Runway/ No Build (Alt. 2/3)
BOSTON (OTHER*)	Greater than or equal to 75 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 70 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 65 dB	0	0	0	0	0
BOSTON (OTHER*)	Greater than or equal to 60 dB	3,270	1,739	621	1,003	1,003
CHELSEA	Greater than or equal to 75 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 70 dB	0	0	0	0	0
CHELSEA	Greater than or equal to 65 dB	6,140	0	1,807	392	0
CHELSEA	Greater than or equal to 60 dB	13,357	2,253	8,490	8,422	1,807
EAST BOSTON	Greater than or equal to 75 dB	58	58	58	58	58
EAST BOSTON	Greater than or equal to 70 dB	2,822	464	351	355	355
EAST BOSTON	Greater than or equal to 65 dB	14,644	4,334	4,306	4,320	3,502
EAST BOSTON	Greater than or equal to 60 dB	28,780	13,915	19,562	19,807	11,147
E BOSTON (Jeff Pt.)	Greater than or equal to 75 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 70 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 65 dB	0	0	0	0	0
E BOSTON (Jeff Pt.)	Greater than or equal to 60 dB	2,288	1,272	1,040	1,272	582
EVERETT	Greater than or equal to 75 dB	0	0	0	0	0
EVERETT	Greater than or equal to 70 dB	0	0	0	0	0
EVERETT	Greater than or equal to 65 dB	0	0	0	0	0
EVERETT	Greater than or equal to 60 dB	766	0	144	0	0
QUINCY	Greater than or equal to 75 dB	0	0	0	0	0
QUINCY	Greater than or equal to 70 dB	0	0	0	0	0
QUINCY	Greater than or equal to 65 dB	0	0	0	0	0
QUINCY	Greater than or equal to 60 dB	0	1,456	0	0	0
REVERE	Greater than or equal to 75 dB	0	0	0	0	0
REVERE	Greater than or equal to 70 dB	1,335	2,808	1,336	2,141	2,346
REVERE	Greater than or equal to 65 dB	4,679	4,603	3,606	3,854	3,884
REVERE	Greater than or equal to 60 dB	10,070	11,350	7,467	8,472	9,242
SOUTH BOSTON	Greater than or equal to 75 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 70 dB	0	0	0	0	0
SOUTH BOSTON	Greater than or equal to 65 dB	1,043	765	813	477	1,080
SOUTH BOSTON	Greater than or equal to 60 dB	12,507	4,417	8,227	9,410	4,341
WINTHROP	Greater than or equal to 75 dB	510	277	77	120	245
WINTHROP	Greater than or equal to 70 dB	2,223	1,770	1,064	1,144	1,522
WINTHROP	Greater than or equal to 65 dB	7,880	6,447	4,364	5,338	5,302
WINTHROP	Greater than or equal to 60 dB	15,126	13,942	11,252	11,918	13,461
Population Summary						
All	Greater than or equal to 75 dB	568	335	135	178	303
All	Greater than or equal to 70 dB	6,380	5,042	2,751	3,640	4,223
All	Greater than or equal to 65 dB	34,386	16,149	14,896	14,381	13,768
All	Greater than or equal to 60 dB	86,164	50,344	56,803	60,304	41,583

* "BOSTON (OTHER)" includes Back Bay, Dorchester, Jamaica Plain, Roxbury, and the South End
Total counts do not include Deer Island or Long Island (institutional population only)

Noise Metrics

A variety of noise metrics are used to assess airport noise impacts in different ways. Noise metrics may be used to describe individual noise events (such as a single operation of an aircraft taking off overhead) or groups of events (such as the cumulative effect of numerous aircraft operations, the collection of which creates a general noise environment, or overall noise exposure level). Both types of metrics are helpful in explaining how people are affected by a given noise condition. Massport uses both single-event and cumulative noise metrics to gain a full understanding of the Logan noise environment.

A-Weighted Sound Level.

The basic descriptor of the magnitude of sound is the value of its sound pressure. Sound pressure is a physical quantity which varies constantly in magnitude and in frequency. Because the range of the values of sound pressure is very large, acousticians adopted a logarithmic ratio scale to describe its magnitude. The unit on this logarithmic scale is the deciBel (dB). To match the unequal sensitivity of the human ear to different frequencies, standard filters have been developed for noise measuring equipment, causing the instruments to respond to sound pressures similar to the way in which we hear. The most common filter is the "A" weighting; it significantly de-emphasizes low frequencies (less than 500 Hertz (Hz)) and very high frequencies (above 10,000 Hz); and it relates well to our ability to hear speech. Sounds measured through this filter are referred to as A-weighted sound levels. The A-weighted dB is the most common sound unit used to evaluate all forms of noise impact on people.

Equivalent Sound Level.

Equivalent sound level (Leq) is the A-weighted sound level of a steady-state noise during a specified period of time containing the same amount of sound exposure as the varying sound level within that period of time. Leq is a metric for describing noise with fluctuating levels. As Leq is related to sound exposure rather than just sound pressure, averaging emphasizes the higher sound levels, and thus affords a good measure of high level intrusive noises. Also, because the sound exposure accounts for both sound level and duration, the Leq provides a good measure of long duration noise events. In this study the Leq is used to describe the nighttime sound level which is the summation of the sound exposure from all of the individual events that occur between the hours of 10:00 PM and 7:00 AM. Unlike DNL which includes both day and night sound levels, the nighttime Leq (LeqN) focuses only on the nighttime period, and does not include the 10 dB penalty surcharged on DNL levels.

Day-Night Sound Level (DNL).

The DNL is the A-weighted sound level of a steady-state noise during a 24-hour day which contains the same sound exposure as does the summation of the sound exposures from all of the individual events that occur during a 24-hour period, with the provision that noises occurring at night (defined as 10:00 PM through 7:00 AM) are increased by 10 dB. Actually, it is a 24-hour Leq, but adjusted with a nighttime penalty. This 10 dB penalty, or weighting, reflects the added intrusiveness of nighttime noise. Since community background noise typically decreases about 10 dB at night, nighttime noise events sound relatively louder because there is less ambient noise. Because DNL is based on an accumulation of total sound exposure, every noise event, regardless of level or duration, adds to its value.

Environmental sound levels can be measured or estimated. Measurements are practical only for obtaining existing DNL values for a relatively limited number of geographic locations and, in the absence of permanently installed monitors, only for a period of a few days. For this reason, most airport noise assessments use computer-generated DNL estimates of the noise contours for both existing and future conditions. Computation of DNL is accomplished by adding together the sound exposure level values of each individual aircraft flight that adds to the noise exposure at each location in the study area. In most airport studies, as in this study, the operations used in computing DNL represent an average day during a given year as determined by the statistical data maintained by Massport, the FAA, and other sources. The results are presented on maps as contours of equal cumulative sound (e.g., DNL values of 60, 65, 70 and 75 dB) and in tables for both DNL and other metrics at specific locations. They are generated by a program developed by the FAA known as the INM.

Maximum Sound Level.

The maximum sound level metric, Lmax, represents the highest sound level during a single noise event. During an aircraft flyby the sound level at a receptor increases during its approach from the time that it is first audible to its maximum level when the aircraft is nearest, or just past, the receptor. Then, as the aircraft flies away the sound level decreases until it is no longer audible. The total sound exposure during such a flyby is related to the sound pressure at the time the maximum sound level (Lmax) and to the duration of the time that the aircraft sound was audible.

Time Above a Given Noise Threshold.

Because analyses of sound levels (of any variety) are complex and often unfamiliar to the public, the FAA has developed a supplemental metric which describes the statistical distribution for the varying sound levels which together comprise the total noise environment. This descriptor accumulates the time that the sound level exceeds a selected A-weighted sound level threshold value. Every moment that the fluctuating sound level rises above the threshold, the number of seconds is accumulated and added to those acquired during previous periods. In this study these time-above-thresholds, or Time Above (TA), are reported in minutes for an average 24-hour period or just for nighttime periods between 10:00 PM and 7:00 AM. To provide a statistical picture of the noise environment the TA must be computed for several threshold values.

Logan 2015: Runway Use by INM Group After Delay Adjustments

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 04L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 04R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	34.0%	37.7%	48.6%	49.8%	6.1%	6.1%	6.5%	6.3%
Night		17.5%	21.5%	30.5%	33.6%	14.5%	11.9%	13.1%	12.2%
Day	2	33.4%	35.4%	47.9%	46.8%	6.7%	8.5%	7.2%	9.3%
Night		14.8%	19.4%	27.4%	31.0%	17.0%	13.4%	15.8%	14.2%
Day	3	34.0%	37.7%	48.6%	49.8%	6.1%	6.1%	6.5%	6.3%
Night		23.9%	28.8%	39.1%	42.0%	11.2%	9.3%	10.0%	9.1%
Day	4	9.7%	12.6%	14.1%	16.7%	30.4%	31.3%	41.0%	39.5%
Night		4.7%	6.9%	8.6%	11.1%	26.9%	25.7%	34.1%	33.6%
Day	5	0.0%	0.0%	0.0%	0.0%	40.1%	43.9%	55.0%	56.2%
Night		0.0%	0.0%	0.0%	0.0%	31.8%	33.0%	43.1%	45.2%
Day	6	0.0%	0.0%	0.0%	0.0%	40.1%	43.9%	55.0%	56.2%
Night		0.0%	0.0%	0.0%	0.0%	31.1%	31.8%	41.7%	43.5%
Day	All	14.3%	17.2%	20.6%	22.7%	25.8%	26.7%	34.5%	33.4%
Night		6.1%	8.5%	11.2%	13.8%	25.6%	24.2%	31.6%	31.2%

	Departures Class	Runway 04L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 04R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	33.7%	35.9%	46.6%	43.8%	0.2%	0.2%	0.3%	0.3%
Night		14.4%	20.5%	23.3%	26.2%	0.4%	0.4%	0.6%	0.6%
Day	2	0.0%	0.0%	0.0%	0.0%	1.7%	1.3%	2.7%	2.0%
Night		0.0%	0.0%	0.0%	0.0%	3.9%	3.1%	3.3%	2.4%
Day	3	33.4%	35.2%	46.2%	43.1%	0.2%	0.2%	0.3%	0.3%
Night		20.3%	25.6%	32.1%	33.1%	0.4%	0.3%	0.5%	0.5%
Day	4	0.0%	0.0%	0.0%	0.0%	1.7%	1.3%	2.7%	2.0%
Night		0.0%	0.0%	0.0%	0.0%	3.8%	3.1%	3.3%	2.4%
Day	5	0.0%	0.0%	0.0%	0.0%	40.1%	41.7%	54.9%	52.2%
Night		0.0%	0.0%	0.0%	0.0%	26.2%	26.8%	37.1%	36.1%
Day	6	0.0%	0.0%	0.0%	0.0%	1.7%	1.3%	2.7%	2.0%
Night		0.0%	0.0%	0.0%	0.0%	3.7%	3.0%	3.3%	2.4%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	0.0%	0.0%	0.0%	0.0%	27.7%	1.3%	37.3%	2.0%
Night		0.0%	0.0%	0.0%	0.0%	8.9%	3.7%	12.7%	2.5%
Day	9	0.0%	0.0%	0.0%	0.0%	40.1%	41.7%	54.9%	52.2%
Night		0.0%	0.0%	0.0%	0.0%	29.3%	30.7%	42.3%	41.5%
Day	All	4.4%	5.0%	6.1%	6.1%	6.0%	4.5%	8.6%	6.0%
Night		1.7%	2.4%	2.8%	3.2%	6.2%	5.1%	7.3%	5.4%

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 09 Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 14 Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.9%	0.5%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%
Night		0.8%	0.7%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%
Day	2	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Day	3	1.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Night		0.9%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Day	4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Day	5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Day	6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Day	All	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%

	Departures Class	Runway 09 Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 14 Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	6.5%	8.0%	8.4%	12.5%	1.7%	1.1%	0.0%	0.0%
Night		19.0%	14.5%	20.6%	20.4%	2.1%	1.5%	0.0%	0.0%
Day	2	38.6%	42.7%	52.6%	54.6%	1.7%	1.1%	0.0%	0.0%
Night		30.0%	32.4%	41.4%	44.9%	2.0%	1.5%	0.0%	0.0%
Day	3	6.7%	8.7%	8.8%	13.2%	1.7%	1.1%	0.0%	0.0%
Night		15.2%	12.7%	16.1%	17.6%	2.0%	1.4%	0.0%	0.0%
Day	4	39.8%	43.4%	52.6%	54.6%	0.0%	0.0%	0.0%	0.0%
Night		31.2%	33.2%	41.6%	44.9%	0.0%	0.0%	0.0%	0.0%
Day	5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	6	39.8%	43.3%	52.6%	54.6%	0.0%	0.0%	0.0%	0.0%
Night		31.6%	33.7%	42.3%	45.5%	0.1%	0.1%	0.0%	0.0%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	13.7%	43.4%	18.0%	54.6%	0.0%	0.0%	0.0%	0.0%
Night		24.6%	30.1%	28.7%	40.6%	0.0%	0.0%	0.0%	0.0%
Day	9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	All	30.6%	34.8%	40.6%	44.2%	0.4%	0.3%	0.0%	0.0%
Night		26.0%	27.7%	34.0%	37.6%	0.4%	0.3%	0.0%	0.0%

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 15L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 15R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.2%	0.1%	0.1%	0.1%	0.8%	0.6%	0.2%	0.3%
Night		0.3%	0.3%	0.1%	0.1%	1.4%	0.8%	0.4%	0.4%
Day	2	0.0%	0.0%	0.0%	0.0%	1.5%	1.2%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	2.1%	1.7%	0.7%	0.6%
Day	3	0.0%	0.0%	0.0%	0.0%	0.9%	0.7%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	1.3%	0.9%	0.6%	0.6%
Day	4	0.0%	0.0%	0.0%	0.0%	1.8%	1.2%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	2.3%	1.8%	0.8%	0.6%
Day	5	0.0%	0.0%	0.0%	0.0%	1.8%	1.2%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	2.3%	1.7%	0.8%	0.6%
Day	6	0.0%	0.0%	0.0%	0.0%	1.8%	1.2%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	2.4%	1.8%	0.8%	0.6%
Day	All	0.0%	0.0%	0.0%	0.0%	1.6%	1.1%	0.4%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	2.2%	1.7%	0.8%	0.6%

	Departures Class	Runway 15L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 15R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	9.8%	7.6%	7.2%	5.2%
Day	2	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	9.8%	7.6%	7.0%	5.1%
Day	3	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	6.9%	5.0%	4.5%	3.0%
Day	4	0.0%	0.0%	0.0%	0.0%	0.8%	0.7%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	10.6%	8.3%	6.9%	5.1%
Day	5	0.0%	0.0%	0.0%	0.0%	2.1%	3.6%	0.6%	4.4%
Night		0.0%	0.0%	0.0%	0.0%	14.6%	13.7%	9.8%	10.8%
Day	6	0.0%	0.0%	0.0%	0.0%	0.8%	0.7%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	10.0%	7.9%	6.5%	4.8%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	0.0%	0.0%	0.0%	0.0%	0.9%	0.6%	0.2%	0.2%
Night		0.0%	0.0%	0.0%	0.0%	12.9%	10.6%	9.3%	7.3%
Day	9	0.0%	0.0%	0.0%	0.0%	2.1%	3.6%	0.6%	4.4%
Night		0.0%	0.0%	0.0%	0.0%	11.8%	11.0%	7.1%	8.7%
Day	All	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.2%	0.5%
Night		0.0%	0.0%	0.0%	0.0%	10.9%	8.7%	7.3%	5.7%

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 22L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 22R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	13.6%	10.8%	36.5%	35.3%	0.7%	0.5%	1.2%	1.0%
Night		23.1%	23.9%	37.1%	36.9%	1.4%	0.7%	2.1%	1.4%
Day	2	5.2%	4.4%	13.1%	11.9%	0.0%	0.0%	0.0%	0.0%
Night		18.4%	20.5%	23.8%	22.5%	0.0%	0.0%	0.0%	0.0%
Day	3	14.3%	11.3%	37.7%	36.3%	0.0%	0.0%	0.0%	0.0%
Night		20.6%	18.7%	38.5%	37.3%	0.0%	0.0%	0.0%	0.0%
Day	4	7.3%	6.0%	18.9%	17.8%	0.0%	0.0%	0.0%	0.0%
Night		20.2%	22.2%	27.6%	26.7%	0.0%	0.0%	0.0%	0.0%
Day	5	1.7%	1.5%	3.0%	1.8%	0.0%	0.0%	0.0%	0.0%
Night		15.9%	18.6%	17.3%	16.1%	0.0%	0.0%	0.0%	0.0%
Day	6	13.3%	10.5%	34.9%	33.5%	0.0%	0.0%	0.0%	0.0%
Night		24.9%	26.4%	37.7%	37.1%	0.0%	0.0%	0.0%	0.0%
Day	All	8.3%	6.7%	21.4%	20.3%	0.0%	0.0%	0.1%	0.1%
Night		20.6%	22.4%	28.8%	28.0%	0.1%	0.0%	0.1%	0.1%

	Departures Class	Runway 22L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 22R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.7%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	24.0%	24.0%	38.9%	38.1%
Day	2	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.7%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	23.8%	23.8%	38.9%	38.1%
Day	3	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.7%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	21.0%	19.5%	38.4%	37.3%
Day	4	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.6%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	23.7%	23.8%	38.9%	38.1%
Day	5	14.5%	11.6%	38.0%	36.7%	0.0%	0.0%	0.0%	0.0%
Night		27.7%	28.2%	43.0%	42.5%	0.0%	0.0%	0.0%	0.0%
Day	6	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.6%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	23.2%	23.2%	38.8%	38.0%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	0.0%	0.0%	0.0%	0.0%	14.4%	11.5%	37.6%	36.2%
Night		0.0%	0.0%	0.0%	0.0%	25.8%	27.7%	39.3%	39.0%
Day	9	14.5%	11.6%	38.0%	36.7%	0.0%	0.0%	0.0%	0.0%
Night		24.8%	23.7%	41.5%	40.5%	0.0%	0.0%	0.0%	0.0%
Day	All	1.2%	1.0%	3.3%	3.0%	13.2%	10.5%	34.4%	33.2%
Night		2.5%	2.4%	3.9%	3.7%	21.7%	22.0%	35.4%	34.8%

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 27 Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 32 Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.6%	0.6%	0.4%	0.4%	42.2%	42.0%	0.0%	0.0%
Night		0.9%	0.7%	0.7%	0.6%	29.2%	30.2%	0.0%	0.0%
Day	2	10.4%	7.9%	24.9%	24.8%	37.4%	38.0%	0.0%	0.0%
Night		8.4%	6.0%	16.1%	16.5%	24.5%	26.3%	0.0%	0.0%
Day	3	0.6%	0.6%	0.4%	0.4%	42.5%	42.3%	0.0%	0.0%
Night		0.8%	0.7%	0.6%	0.5%	34.5%	35.8%	0.0%	0.0%
Day	4	9.6%	8.0%	19.1%	18.8%	11.0%	8.8%	0.0%	0.0%
Night		8.8%	7.5%	12.2%	12.3%	7.1%	5.2%	0.0%	0.0%
Day	5	15.7%	12.6%	35.0%	34.8%	0.0%	0.0%	0.0%	0.0%
Night		13.5%	10.6%	22.3%	22.8%	0.0%	0.0%	0.0%	0.0%
Day	6	4.2%	3.5%	3.1%	3.1%	0.0%	0.0%	0.0%	0.0%
Night		5.6%	4.5%	2.2%	2.2%	0.0%	0.0%	0.0%	0.0%
Day	All	8.3%	6.7%	16.5%	16.2%	16.7%	15.8%	0.0%	0.0%
Night		8.0%	6.5%	10.8%	10.9%	9.6%	8.9%	0.0%	0.0%

	Departures Class	Runway 27 Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 32 Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.7%	0.6%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%
Night		0.9%	0.9%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Day	2	1.1%	3.8%	5.7%	5.8%	0.0%	0.0%	0.0%	0.0%
Night		1.4%	3.3%	7.1%	7.4%	0.0%	0.0%	0.0%	0.0%
Day	3	0.6%	0.8%	0.6%	0.8%	0.0%	0.0%	0.0%	0.0%
Night		0.8%	1.0%	0.8%	0.9%	0.0%	0.0%	0.0%	0.0%
Day	4	39.1%	39.4%	5.7%	5.8%	0.0%	0.0%	0.0%	0.0%
Night		24.1%	25.9%	7.1%	7.4%	0.0%	0.0%	0.0%	0.0%
Day	5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	6	39.3%	39.7%	5.9%	6.0%	0.0%	0.0%	0.0%	0.0%
Night		25.2%	27.1%	7.2%	7.5%	0.0%	0.0%	0.0%	0.0%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	39.3%	39.7%	5.8%	6.0%	0.0%	0.0%	0.0%	0.0%
Night		21.1%	22.3%	7.8%	8.4%	0.0%	0.0%	0.0%	0.0%
Day	9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	All	26.4%	26.6%	4.6%	4.6%	0.0%	0.0%	0.0%	0.0%
Night		16.8%	18.1%	5.9%	6.1%	0.0%	0.0%	0.0%	0.0%

Logan 2015

* Runway use by INM group after delay adjustments

	Arrivals Class	Runway 33L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 33R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	0.5%	0.4%	3.8%	4.2%	0.5%	0.5%	2.5%	2.4%
Night		10.2%	8.5%	12.6%	11.4%	0.7%	0.8%	3.1%	3.1%
Day	2	5.1%	4.7%	6.4%	6.7%	0.0%	0.0%	0.0%	0.0%
Night		14.6%	12.6%	16.2%	15.1%	0.0%	0.0%	0.0%	0.0%
Day	3	0.7%	0.7%	6.4%	6.6%	0.0%	0.0%	0.0%	0.0%
Night		6.8%	5.2%	11.3%	10.4%	0.0%	0.0%	0.0%	0.0%
Day	4	30.1%	32.1%	6.5%	6.7%	0.0%	0.0%	0.0%	0.0%
Night		29.9%	30.7%	16.7%	15.6%	0.0%	0.0%	0.0%	0.0%
Day	5	40.6%	40.8%	6.5%	6.6%	0.0%	0.0%	0.0%	0.0%
Night		36.3%	35.9%	16.4%	15.2%	0.0%	0.0%	0.0%	0.0%
Day	6	40.6%	40.8%	6.5%	6.6%	0.0%	0.0%	0.0%	0.0%
Night		36.0%	35.4%	17.5%	16.5%	0.0%	0.0%	0.0%	0.0%
Day	All	24.8%	25.5%	6.3%	6.5%	0.0%	0.0%	0.2%	0.2%
Night		27.7%	27.6%	16.3%	15.2%	0.0%	0.0%	0.2%	0.2%

	Departures Class	Runway 33L Alt 1	Alt 1A	Alt 2/3	Alt 4	Runway 33R Alt 1	Alt 1A	Alt 2/3	Alt 4
Day	1	42.6%	42.5%	6.2%	6.3%	0.0%	0.0%	0.0%	0.0%
Night		29.3%	30.5%	8.4%	8.5%	0.0%	0.0%	0.0%	0.0%
Day	2	42.2%	39.3%	1.1%	1.2%	0.0%	0.0%	0.0%	0.0%
Night		29.1%	28.2%	2.3%	2.1%	0.0%	0.0%	0.0%	0.0%
Day	3	42.7%	42.3%	6.3%	6.2%	0.0%	0.0%	0.0%	0.0%
Night		33.5%	34.7%	7.6%	7.5%	0.0%	0.0%	0.0%	0.0%
Day	4	4.3%	3.7%	1.1%	1.2%	0.0%	0.0%	0.0%	0.0%
Night		6.6%	5.7%	2.2%	2.1%	0.0%	0.0%	0.0%	0.0%
Day	5	43.3%	43.1%	6.6%	6.7%	0.0%	0.0%	0.0%	0.0%
Night		31.5%	31.4%	10.2%	10.6%	0.0%	0.0%	0.0%	0.0%
Day	6	4.0%	3.5%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Night		6.1%	5.1%	2.0%	1.8%	0.0%	0.0%	0.0%	0.0%
Day	7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Night		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Day	8	4.0%	3.5%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Night		6.7%	5.7%	2.4%	2.2%	0.0%	0.0%	0.0%	0.0%
Day	9	43.3%	43.1%	6.6%	6.7%	0.0%	0.0%	0.0%	0.0%
Night		34.1%	34.5%	9.1%	9.3%	0.0%	0.0%	0.0%	0.0%
Day	All	16.9%	16.5%	2.2%	2.3%	0.0%	0.0%	0.0%	0.0%
Night		13.8%	13.3%	3.5%	3.5%	0.0%	0.0%	0.0%	0.0%

Logan 2015: Operations After Delay Adjustments

Logan 2015 Alternative 1A

* Operations after Delay Adjustments

		Total				Total		Stagelength 1			Stagelength 2		
EQUIP	INMTYPE	Arrivals	Day	Night	Class	Departures	Day	Night	Class	Day	Night	Class	
CNA	BEC58P	9.24	8.53	0.71	1	9.24	8.49	0.75	1	0	0	0	
BE1	DHC6	24.81	22.9	1.91	1	24.81	22.79	2.02	1	0	0	0	
SF3	SF340	49.3	45.51	3.79	3	49.3	45.28	4.02	3	0	0	0	
DH8	DHC8	2.38	2.2	0.18	3	2.38	2.19	0.19	3	0	0	0	
ATR	DHC8	0.09	0.08	0	3	0.09	0.08	0	3	0	0	0	
AT7	HS748A	3.09	2.85	0.23	3	3.09	2.84	0.25	3	0	0	0	
328	CL600	58.47	48.13	10.34	2	58.47	33.14	4.75	2	18	2.58	2	
ER3	CL601	30.65	25.22	5.43	4	30.65	15.85	2.27	4	10.97	1.57	4	
CRJ	CL601	49.45	40.69	8.75	4	49.44	35.33	5.06	4	7.92	1.13	4	
ER4	EMB145	105.92	87.18	18.75	4	105.92	36.78	5.27	4	55.87	8	4	
CR7	CL601	3.24	2.67	0.57	4	3.24	1.84	0.26	4	1	0.14	4	
728	CL601	1.62	1.33	0.29	4	1.62	0.91	0.14	4	0.49	0.08	4	
ER7	CL601	3.24	2.67	0.57	4	3.24	1.84	0.26	4	1	0.14	4	
100	F10065	0.86	0.71	0.16	4	0.86	0.05	0	4	0.7	0.11	4	
AR1	BAE300	2.21	1.82	0.39	4	2.21	0.8	0.11	4	1.14	0.17	4	
736	7373B2	8.93	7.35	1.58	4	8.93	3.21	0.46	4	3.96	0.57	4	
735	737500	4.67	3.85	0.82	4	4.67	1.81	0.28	4	2.08	0.3	4	
717	F10062	7.09	5.84	1.25	4	7.09	0	0	0	6.21	0.88	4	
319	A320	26.04	21.44	4.6	4	26.04	13.62	1.95	4	5.17	0.74	4	
737	737400	48.33	39.78	8.55	4	48.33	10.15	1.45	4	32.14	4.6	4	
733	737300	3.53	1.94	1.59	4	3.53	1.98	0.83	4	0.35	0.15	4	
733	7373B2	2.16	1.19	0.97	4	2.16	1.22	0.5	4	0.22	0.09	4	
73H	737N9	12.45	11.85	0.6	4	12.45	9.42	0.48	4	1.68	0.09	4	
738	737400	65.07	53.52	11.55	4	65.07	6.58	1.34	4	24.7	3.72	4	
M83	MD82	6.83	5.63	1.2	4	6.83	2.21	0.31	4	1.27	0.18	4	
M83	MD83	4.09	3.36	0.73	4	4.09	1.34	0.31	4	0.74	0.16	4	
734	737400	3.91	3.22	0.69	4	3.91	2.94	0.42	4	0.48	0.06	4	
320	A320	63.64	52.37	11.26	4	63.64	29	4.16	4	6.79	0.97	4	
739	737400	5.04	4.15	0.89	4	5.04	0.39	0.06	4	1.49	0.22	4	
757	757PW	22.03	18.13	3.9	5	22.03	1.93	0.29	6	6.92	1.01	6	
757	757RR	12.94	10.65	2.29	5	12.94	1.13	0.17	6	4.06	0.6	6	
321	A320	17.15	14.12	3.03	4	17.15	1.32	0.19	4	5.1	0.73	4	
762	767CF6	6.26	5.17	1.09	6	6.26	0	0	0	0.01	0	8	
762	767JT9	1.77	1.46	0.3	6	1.77	0	0	0	0	0	8	
763	767CF6	8.29	6.82	1.47	6	8.29	0.89	0.12	8	3.13	0.45	8	
763	767300	12.28	10.92	1.36	6	12.28	0.64	0.09	8	2.27	0.32	8	
M11	MD11GE	0.65	0.55	0.1	6	0.65	0.01	0	9	0.11	0.04	9	
M11	MD11PW	0.7	0.6	0.1	6	0.7	0.01	0.01	9	0.12	0.05	9	
AB6	A300	0.75	0.63	0.12	6	0.75	0.02	0.01	8	0.1	0.07	8	
764	767300	6.6	6.01	0.59	6	6.6	0.01	0	8	0.49	0.08	8	
777	767JT9	2.21	1.99	0.22	6	2.21	0.01	0	8	0.2	0.03	8	
772	767JT9	6.18	5.52	0.66	6	6.18	0.02	0	8	0.63	0.09	8	
330	A310	0.92	0.76	0.16	6	0.92	0.01	0	8	0.21	0.03	8	
773	767JT9	0.52	0.48	0.04	6	0.52	0	0	8	0.04	0	8	
752	757RR	2.78	2.65	0.13	5	2.78	0	0	0	0	0	0	
767	767CF6	0.14	0.13	0.01	6	0.14	0	0	0	0	0	0	
767	767JT9	0.04	0.04	0	6	0.04	0	0	0	0	0	0	
310	A310	0.69	0.66	0.03	6	0.69	0	0	0	0	0	0	
346	DC870	1.1	1.05	0.05	6	1.1	0	0	0	0	0	0	
332	A320	7.96	7.58	0.38	6	7.96	0	0	0	0	0	0	
343	DC870	1.64	1.56	0.08	6	1.64	0	0	0	0	0	0	
333	A310	2.39	2.27	0.12	6	2.39	0	0	0	0	0	0	
744	747400	1.11	1.06	0.05	6	1.11	0	0	0	0	0	0	
75F	757PW	1.88	1.44	0.44	5	1.88	0.79	0.06	6	0.71	0.05	6	
72F	727EM2	4.37	0	4.37	4	4.37	0	1.97	4	0	1.79	5	
76F	767300	4.87	1.12	3.76	6	4.87	0.62	1.58	8	0.56	1.44	8	
30F	A300	3.09	0.71	2.39	6	3.09	0.39	1	8	0.35	0.91	8	
D3F	DC1030	1.69	0.39	1.31	6	1.69	0.21	0.55	8	0.19	0.5	8	
31F	A310	1.55	0.35	1.19	6	1.55	0.19	0.5	8	0.18	0.46	8	
D1F	DC1010	1.48	0.34	1.15	6	1.48	0.19	0.48	8	0.17	0.44	8	
LJF	LEAR35	0.85	0.19	0.65	2	0.85	0.24	0.61	2	0	0	0	
M1F	MD11GE	0.76	0.17	0.59	6	0.76	0.1	0.24	9	0.09	0.22	9	
33F	A310	0.64	0.14	0.49	6	0.64	0.08	0.2	8	0.08	0.18	8	
GA2	LEAR35	31.07	27.06	4.01	2	31.07	27.19	3.88	2	0	0	0	
GA1	BEC58P	19.68	14.34	5.35	1	19.68	15.27	4.41	1	0	0	0	
GA5	CL601	3.66	3.19	0.47	4	3.66	3.2	0.46	4	0	0	0	
GA3	CIT3	1.83	1.59	0.24	2	1.83	1.6	0.23	2	0	0	0	
Total		**800.87**	**659.82**	**141.04**		**800.86**	**348.15**	**54.95**		**210.09**	**36.14**		

Stagelength 3			Stagelength 4			Stagelength 5			Stagelength 6			Stagelength 7		
Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.41	0.06	4	0.16	0.03	4	0.07	0.01	4	0	0	0	0	0	0
0	0	4	0.17	0.03	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.41	0.2	4	1.57	0.23	4	1	0.14	4	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0.15	0.07	4	0	0	0	0	0	0	0	0	0
0	0	0	0.1	0.04	4	0	0	0	0	0	0	0	0	0
0	0	0	0.74	0.04	4	0	0	0	0	0	0	0	0	0
0.16	0.11	4	10.59	1.54	4	14.28	2.04	5	0	0	0	0	0	0
1.05	0.15	4	1.46	0.2	5	0	0	0	0	0	0	0	0	0
0.58	0.11	4	0.75	0.12	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.85	0.55	4	12.25	1.75	4	3.79	0.54	5	0	0	0	0	0	0
0.37	0.05	4	0.96	0.14	5	1.19	0.17	5	0	0	0	0	0	0
1.73	0.26	6	4.85	0.72	6	3.77	0.54	6	0	0	0	0	0	0
1.02	0.15	6	2.86	0.41	6	2.22	0.32	6	0	0	0	0	0	0
1.28	0.18	4	3.26	0.46	5	4.06	0.58	5	0	0	0	0	0	0
0	0	0	0.66	0.09	8	4.83	0.68	8	0	0	0	0	0	0
0	0	0	0.18	0.03	8	1.36	0.19	8	0	0	0	0	0	0
1.15	0.17	8	0.96	0.14	8	1.11	0.16	9	0	0	0	0	0	0
0.84	0.12	8	0.69	0.1	8	5.43	0.42	9	1.27	0.08	9	0	0	0
0.16	0.04	9	0.04	0	9	0.04	0.02	9	0.17	0.01	9	0	0	0
0.17	0.04	9	0.04	0.01	9	0.04	0.02	9	0.19	0.01	9	0	0	0
0.19	0.05	8	0.06	0.01	8	0.19	0.06	8	0.01	0	9	0	0	0
1.12	0.16	8	0.27	0.03	9	3.18	0.21	9	0.89	0.06	9	0.08	0	9
0.46	0.06	8	0.11	0.02	8	1.25	0.08	8	0	0	0	0	0	0
1.44	0.2	8	0.34	0.05	8	3.18	0.21	8	0	0	0	0	0	0
0.48	0.06	8	0.11	0.02	9	0	0	0	0	0	0	0	0	0
0.09	0.01	8	0.02	0	9	0.26	0.01	9	0.08	0	9	0.01	0	9
0	0	0	2.6	0.17	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.13	0.01	8	0	0	0
0	0	0	0	0	0	0	0	0	0.04	0	8	0	0	0
0	0	0	0.44	0.03	8	0.22	0.01	8	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1.03	0.07	9
0	0	0	0	0	0	3.02	0.2	9	4.45	0.29	9	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1.53	0.11	9
0	0	0	0	0	0	2.25	0.15	9	0	0	0	0	0	0
0	0	0	0	0	0	0.52	0.04	9	0	0	0	0.52	0.04	9
0.17	0.01	6	0.07	0	6	0	0	0	0	0	0	0	0	0
0	0.44	5	0	0.17	5	0	0	0	0	0	0	0	0	0
0.13	0.35	8	0.03	0.07	9	0.03	0.07	9	0	0	0	0	0	0
0.09	0.22	8	0.02	0.04	8	0.02	0.04	9	0	0	0	0	0	0
0.05	0.12	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0.05	0.11	8	0.01	0.02	8	0.01	0.02	9	0	0	0	0	0	0
0.04	0.1	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0.05	9	0	0.01	9	0	0.01	9	0	0	0	0	0	0
0.02	0.04	8	0	0.01	9	0	0.01	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.53	**4.17**		**46.54**	**6.84**		**57.34**	**6.99**		**7.23**	**0.46**		**3.17**	**0.22**	

Logan 2015 Alternative 1

* Operations after Delay Adjustments

		Total				Total	Stagelength 1			Stagelength 2			
EQUIP	INMTYPE	Arrivals	Day	Night	Class	Departures	Day	Night	Class	Day	Night	Class	
CNA	BEC58P	8.4	7.83	0.57	1	8.4	7.79	0.61	1	0	0	0	
BE1	DHC6	22.92	21.39	1.53	1	22.92	21.27	1.65	1	0	0	0	
SF3	SF340	46.3	43.22	3.08	3	46.3	42.99	3.31	3	0	0	0	
DH8	DHC8	2.24	2.09	0.15	3	2.24	2.08	0.16	3	0	0	0	
ATR	DHC8	0.08	0.08	0	3	0.08	0.08	0	3	0	0	0	
AT7	HS748A	2.9	2.71	0.19	3	2.9	2.69	0.21	3	0	0	0	
328	CL600	54.97	45.39	9.58	2	54.97	31.4	4.22	2	17.1	2.3	2	
ER3	CL601	28.81	23.8	5.02	4	28.81	15.01	2.02	4	10.4	1.4	4	
CRJ	CL601	47.22	39.09	8.13	4	47.22	34.06	4.52	4	7.63	1.01	4	
ER4	EMB145	101.16	83.76	17.41	4	101.16	35.45	4.71	4	53.9	7.16	4	
CR7	CL601	3.24	2.7	0.54	4	3.24	1.86	0.24	4	1.01	0.13	4	
728	CL601	1.62	1.35	0.27	4	1.62	0.93	0.12	4	0.5	0.07	4	
ER7	CL601	3.24	2.7	0.54	4	3.24	1.86	0.24	4	1.01	0.13	4	
100	F10065	0.86	0.72	0.15	4	0.86	0.05	0	4	0.71	0.1	4	
AR1	BAE300	2.21	1.84	0.37	4	2.21	0.81	0.1	4	1.16	0.15	4	
736	7373B2	8.93	7.45	1.48	4	8.93	3.25	0.42	4	4.01	0.52	4	
735	737500	4.67	3.9	0.77	4	4.67	1.83	0.26	4	2.1	0.28	4	
717	F10062	7.09	5.91	1.18	4	7.09	0	0	0	6.29	0.8	4	
319	A320	26.04	21.72	4.32	4	26.04	13.8	1.77	4	5.24	0.67	4	
737	737400	48.33	40.31	8.02	4	48.33	10.28	1.32	4	32.6	4.18	4	
733	737300	3.53	1.97	1.56	4	3.53	2.01	0.8	4	0.36	0.14	4	
733	7373B2	2.16	1.21	0.95	4	2.16	1.23	0.49	4	0.22	0.09	4	
73H	737N9	12.45	12.01	0.44	4	12.45	9.55	0.35	4	1.71	0.06	4	
738	737400	65.07	54.24	10.83	4	65.07	6.67	1.25	4	25	3.39	4	
M83	MD82	6.83	5.7	1.13	4	6.83	2.24	0.28	4	1.28	0.17	4	
M83	MD83	4.09	3.41	0.68	4	4.09	1.36	0.29	4	0.75	0.15	4	
734	737400	3.91	3.26	0.65	4	3.91	2.98	0.38	4	0.48	0.06	4	
320	A320	63.64	53.07	10.56	4	63.64	29.39	3.77	4	6.88	0.88	4	
739	737400	5.04	4.21	0.83	4	5.04	0.4	0.05	4	1.51	0.2	4	
757	757PW	22.03	18.38	3.65	5	22.03	1.96	0.26	6	7.01	0.92	6	
757	757RR	12.94	10.79	2.15	5	12.94	1.15	0.15	6	4.12	0.54	6	
321	A320	17.15	14.3	2.85	4	17.15	1.34	0.17	4	5.17	0.66	4	
762	767CF6	6.26	5.24	1.02	6	6.26	0	0	0	0.01	0	8	
762	767JT9	1.77	1.48	0.28	6	1.77	0	0	0	0	0	8	
763	767CF6	8.29	6.92	1.37	6	8.29	0.9	0.11	8	3.17	0.41	8	
763	767300	12.28	11.06	1.22	6	12.28	0.65	0.08	8	2.3	0.29	8	
M11	MD11GE	0.65	0.56	0.09	6	0.65	0.01	0	9	0.12	0.03	9	
M11	MD11PW	0.7	0.61	0.09	6	0.7	0.01	0.01	9	0.13	0.04	9	
AB6	A300	0.75	0.64	0.11	6	0.75	0.02	0.01	8	0.11	0.06	8	
764	767300	6.6	6.09	0.51	6	6.6	0.01	0	8	0.5	0.07	8	
777	767JT9	2.21	2.02	0.19	6	2.21	0.01	0	8	0.2	0.03	8	
772	767JT9	6.18	5.59	0.59	6	6.18	0.02	0	8	0.64	0.08	8	
330	A310	0.92	0.77	0.15	6	0.92	0.01	0	8	0.21	0.03	8	
773	767JT9	0.52	0.48	0.04	6	0.52	0	0	8	0.04	0	8	
752	757RR	2.78	2.68	0.1	5	2.78	0	0	0	0	0	0	
767	767CF6	0.14	0.14	0	6	0.14	0	0	0	0	0	0	
767	767JT9	0.04	0.04	0	6	0.04	0	0	0	0	0	0	
310	A310	0.69	0.67	0.02	6	0.69	0	0	0	0	0	0	
346	DC870	1.1	1.06	0.04	6	1.1	0	0	0	0	0	0	
332	A320	7.96	7.68	0.28	6	7.96	0	0	0	0	0	0	
343	DC870	1.64	1.58	0.06	6	1.64	0	0	0	0	0	0	
333	A310	2.39	2.31	0.08	6	2.39	0	0	0	0	0	0	
744	747400	1.11	1.07	0.04	6	1.11	0	0	0	0	0	0	
75F	757PW	1.88	1.46	0.42	5	1.88	0.8	0.05	6	0.72	0.04	6	
72F	727EM2	4.37	0	4.37	4	4.37	0	1.97	4	0	1.79	5	
76F	767300	4.87	1.14	3.74	6	4.87	0.63	1.57	8	0.57	1.43	8	
30F	A300	3.09	0.72	2.38	6	3.09	0.4	0.99	8	0.36	0.9	8	
D3F	DC1030	1.69	0.4	1.3	6	1.69	0.21	0.55	8	0.19	0.5	8	
31F	A310	1.55	0.36	1.18	6	1.55	0.19	0.5	8	0.18	0.46	8	
D1F	DC1010	1.48	0.35	1.14	6	1.48	0.19	0.48	8	0.17	0.44	8	
LJF	LEAR35	0.85	0.19	0.65	2	0.85	0.24	0.61	2	0	0	0	
M1F	MD11GE	0.76	0.17	0.59	6	0.76	0.1	0.24	9	0.09	0.22	9	
33F	A310	0.64	0.14	0.49	6	0.64	0.08	0.2	8	0.08	0.18	8	
GA2	LEAR35	28.35	24.8	3.55	2	28.35	24.93	3.42	2	0	0	0	
GA1	BEC58P	16.95	11.89	5.06	1	16.95	12.84	4.11	1	0	0	0	
GA5	CL601	3.34	2.91	0.42	4	3.34	2.93	0.41	4	0	0	0	
GA3	CIT3	1.67	1.46	0.21	2	1.67	1.47	0.2	2	0	0	0	
Total		**776.54**	**645.19**	**131.36**		**776.54**	**334.42**	**49.63**		**208**	**33.16**		

	Stagelength 3			Stagelength 4			Stagelength 5			Stagelength 6			Stagelength 7		
Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.41	0.06	4	0.16	0.03	4	0.07	0.01	4	0	0	0	0	0	0
	0	0	4	0.17	0.03	4	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1.43	0.18	4	1.59	0.21	4	1.01	0.13	4	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0.15	0.07	4	0	0	0	0	0	0	0	0	0
	0	0	0	0.1	0.04	4	0	0	0	0	0	0	0	0	0
	0	0	0	0.75	0.03	4	0	0	0	0	0	0	0	0	0
	0.16	0.11	4	10.74	1.39	4	14.47	1.85	5	0	0	0	0	0	0
	1.06	0.14	4	1.48	0.18	5	0	0	0	0	0	0	0	0	0
	0.59	0.1	4	0.76	0.11	5	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3.9	0.5	4	12.41	1.59	4	3.84	0.49	5	0	0	0	0	0	0
	0.38	0.04	4	0.97	0.13	5	1.21	0.15	5	0	0	0	0	0	0
	1.76	0.23	6	4.92	0.65	6	3.82	0.49	6	0	0	0	0	0	0
	1.03	0.14	6	2.89	0.38	6	2.25	0.29	6	0	0	0	0	0	0
	1.29	0.17	4	3.3	0.42	5	4.11	0.53	5	0	0	0	0	0	0
	0	0	0	0.67	0.08	8	4.89	0.62	8	0	0	0	0	0	0
	0	0	0	0.18	0.03	8	1.38	0.17	8	0	0	0	0	0	0
	1.17	0.15	8	0.97	0.13	8	1.13	0.14	9	0	0	0	0	0	0
	0.85	0.11	8	0.7	0.09	8	5.5	0.35	9	1.28	0.07	9	0	0	0
	0.16	0.04	9	0.04	0	9	0.04	0.02	9	0.17	0.01	9	0	0	0
	0.17	0.04	9	0.04	0.01	9	0.04	0.02	9	0.19	0.01	9	0	0	0
	0.19	0.05	8	0.06	0.01	8	0.19	0.06	8	0.01	0	9	0	0	0
	1.14	0.14	8	0.27	0.03	9	3.22	0.17	9	0.91	0.04	9	0.08	0	9
	0.46	0.06	8	0.12	0.01	8	1.26	0.07	8	0	0	0	0	0	0
	1.46	0.18	8	0.35	0.04	8	3.22	0.17	8	0	0	0	0	0	0
	0.48	0.06	8	0.12	0.01	9	0	0	0	0	0	0	0	0	0
	0.09	0.01	8	0.02	0	9	0.26	0.01	9	0.08	0	9	0.01	0	9
	0	0	0	2.63	0.14	6	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0.14	0	8	0	0	0
	0	0	0	0	0	0	0	0	0	0.04	0	8	0	0	0
	0	0	0	0.44	0.03	8	0.22	0.01	8	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	1.04	0.06	9
	0	0	0	0	0	0	3.06	0.16	9	4.5	0.24	9	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	1.55	0.09	9
	0	0	0	0	0	0	2.28	0.12	9	0	0	0	0	0	0
	0	0	0	0	0	0	0.53	0.03	9	0	0	0	0.53	0.03	9
	0.17	0.01	6	0.07	0	6	0	0	0	0	0	0	0	0	0
	0	0.44	5	0	0.17	5	0	0	0	0	0	0	0	0	0
	0.14	0.34	8	0.03	0.07	9	0.03	0.07	9	0	0	0	0	0	0
	0.09	0.22	8	0.02	0.04	8	0.02	0.04	9	0	0	0	0	0	0
	0.05	0.12	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
	0.05	0.11	8	0.01	0.02	8	0.01	0.02	9	0	0	0	0	0	0
	0.04	0.1	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.02	0.05	9	0	0.01	9	0	0.01	9	0	0	0	0	0	0
	0.02	0.04	8	0	0.01	9	0	0.01	9	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18.76	**3.94**		**47.15**	**6.23**		**58.08**	**6.25**		**7.32**	**0.37**		**3.21**	**0.18**	

Logan 2015 Alternative 4

* Operations after Delay Adjustments

		Total				Total				Stagelength 1			Stagelength 2			Stagelength 3		
EQUIP	INMTYPI	Arrivals	Day	Night	Class	Departu	Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class
CNA	BEC58P	9.24	8.29	0.95	1	9.24	8.26	0.98	1	0	0	0	0	0	0			
BE1	DHC6	24.81	22.27	2.54	1	24.81	22.16	2.65	1	0	0	0	0	0	0			
SF3	SF340	49.3	44.26	5.04	3	49.3	44.04	5.26	3	0	0	0	0	0	0			
DH8	DHC8	2.38	2.14	0.24	3	2.38	2.13	0.25	3	0	0	0	0	0	0			
ATR	DHC8	0.09	0.07	0.01	3	0.09	0.07	0.01	3	0	0	0	0	0	0			
AT7	HS748A	3.09	2.77	0.31	3	3.09	2.76	0.33	3	0	0	0	0	0	0			
328	CL600	58.47	46.8	11.67	2	58.47	32.23	5.66	2	17.5	3.08	2	0	0	0			
ER3	CL601	30.65	24.53	6.12	4	30.65	15.41	2.71	4	10.66	1.88	4	0	0	0			
CRJ	CL601	49.45	39.57	9.87	4	49.44	34.36	6.03	4	7.7	1.35	4	0	0	0			
ER4	EMB145	105.92	84.78	21.15	4	105.92	35.77	6.28	4	54.33	9.54	4	0	0	0			
CR7	CL601	3.24	2.59	0.65	4	3.24	1.79	0.31	4	0.97	0.17	4	0	0	0			
728	CL601	1.62	1.3	0.32	4	1.62	0.89	0.16	4	0.48	0.09	4	0	0	0			
ER7	CL601	3.24	2.59	0.65	4	3.24	1.79	0.31	4	0.97	0.17	4	0	0	0			
100	F10065	0.86	0.69	0.18	4	0.86	0.05	0	4	0.69	0.12	4	0	0	0			
AR1	BAE300	2.21	1.77	0.44	4	2.21	0.78	0.13	4	1.11	0.2	4	0	0	0			
736	7373B2	8.93	7.15	1.78	4	8.93	3.12	0.55	4	3.85	0.68	4	0.4	0.07	4			
735	737500	4.67	3.74	0.93	4	4.67	1.76	0.33	4	2.02	0.36	4	0	0	4			
717	F10062	7.09	5.67	1.42	4	7.09	0	0	0	6.04	1.05	4	0	0	0			
319	A320	26.04	20.85	5.19	4	26.04	13.25	2.32	4	5.03	0.88	4	1.37	0.24	4			
737	737400	48.33	38.69	9.64	4	48.33	9.87	1.73	4	31.25	5.49	4	0	0	0			
733	737300	3.53	1.89	1.64	4	3.53	1.93	0.88	4	0.34	0.16	4	0	0	0			
733	7373B2	2.16	1.16	1	4	2.16	1.18	0.54	4	0.21	0.1	4	0	0	0			
73H	737N9	12.45	11.52	0.93	4	12.45	9.16	0.74	4	1.64	0.13	4	0	0	0			
738	737400	65.07	52.05	13.02	4	65.07	6.4	1.52	4	24.02	4.4	4	0.16	0.11	4			
M83	MD82	6.83	5.47	1.36	4	6.83	2.15	0.37	4	1.23	0.22	4	1.02	0.18	4			
M83	MD83	4.09	3.27	0.82	4	4.09	1.31	0.34	4	0.72	0.18	4	0.56	0.13	4			
734	737400	3.91	3.13	0.78	4	3.91	2.86	0.5	4	0.46	0.08	4	0	0	0			
320	A320	63.64	50.93	12.7	4	63.64	28.21	4.95	4	6.6	1.16	4	3.74	0.66	4			
739	737400	5.04	4.04	1	4	5.04	0.38	0.07	4	1.45	0.26	4	0.36	0.06	4			
757	757PW	22.03	17.63	4.4	5	22.03	1.88	0.34	6	6.73	1.2	6	1.68	0.31	6			
757	757RR	12.94	10.36	2.58	5	12.94	1.1	0.2	6	3.95	0.71	6	0.99	0.18	6			
321	A320	17.15	13.73	3.42	4	17.15	1.29	0.22	4	4.96	0.87	4	1.24	0.22	4			
762	767CF6	6.26	5.03	1.23	6	6.26	0	0	0	0.01	0	8	0	0	0			
762	767JT9	1.77	1.42	0.34	6	1.77	0	0	0	0	0	8	0	0	0			
763	767CF6	8.29	6.64	1.65	6	8.29	0.86	0.15	8	3.05	0.53	8	1.12	0.2	8			
763	767300	12.28	10.62	1.66	6	12.28	0.62	0.11	8	2.2	0.39	8	0.81	0.15	8			
M11	MD11GE	0.65	0.54	0.11	6	0.65	0.01	0	9	0.11	0.04	9	0.16	0.04	9			
M11	MD11PW	0.7	0.58	0.12	6	0.7	0.01	0.01	9	0.12	0.05	9	0.17	0.04	9			
AB6	A300	0.75	0.61	0.14	6	0.75	0.02	0.01	8	0.1	0.07	8	0.19	0.05	8			
764	767300	6.6	5.84	0.76	6	6.6	0.01	0	8	0.48	0.09	8	1.09	0.19	8			
777	767JT9	2.21	1.93	0.28	6	2.21	0.01	0	8	0.19	0.04	8	0.44	0.08	8			
772	767JT9	6.18	5.37	0.81	6	6.18	0.02	0	8	0.61	0.11	8	1.4	0.24	8			
330	A310	0.92	0.74	0.18	6	0.92	0.01	0	8	0.2	0.04	8	0.46	0.08	8			
773	767JT9	0.52	0.46	0.06	6	0.52	0	0	8	0.04	0	8	0.08	0.02	8			
752	757RR	2.78	2.57	0.21	5	2.78	0	0	0	0	0	0	0	0	0			
767	767CF6	0.14	0.13	0.01	6	0.14	0	0	0	0	0	0	0	0	0			
767	767JT9	0.04	0.04	0	6	0.04	0	0	0	0	0	0	0	0	0			
310	A310	0.69	0.64	0.05	6	0.69	0	0	0	0	0	0	0	0	0			
346	DC870	1.1	1.02	0.08	6	1.1	0	0	0	0	0	0	0	0	0			
332	A320	7.96	7.37	0.59	6	7.96	0	0	0	0	0	0	0	0	0			
343	DC870	1.64	1.52	0.12	6	1.64	0	0	0	0	0	0	0	0	0			
333	A310	2.39	2.21	0.18	6	2.39	0	0	0	0	0	0	0	0	0			
744	747400	1.11	1.03	0.08	6	1.11	0	0	0	0	0	0	0	0	0			
75F	757PW	1.88	1.4	0.48	5	1.88	0.77	0.08	6	0.69	0.07	6	0.17	0.01	6			
72F	727EM2	4.37	0	4.37	4	4.37	0	1.97	4	0	1.79	5	0	0.44	5			
76F	767300	4.87	1.09	3.79	6	4.87	0.6	1.6	8	0.55	1.45	8	0.13	0.35	8			
30F	A300	3.09	0.69	2.41	6	3.09	0.38	1.01	8	0.34	0.92	8	0.08	0.23	8			
D3F	DC1030	1.69	0.38	1.32	6	1.69	0.2	0.56	8	0.19	0.5	8	0.05	0.12	9			
31F	A310	1.55	0.34	1.2	6	1.55	0.19	0.5	8	0.18	0.46	8	0.05	0.11	8			
D1F	DC1010	1.48	0.33	1.16	6	1.48	0.19	0.48	8	0.17	0.44	8	0.04	0.1	9			
LJF	LEAR35	0.85	0.19	0.65	2	0.85	0.23	0.62	2	0	0	0	0	0	0			
M1F	MD11GE	0.76	0.17	0.59	6	0.76	0.09	0.25	9	0.08	0.23	9	0.02	0.05	9			
33F	A310	0.64	0.14	0.49	6	0.64	0.07	0.21	8	0.07	0.19	8	0.02	0.04	8			
GA2	LEAR35	31.07	26.32	4.75	2	31.07	26.44	4.63	2	0	0	0	0	0	0			
GA1	BEC58P	19.68	13.95	5.74	1	19.68	14.85	4.83	1	0	0	0	0	0	0			
GA5	CL601	3.66	3.1	0.56	4	3.66	3.11	0.55	4	0	0	0	0	0	0			
GA3	CIT3	1.83	1.55	0.28	2	1.83	1.56	0.27	2	0	0	0	0	0	0			
Total		**800.87**	**641.66**	**159.2**		**800.86**	**338.59**	**64.51**		**204.29**	**41.94**		**18**	**4.7**				

Stagelength 4			Stagelength 5			Stagelength 6			Stagelength 7		
Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0.16	0.03	4	0.06	0.02	4	0	0	0	0	0	0
0.17	0.03	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1.53	0.27	4	0.97	0.17	4	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0.15	0.07	4	0	0	0	0	0	0	0	0	0
0.09	0.05	4	0	0	0	0	0	0	0	0	0
0.72	0.06	4	0	0	0	0	0	0	0	0	0
10.3	1.83	4	13.89	2.43	5	0	0	0	0	0	0
1.42	0.24	5	0	0	0	0	0	0	0	0	0
0.73	0.14	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
11.91	2.09	4	3.68	0.65	5	0	0	0	0	0	0
0.93	0.17	5	1.16	0.2	5	0	0	0	0	0	0
4.72	0.85	6	3.67	0.64	6	0	0	0	0	0	0
2.78	0.49	6	2.16	0.38	6	0	0	0	0	0	0
3.17	0.55	5	3.94	0.7	5	0	0	0	0	0	0
0.64	0.11	8	4.69	0.82	8	0	0	0	0	0	0
0.18	0.03	8	1.32	0.23	8	0	0	0	0	0	0
0.93	0.17	8	1.08	0.19	9	0	0	0	0	0	0
0.68	0.11	8	5.28	0.57	9	1.23	0.12	9	0	0	0
0.04	0	9	0.04	0.02	9	0.17	0.01	9	0	0	0
0.04	0.01	9	0.04	0.02	9	0.19	0.01	9	0	0	0
0.06	0.01	8	0.19	0.06	8	0.01	0	9	0	0	0
0.26	0.04	9	3.09	0.3	9	0.87	0.08	9	0.07	0.01	9
0.11	0.02	8	1.21	0.12	8	0	0	0	0	0	0
0.33	0.06	8	3.09	0.3	8	0	0	0	0	0	0
0.11	0.02	9	0	0	0	0	0	0	0	0	0
0.02	0	9	0.25	0.02	9	0.07	0.01	9	0.01	0	9
2.53	0.24	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0.13	0.01	8	0	0	0
0	0	0	0	0	0	0.04	0	8	0	0	0
0.43	0.04	8	0.21	0.02	8	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0.1	9
0	0	0	2.93	0.29	9	4.32	0.42	9	0	0	0
0	0	0	0	0	0	0	0	0	1.49	0.15	9
0	0	0	2.18	0.22	9	0	0	0	0	0	0
0	0	0	0.51	0.05	9	0	0	0	0.51	0.05	9
0.06	0.01	6	0	0	0	0	0	0	0	0	0
0	0.17	5	0	0	0	0	0	0	0	0	0
0.03	0.07	9	0.03	0.07	9	0	0	0	0	0	0
0.02	0.04	8	0.02	0.04	9	0	0	0	0	0	0
0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0.01	0.02	8	0.01	0.02	9	0	0	0	0	0	0
0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0.01	9	0	0.01	9	0	0	0	0	0	0
0	0.01	9	0	0.01	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
45.28	**8.1**		**55.72**	**8.61**		**7.03**	**0.66**		**3.08**	**0.31**	

Logan 2015 Alternative 2 / 3

* Operations after Delay Adjustments

		Total				Total	Stagelength 1			Stagelength 2			
EQUIP	INMTYPE	Arrivals	Day	Night	Class	Departures	Day	Night	Class	Day	Night	Class	
CNA	BEC58P	8.4	7.66	0.74	1	8.4	7.62	0.78	1	0	0	0	0
BE1	DHC6	22.92	20.91	2.01	1	22.92	20.8	2.12	1	0	0	0	0
SF3	SF340	46.3	42.27	4.03	3	46.3	42.04	4.26	3	0	0	0	0
DH8	DHC8	2.24	2.05	0.19	3	2.24	2.04	0.2	3	0	0	0	0
ATR	DHC8	0.08	0.08	0	3	0.08	0.08	0	3	0	0	0	0
AT7	HS748A	2.9	2.65	0.25	3	2.9	2.63	0.27	3	0	0	0	0
328	CL600	54.97	44.39	10.58	2	54.97	30.7	4.92	2	16.68	2.67	2	
ER3	CL601	28.81	23.27	5.55	4	28.81	14.68	2.35	4	10.16	1.63	4	
CRJ	CL601	47.22	38.23	8.99	4	47.22	33.31	5.27	4	7.46	1.18	4	
ER4	EMB145	101.16	81.9	19.27	4	101.16	34.67	5.49	4	52.66	8.35	4	
CR7	CL601	3.24	2.64	0.6	4	3.24	1.82	0.28	4	0.99	0.15	4	
728	CL601	1.62	1.32	0.3	4	1.62	0.91	0.14	4	0.49	0.08	4	
ER7	CL601	3.24	2.64	0.6	4	3.24	1.82	0.28	4	0.99	0.15	4	
100	F10065	0.86	0.71	0.16	4	0.86	0.05	0	4	0.7	0.11	4	
AR1	BAE300	2.21	1.8	0.41	4	2.21	0.79	0.12	4	1.13	0.18	4	
736	7373B2	8.93	7.28	1.65	4	8.93	3.18	0.49	4	3.92	0.61	4	
735	737500	4.67	3.81	0.86	4	4.67	1.79	0.3	4	2.06	0.32	4	
717	F10062	7.09	5.78	1.31	4	7.09	0	0	0	6.15	0.94	4	
319	A320	26.04	21.24	4.8	4	26.04	13.5	2.07	4	5.12	0.79	4	
737	737400	48.33	39.42	8.91	4	48.33	10.06	1.54	4	31.85	4.89	4	
733	737300	3.53	1.92	1.61	4	3.53	1.96	0.85	4	0.35	0.15	4	
733	7373B2	2.16	1.18	0.98	4	2.16	1.21	0.51	4	0.22	0.09	4	
73H	737N9	12.45	11.74	0.71	4	12.45	9.34	0.56	4	1.67	0.1	4	
738	737400	65.07	53.04	12.03	4	65.07	6.52	1.4	4	24.48	3.94	4	
M83	MD82	6.83	5.57	1.26	4	6.83	2.19	0.33	4	1.25	0.2	4	
M83	MD83	4.09	3.33	0.76	4	4.09	1.33	0.32	4	0.74	0.16	4	
734	737400	3.91	3.19	0.72	4	3.91	2.91	0.45	4	0.47	0.07	4	
320	A320	63.64	51.9	11.73	4	63.64	28.74	4.42	4	6.73	1.03	4	
739	737400	5.04	4.11	0.93	4	5.04	0.39	0.06	4	1.48	0.23	4	
757	757PW	22.03	17.97	4.06	5	22.03	1.91	0.31	6	6.86	1.07	6	
757	757RR	12.94	10.56	2.38	5	12.94	1.12	0.18	6	4.03	0.63	6	
321	A320	17.15	13.99	3.16	4	17.15	1.31	0.2	4	5.06	0.77	4	
762	767CF6	6.26	5.12	1.14	6	6.26	0	0	0	0.01	0	8	
762	767JT9	1.77	1.44	0.32	6	1.77	0	0	0	0	0	8	
763	767CF6	8.29	6.76	1.53	6	8.29	0.88	0.13	8	3.1	0.48	8	
763	767300	12.28	10.82	1.46	6	12.28	0.63	0.1	8	2.24	0.35	8	
M11	MD11GE	0.65	0.55	0.1	6	0.65	0.01	0	9	0.11	0.04	9	
M11	MD11PW	0.7	0.59	0.11	6	0.7	0.01	0.01	9	0.12	0.05	9	
AB6	A300	0.75	0.62	0.13	6	0.75	0.02	0.01	8	0.1	0.07	8	
764	767300	6.6	5.95	0.65	6	6.6	0.01	0	8	0.49	0.08	8	
777	767JT9	2.21	1.97	0.24	6	2.21	0.01	0	8	0.2	0.03	8	
772	767JT9	6.18	5.47	0.71	6	6.18	0.02	0	8	0.62	0.1	8	
330	A310	0.92	0.75	0.17	6	0.92	0.01	0	8	0.21	0.03	8	
773	767JT9	0.52	0.47	0.05	6	0.52	0	0	8	0.04	0	8	
752	757RR	2.78	2.62	0.16	5	2.78	0	0	0	0	0	0	
767	767CF6	0.14	0.13	0.01	6	0.14	0	0	0	0	0	0	
767	767JT9	0.04	0.04	0	6	0.04	0	0	0	0	0	0	
310	A310	0.69	0.65	0.04	6	0.69	0	0	0	0	0	0	
346	DC870	1.1	1.04	0.06	6	1.1	0	0	0	0	0	0	
332	A320	7.96	7.51	0.45	6	7.96	0	0	0	0	0	0	
343	DC870	1.64	1.55	0.09	6	1.64	0	0	0	0	0	0	
333	A310	2.39	2.25	0.14	6	2.39	0	0	0	0	0	0	
744	747400	1.11	1.05	0.06	6	1.11	0	0	0	0	0	0	
75F	757PW	1.88	1.42	0.46	5	1.88	0.78	0.07	6	0.71	0.05	6	
72F	727EM2	4.37	0	4.37	4	4.37	0	1.97	4	0	1.79	5	
76F	767300	4.87	1.11	3.77	6	4.87	0.61	1.59	8	0.56	1.44	8	
30F	A300	3.09	0.71	2.39	6	3.09	0.39	1	8	0.35	0.91	8	
D3F	DC1030	1.69	0.39	1.31	6	1.69	0.21	0.55	8	0.19	0.5	8	
31F	A310	1.55	0.35	1.19	6	1.55	0.19	0.5	8	0.18	0.46	8	
D1F	DC1010	1.48	0.34	1.15	6	1.48	0.19	0.48	8	0.17	0.44	8	
LJF	LEAR35	0.85	0.19	0.65	2	0.85	0.24	0.61	2	0	0	0	
M1F	MD11GE	0.76	0.17	0.59	6	0.76	0.09	0.25	9	0.08	0.23	9	
33F	A310	0.64	0.14	0.49	6	0.64	0.08	0.2	8	0.08	0.18	8	
GA2	LEAR35	28.35	24.25	4.1	2	28.35	24.37	3.98	2	0	0	0	
GA1	BEC58P	16.95	11.63	5.32	1	16.95	12.56	4.39	1	0	0	0	
GA5	CL601	3.34	2.85	0.48	4	3.34	2.87	0.47	4	0	0	0	
GA3	CIT3	1.67	1.42	0.25	2	1.67	1.43	0.24	2	0	0	0	
Total		**776.54**	**630.87**	**145.68**		**776.54**	**327.03**	**57.02**		**203.26**	**37.72**		

Stagelength 3			Stagelength 4			Stagelength 5			Stagelength 6			Stagelength 7		
Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class	Day	Night	Class
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.41	0.06	4	0.16	0.03	4	0.07	0.01	4	0	0	0	0	0	0
0	0	4	0.17	0.03	4	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.4	0.21	4	1.56	0.24	4	0.99	0.15	4	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0.15	0.07	4	0	0	0	0	0	0	0	0	0
0	0	0	0.09	0.05	4	0	0	0	0	0	0	0	0	0
0	0	0	0.74	0.04	4	0	0	0	0	0	0	0	0	0
0.16	0.11	4	10.5	1.63	4	14.15	2.17	5	0	0	0	0	0	0
1.04	0.16	4	1.44	0.22	5	0	0	0	0	0	0	0	0	0
0.58	0.11	4	0.75	0.12	5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.81	0.59	4	12.14	1.86	4	3.75	0.58	5	0	0	0	0	0	0
0.37	0.05	4	0.95	0.15	5	1.18	0.18	5	0	0	0	0	0	0
1.72	0.27	6	4.81	0.76	6	3.74	0.57	6	0	0	0	0	0	0
1.01	0.16	6	2.83	0.44	6	2.2	0.34	6	0	0	0	0	0	0
1.26	0.2	4	3.23	0.49	5	4.02	0.62	5	0	0	0	0	0	0
0	0	0	0.65	0.1	8	4.78	0.73	8	0	0	0	0	0	0
0	0	0	0.18	0.03	8	1.35	0.2	8	0	0	0	0	0	0
1.14	0.18	8	0.95	0.15	8	1.1	0.17	9	0	0	0	0	0	0
0.83	0.13	8	0.69	0.1	8	5.38	0.47	9	1.25	0.1	9	0	0	0
0.16	0.04	9	0.04	0	9	0.04	0.02	9	0.17	0.01	9	0	0	0
0.17	0.04	9	0.04	0.01	9	0.04	0.02	9	0.19	0.01	9	0	0	0
0.19	0.05	8	0.06	0.01	8	0.19	0.06	8	0.01	0	9	0	0	0
1.11	0.17	8	0.26	0.04	9	3.15	0.24	9	0.89	0.06	9	0.08	0	9
0.45	0.07	8	0.11	0.02	8	1.24	0.09	8	0	0	0	0	0	0
1.42	0.22	8	0.34	0.05	8	3.15	0.24	8	0	0	0	0	0	0
0.47	0.07	8	0.11	0.02	9	0	0	0	0	0	0	0	0	0
0.08	0.02	8	0.02	0	9	0.25	0.02	9	0.08	0	9	0.01	0	9
0	0	0	2.58	0.19	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0.13	0.01	8	0	0	0
0	0	0	0	0	0	0	0	0	0.04	0	8	0	0	0
0	0	0	0.43	0.04	8	0.22	0.01	8	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1.02	0.08	9
0	0	0	0	0	0	2.99	0.23	9	4.41	0.33	9	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1.52	0.12	9
0	0	0	0	0	0	2.23	0.17	9	0	0	0	0	0	0
0	0	0	0	0	0	0.52	0.04	9	0	0	0	0.52	0.04	9
0.17	0.01	6	0.07	0	6	0	0	0	0	0	0	0	0	0
0	0.44	5	0	0.17	5	0	0	0	0	0	0	0	0	0
0.13	0.35	8	0.03	0.07	9	0.03	0.07	9	0	0	0	0	0	0
0.08	0.23	8	0.02	0.04	8	0.02	0.04	9	0	0	0	0	0	0
0.05	0.12	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0.05	0.11	8	0.01	0.02	8	0.01	0.02	9	0	0	0	0	0	0
0.04	0.1	9	0.01	0.02	9	0.01	0.02	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.02	0.05	9	0	0.01	9	0	0.01	9	0	0	0	0	0	0
0.02	0.04	8	0	0.01	9	0	0.01	9	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.34	**4.36**		**46.13**	**7.25**		**56.81**	**7.52**		**7.17**	**0.52**		**3.15**	**0.24**	

Appendix F
Air Quality

- F.1 Comparison of Air Quality Modeling Results for the 29M Low Scenario, Alternative 1/1A LDMS vs. EDMS Modeling
- F.2 Aircraft Fleet Used for EDMS Modeling
- F.3 2015 RJ Fleet – Emission Inventory Result
- F.4 2015 RJ Fleet – Dispersion Modeling Results
- F.5 Comparison of Air Quality Results for All Alternatives Excerpted from the Draft EIR/EIS

Comparison of Air Quality Modeling Results

Comparison of Air Quality Modeling Results for the 29M Low Scenario, Alternative 1/1 A

	2nd Maximum CO (1-hour)			2nd Maximum N02 (1-hour)			2nd Maximum CO (8-hour)			2nd Maximum PM-10 (24-hour)			AnnualMean $N0_2$			AnnualMean PM-10		
Receptor	LDMS	EDMS	Std.	LDMS	EDMS	Std.	LDMS	EDMS	Std.	LDMS	EDMS	Std.	LDMS	EDMS	Std.	LDMS	EDMS	Std.
Annavoy & Baywater	4,162	3,964	40,000	215	194	320	2,273	2,186	10,000	46	45	150	54	54	100	23	23	50
Broadway & C	3,740	3,692	40,000	192	176	320	2,113	2,158	10,000	45	45	150	53	53	100	23	23	50
Constitution Beach	4,420	5,241	40,000	211	212	320	2,293	2,690	10,000	46	46	150	54	54	100	23	23	50
Cottage Park	3,787	3,747	40,000	198	191	320	2,135	2,205	10,000	46	45	150	54	54	100	23	23	50
Court & Loring	4,225	3,657	40,000	203	175	320	2,279	2,147	10,000	46	46	150	54	54	100	23	23	50
Eagle Hill	4,421	4,291	40,000	215	212	320	2,345	2,486	10,000	46	46	150	54	54	100	23	23	50
Farragut & 1st	4,140	3,935	40,000	199	182	320	2,207	2,290	10,000	46	45	150	54	53	100	23	23	50
Grandview & Baysview	3,814	4,000	40,000	195	204	320	2,179	2,193	10,000	46	45	150	54	53	100	23	23	50
Jeffries Point	5,676	4,821	40,000	255	203	320	2,734	2,515	10,000	48	46	150	55	55	100	24	23	50
Orient Heights	4,141	4,686	40,000	196	201	320	2,204	2,481	10,000	46	46	150	54	53	100	23	23	50
Revere Beach	3,830	3,685	40,000	185	176	320	2,147	2,107	10,000	46	45	150	53	53	100	23	23	50
Union Park	4,024	3,706	40,000	188	177	320	2,176	2,132	10,000	45	45	150	53	53	100	23	23	50

All values are given in $\mu g/m^3$.

LDMS is the Logan Dispersion Modeling System.

EDIVIS is the FAA Emissions and Dispersion Modeling System.

Std. is the National Ambient Air Quality Standard (NAAQS) for the specified pollutant, except in the case of NO_2, which has no NAAQS for the one-hour averaging time.

For NO_2, the standard is a state policy level standard.

Aircraft Fleet Used for EDMS Modeling

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
**A310-300-S-A2	DEFAULT	S. Cargo	27	73
**A320-200-M15R	DEFAULT	Main	15R	291
**A320-200-M22R	DEFAULT	Main	22R	776
**A320-200-M27	DEFAULT	Main	27	1109
**A320-200-M33L	DEFAULT	Main	33L	495
**A320-200-M9	DEFAULT	Main	9	550
**A320-211-M14	DEFAULT	Main	14	245
**A320-211-M22R	DEFAULT	Main	22R	655
**A320-211-M33L	DEFAULT	Main	33L	417
**A320-211-M4R	DEFAULT	Main	4R	351
**A320-211-M9	DEFAULT	Main	9	464
**A321-M15R	DEFAULT	Main	15R	334
**A321-M22R	DEFAULT	Main	22R	869
**A321-M22R-A5	DEFAULT	Main	22R	608
**A321-M27	DEFAULT	Main	27	988
**A321-M27-A5	DEFAULT	Main	27	530
**A321-M33L	DEFAULT	Main	33L	806
**A321-M33L-A5	DEFAULT	Main	33L	493
**A321-M9	DEFAULT	Main	9	520
**A321-M9-A5	DEFAULT	Main	9	363
**A340-300-M27C2	DEFAULT	Main	27	196
**A340-300-M27C3	DEFAULT	Main	27	500
**AVRO-RJ70-M22R	DEFAULT	Main	22R	983
**AVRO-RJ70-M27	DEFAULT	Main	27	1358
**AVRO-RJ70-M33L	DEFAULT	Main	33L	326
**AVRO-RJ70-M9	DEFAULT	Main	9	781
**13727-100-S-7	DEFAULT	S. Cargo	22L	9
**B727-200F-MI5R-15	DEFAULT	Main	15R	425
**B727-200F-M22R-15	DEFAULT	Main	22R	778
**B727-200F-M22R-9	DEFAULT	Main	22R	212
**B727-200F-M27-9	DEFAULT	Main	27	359
**B727-200F-M33L-15	DEFAULT	Main	33L	709
**B727-200F-M9-15	DEFAULT	Main	9	829
**B727-200F-N4R-15	DEFAULT	N. Cargo	4R	550
**B727-200F-S33L-15	DEFAULT	S. Cargo	33L	19
**B727-200F-S33L-7	DEFAULT	S. Cargo	33L	517
**B727-200-M22R-15	DEFAULT	Main	22R	239
**B727-200-M22R-9A	DEFAULT	Main	22R	376
**B727-200-M27-9A	DEFAULT	Main	27	637
**B727-200-N-15	DEFAULT	N. Cargo	14	21
**B727-200-S-15	DEFAULT	S. Cargo	14	21
**B737-100-M22L-7B	DEFAULT	Main	22L	341
**B737-100-M22R-15A	DEFAULT	Main	22R	622

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
**B737-100-M22R-9A	DEFAULT	Main	22R	370
**B737-100-M27-15A	DEFAULT	Main	27	759
**B737-100-M33L-15A	DEFAULT	Main	33L	301
**B737-100-M9-15A	DEFAULT	Main	9	373
**13737-300-M14-3B	DEFAULT	Main	14	326
**B737-300-M15R-3B	DEFAULT	Main	15R	441
**B737-300-M22L-3B	DEFAULT	Main	22L	365
**13737-300-102211-313	DEFAULT	Main	22R	1680
**B737-300-M33L-3B	DEFAULT	Main	33L	1347
**B737-300-M4R-3B	DEFAULT	Main	4R	1108
**B737-300-M9-3B	DEFAULT	Main	9	1434
**B737-400-M15R-3C1	DEFAULT	Main	15R	471
**B737-400-M22R-3B	DEFAULT	Main	22R	637
**B737-400-M22R-3C1	DEFAULT	Main	22R	427
**B737-400-M27-3	DEFAULT	Main	27	413
**B737-400-M27-3B	DEFAULT	Main	27	772
**B737-400-M27-3C1	DEFAULT	Main	27	732
**B737-400-M33L-3B	DEFAULT	Main	33L	312
**B737-400-M9-3B	DEFAULT	Main	9	381
**B737-400-M9-3C1	DEFAULT	Main	9	361
**B737-500-MI5R-3	DEFAULT	Main	15R	282
**B737-500-M22R-3	DEFAULT	Main	22R	1181
**B737-500-M22R-3C1	DEFAULT	Main	22R	706
**B737-500-M27-3	DEFAULT	Main	27	2024
**B737-500-M27-3C1	DEFAULT	Main	27	1211
**B737-500-M33L-3	DEFAULT	Main	33L	486
**B737-500-M33L-3C1	DEFAULT	Main	33L	460
**B737-500-M9-3	DEFAULT	Main	9	970
**B737-500-M9-3C1	DEFAULT	Main	9	580
**B747-200-N33L-7F	DEFAULT	N. Cargo	33L	117
**B747-200-S22R-7F	DEFAULT	S. Cargo	22R	134
**B747-400-M22L-B1	DEFAULT	Main	22L	291
**B747-400-M33L-B1	DEFAULT	Main	33L	333
**B757-200-M15R-37	DEFAULT	Main	15R	506
**B757-200-M15R-E4	DEFAULT	Main	15R	686
**B757-200-M22L-37	DEFAULT	Main	22L	504
**B757-200-M22L-40	DEFAULT	Main	22L	394
**B757-200-M22L-E4	DEFAULT	Main	22L	683
**B757-200-M22R-37	DEFAULT	Main	22R	1085
**B757-200-M22R-40	DEFAULT	Main	22R	424
**B757-200-M22R-5C	DEFAULT	Main	22R	339
**B757-200-M22R-E4	DEFAULT	Main	22R	1473
**B757-200-M27-40	DEFAULT	Main	27	726

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
**B757-200-M27-5C	DEFAULT	Main	27	301
**B757-200-M27-E4	DEFAULT	Main	27	2525
**B757-200-M33L-37	DEFAULT	Main	33L	1422
**B757-200-M33L-40	DEFAULT	Main	33L	555
**B757-200-M33L-5C	DEFAULT	Main	33L	230
**B757-200-M4R-37	DEFAULT	Main	4R	958
**B757-200-M4R-E4	DEFAULT	Main	4R	1300
**B757-200-M9-37	DEFAULT	Main	9	1074
**B757-200-M9-40	DEFAULT	Main	9	419
**B757-200-M9-E4	DEFAULT	Main	9	1457
**B757-200-N27-37	DEFAULT	N. Cargo	27	452
**B757-200-S27-37	DEFAULT	S. Cargo	27	452
**B767-200-M22R-4D	DEFAULT	Main	22R	276
**B767-200-M22R-A2	DEFAULT	Main	22R	223
**B767-200-M27-A2	DEFAULT	Main	27	337
**B767-200-M4R-4D	DEFAULT	Main	4R	255
**B767-200-N15R-4D	DEFAULT	N. Cargo	15R	41
**B767-200-S15R-4D	DEFAULT	S. Cargo	15R	41
**B79-200-M9-15	DEFAULT	Main	9	273
**BAE146-200-M22R-5	DEFAULT	Main	22R	251
**BAE146-200-M9-5	DEFAULT	Main	9	297
"131-1-1900-M14	DEFAULT	Main	14	1295
**BH-1900-MI5R	DEFAULT	Main	15R	522
**BH-1900-M22R	DEFAULT	Main	22R	3747
**BH-1900-M27	DEFAULT	Main	27	6263
**BH-1900-M33L	DEFAULT	Main	33L	1683
**BH-1900-M9	DEFAULT	Main	9	1358
"*Can Reg-100-M15R	DEFAULT	Main	15R	173
**Can Reg-100-M22R	DEFAULT	Main	22R	720
**Can Reg-100-M33L	DEFAULT	Main	33L	297
**Can Reg-100-M4R	DEFAULT	Main	4R	351
**Can Reg-100-M9	DEFAULT	Main	9	710
**DASH-7-M14	DEFAULT	Main	14	384
**DASH-7-M22R	DEFAULT	Main	22R	542
**DASH-7-M33L	DEFAULT	Main	33L	1013
**DC10-10-M22L	DEFAULT	Main	22L	575
**DC10-10-M4R	DEFAULT	Main	4R	479
**DC10-10-S33L	DEFAULT	S. Cargo	33L	580
**DC10-30-S4R-C2	DEFAULT	S. Cargo	4R	46
**DC8-60-S27	DEFAULT	S. Cargo	27	240
**DC8-70-N22R	DEFAULT	N. Cargo	22R	389
**DC8-70-N9	DEFAULT	N. Cargo	9	458
**DC8-70-S22R	DEFAULT	S. Cargo	22R	233

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
**DC8-70-S27	DEFAULT	S. Cargo	27	399
**DC8-70-S9	DEFAULT	S. Cargo	9	275
**DC9-30-M22L-9A	DEFAULT	Main	22L	309
**DC9-30-M22R-7B	DEFAULT	Main	22R	553
**DC9-30-M4R-9A	DEFAULT	Main	413	444
**DC9-30-M9-7B	DEFAULT	Main	9	658
**DC9-30-N14-9	DEFAULT	N. Cargo	14	127
**DC9-30-S14-9	DEFAULT	S. Cargo	14	127
**DHC-8-300-M22R	DEFAULT	Main	22R	753
**DHC-8-300-M4L	DEFAULT	Main	4L	518
**DHC-8-300-M9	DEFAULT	Main	9	534
**DHC-8-M22R-OA	DEFAULT	Main	22R	831
**DHC-8M22R-21	DEFAULT	Main	22R	559
**DHC-8-M4L-OA	DEFAULT	Main	4L	571
**DHC-8-M4L-120	DEFAULT	Main	4L	240
**DHC-8-M4L-21	DEFAULT	Main	4L	272
**DHC-8-M9-OA	DEFAULT	Main	9	589
"EMB-120-M14	DEFAULT	Main	14	450
**EMB-120-M22R	DEFAULT	Main	22R	1484
**EMB-120-M33L	DEFAULT	Main	33L	584
**EMB-120-M4L	DEFAULT	Main	4L	1132
**EMB-1 20-M9	DEFAULT	Main	9	472
**F1 00-M22R-650	DEFAULT	Main	22R	398
**F1 00-M9-650	DEFAULT	Main	9	472
**Falcon 20-S22R	DEFAULT	S. Cargo	22R	536
**Falcon 20-S9	DEFAULT	S. Cargo	9	637
**HS7482A-M14	DEFAULT	Main	14	417
**HS7482A-M22R	DEFAULT	Main	22R	1197
**HS7482A-M4L	DEFAULT	Main	4L	822
**HS7482A-M9	DEFAULT	Main	9	430
**L-1011-500-S15R-B	DEFAULT	S. Cargo	15R	24
**L-1011-50-M22R	DEFAULT	Main	22R	206
**L-1011-50-M9	DEFAULT	Main	9	189
**Learjet 35-S15L	DEFAULT	S. Cargo	15L	175
**Learjet 35-S22L	DEFAULT	S. Cargo	22L	1012
**Learjet 35-S32	DEFAULT	S. Cargo	32	447
**Learjet 35-S4L	DEFAULT	S. Cargo	4L	480
**Learjet 35-S4R	DEFAULT	S. Cargo	4R	1004
**MD-11-M4R-60	DEFAULT	Main	4R	191
**MD-80-81-M14	DEFAULT	Main	14	990
**MD-80-81-Ml5R	DEFAULT	Main	15R	2239
**MD-80-81-M22R	DEFAULT	Main	22R	6202
**MD-80-81-M33L	DEFAULT	Main	33L	2545

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
**MD-80-81-M4R	DEFAULT	Main	4R	3513
**MD-80-81-M9	DEFAULT	Main	9	4960
**MD-90-10-22R	DEFAULT	Main	22R	1065
**MD-90-10-33L	DEFAULT	Main	33L	519
**MD-90-10-MI5R	DEFAULT	Main	15R	304
**MD-90-10-M4R	DEFAULT	Main	4R	555
**MD-90-10-M9	DEFAULT	Main	9	1063
**P-337P-S14	DEFAULT	S. Cargo	14	412
**P-337P-S22R	DEFAULT	S. Cargo	22R	1358
**P-337P-S33L	DEFAULT	S. Cargo	33L	535
**P-337P-S4L	DEFAULT	S. Cargo	4L	1037
**P-337P-S9	DEFAULT	S. Cargo	9	432
**SF-340-B-M14	DEFAULT	Main	14	3073
**SF-340-B-M15R	DEFAULT	Main	15R	830
**SF-340-B-M22L	DEFAULT	Main	22L	366
**SF-340-B-M22R	DEFAULT	Main	22R	7768
**SF-340-B-M4L	DEFAULT	Main	4L	6054
**SF-340-B-M9	DEFAULT	Main	9	3166
**Sw Merl-M14	DEFAULT	Main	14	383
**Sw Merl-M22R	DEFAULT	Main	22R	1262
**Sw Merl-M33L	DEFAULT	Main	33L	498
**Sw Merl-M4L	DEFAULT	Main	4L	963
**Sw Merl-M9	DEFAULT	Main	9	402
**Sw Met-M14	DEFAULT	Main	14	968
**Sw Met-M15R	DEFAULT	Main	15R	398
**Sw Met-M22L	DEFAULT	Main	22L	802
**Sw Met-M22R	DEFAULT	Main	22R	2493
**Sw Met-M33L	DEFAULT	Main	33L	1284
**Sw Met-M4L	DEFAULT	Main	4L	2405
**Sw Met-M4R	DEFAULT	Main	4R	179
**Sw Met-M9	DEFAULT	Main	9	958
A300-600	PW4158	S. Cargo	27	60
A300-132-200	CF6-50C2R	Main	27	338
A300-134-200	DEFAULT	Main	27	466
A300-134-605R	CF6-80C2A5	Main	27	305
A310-200	JT9D-7R4D1	Main	22R	8
A310-200	CF6-80A3	Main	22R	54
A310-200	CF6-80C2A2	Main	27	23
A310-300	CF6-80C2A2	Main	27	81
A310-300	JT9D-7R4EI	Main	22R	31
A310-300	PW4152	Main	22R	74
A310-300	PW4156 (Old Comb)	Main	4R	12
A320	CFM56-5134	Main	9	16

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
A320-200	CFM56-5A3	Main	27	325
A320-200	V2500-A1	Main	27	390
A320-200	V2527-A5	Main	4R	416
A320-211	CFM56-5A1	Main	27	936
A321	CFM56-5131	Main	4R	531
A321	V2530-A5	Main	4R	312
A330	CF6-80E1A1	Main	33L	243
A330	PW4164	Main	33L	194
A330	PW4168	Main	33L	259
A330	TRENT-768	Main	33L	324
A330	TRENT-772	Main	33L	113
A340-300	CFM56-5C2	Main	9	250
A340-300	CFM56-5C3	Main	22R	201
AVRO-RJ70	LF507 SERIES	Main	4R	386
B727-1 00	JT8D-7	N. Cargo	22L	9
B727-1 00	JT8D-7B	Main	22L	52
B727-200	JT8D-15	Main	27	404
B727-200	JT8D-17	Main	14	16
B727-200	JT8D-9	Main	27	161
B727-200	JT8D-15A	Main	4R	77
B727-200	JT8D-17A	Main	4R	32
B727-200	JT8D-17R	Main	15R	77
B727-200	JT8D-9A	Main	9	430
B727-200F	JT8D-15	Main	27	1333
B727-200F	JT8D-15A	Main	27	391
B727-200F	JT8D-17	Main	33L	81
B727-200F	JT8D-17A	Main	14	163
B727-200F	JT8D-17R	Main	27	391
B727-200F	JT8D-7B	Main	14	261
B727-200F	JT8D-9	Main	9	243
B727-200F	DEFAULT	N. Cargo	411	114
B737-100	JT8D-15A	Main	4R	350
B737-100	JT8D-17	Main	15R	150
B737-100	JT8D-17A	Main	15R	125
B737-100	JT8D-7A	Main	4R	168
B737-100	JT8D-7B	Main	4R	252
B737-100	JT8D-9A	Main	411	470
B737-200	JT8D-15A	Main	15R	87
B737-300	CFM56-313	Main	27	2880
B737-300	CFM56-3C-1	Main	27	412
B737-400	CFM56-3C-1	Main	413	340
B737-400	CFM56-3	Main	9	524
B737-400	CFM56-3B	Main	413	359

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
B737-500	CFM56-313	Main	4R	770
B737-500	CFM56-3C-1	Main	4R	460
B747-100F	JT9D-70A	N. Cargo	33L	4
B747-200	JT9D-7A	Main	22L	70
B747-200	JT9D-7Q	Main	15R	17
B747-200	CF6-50E2	Main	22L	44
B747-200	JT9D-7F	Main	22L	26
B747-200	JT9D-7J	Main	15R	9
B747-200	JT9D-7R4G2	Main	22L	4
B747-200	RB211-524D4	Main	15R	16
B747-400	PW4056	Main	33L	434
B747-400	RB211-524G	Main	33L	349
B747-400	RB211-524H	Main	15R	28
B757-200	PW2037	Main	27	1859
B757-200	RB211-535E4	Main	33L	1929
B757-200	PW2040	Main	4R	374
B757-200	RB211-535C	Main	9	329
B767-200	JT9D-7R4D	Main	27	420
B767-200	CF6-80A2	Main	9	205
B767-200	CF6-80C2B2	Main	15R	308
B767-300	PW4060	Main	4R	322
B767-300	CF6-80A2	Main	413	114
B767-300	CF6-80C2B6	Main	27	663
B767-300	PW4056	Main	15R	104
B767-300	RB211-524H	Main	15R	147
B777-200	GE90-85B	Main	15R	178
B777-200	PW4084	Main	22L	302
B777-200	TRENT-875	Main	22L	73
B777-200	TRENT-877	Main	22L	7
B777-200	TRENT-890	Main	22L	25
B777-200	GE90-76B	Main	15R	7
BAD 46-200	ALF50211-5	Main	27	429
BAE146-200	ALF50211-3	Main	14	127
BH-1900	PT6A-65B	Main	4L	3258
BH-C99	PT6A-27	Main	27	377
Canadair Reg-100	CF34-3A1	Main	27	1235
DASH-7	PT6A-50	Main	4L	373
DC10-10	CF6-6D	Main	33L	852
DC10-30	CF6-50C2	Main	33L	241
DC10-30	CF6-50C	Main	22L	169
DC10-40	JT9D-20	Main	33L	507
DC8-60	JT3D-7 SERIES	N. Cargo	27	293
DC8-70	CFM56-2C5	N. Cargo	27	665

Aircraft Fleet Used for EDMS Modeling (Cont'd.)

Aircraft	Engine	Terminal/Gate Area	Runway	Annual LTOs
DC9-10	JT8D-7A	Main	14	17
DC9-10	JT8D-7B	Main	14	191
DC9-30	JT8D-9	Main	14	121
DC9-30	JT8D-11	Main	14	114
DC9-30	JT8D-15	Main	14	153
DC9-30	JT8D-17	Main	14	448
DC9-30	JT8D-7A	Main	14	188
DC9-30	JT8D-7B	Main	27	949
DC9-30	JT8D-9A	Main	15R	705
DC9-40	JT8D-11	Main	14	19
DC9-50	JT8D-17	Main	14	118
DC9-50	JTBD-15	Main	14	40
DHC-8	PW120A	Main	33L	1554
DHC-8	PW120	Main	33L	491
DHC-8-100	PW121	Main	22R	694
DHC-8-300	PW123	Main	33L	1407
DHC-8-400	PW123	Main	33L	511
EMB-120	PW118	Main	27	2176
F-28-1000	RR SPEY-MK555	Main	14	212
F-70-100	TAY620-15	Main	14	154
Falcon 20	CF700-2D	S. Cargo	27	919
FOKKER 100	TAY620-15	Main	14	120
FOKKER 100-100	TAY650-15	Main	27	682
HS 748 2A SERIES	RDa7	Main	33L	2236
L-1011-50	RB211-22B	Main	27	312
L-1011-500	R13211-524134	Main	413	338
P011-500 TR	RB211-524B4	N. Cargo	15R	24
Learjet 35/36	TFE 731-2-213	S. Cargo	22R	1647
MD-11	CF6-80C2D1 F	Main	22L	203
MD-11	PW4460	Main	33L	217
MD-80-81	JT81D-219	Main	27	8759
MD-90-10	V2525-D5	Main	27	1826
P-337P Skyrnaster	TSIO-3600	S. Cargo	27	1992
SF-340-B-PLUS	CT7-5	Main	33L	16317
Swearingen Merlin	TPE331-3	Main	27	1852
Swearingen Metro 2	TPE331-3	Main	27	4338
Total LTO Cycles				**254913**

** Indicates this is a user-created aircraft entered for the purpose of accurate runway assignments.

2015 RJ Fleet – Emission Inventory Results

ESTIMATED CO EMISSIONS AT LOGAN AIRPORT
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	5,137	2,067
Service Vehicles	6,670	2,684
Airport-Related Motor Vehicles		
Parking/Curbside	469	189
On-airport vehicles	932	375
Total motor vehicle sources	1,401	564
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	45	18
Total other sources	45	18
TOTAL AIRPORT SOURCES	**13,253**	**5,332**

ESTIMATED NO_x EMISSIONS AT LOGAN AIRPORT
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	5,271	2,121
Service Vehicles	693	279
Airport-Related Motor Vehicles		
Parking/Curbside	19	8
On-airport vehicles	187	75
Total motor vehicle sources	206	83
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	533	214
Total other sources	533	214
TOTAL AIRPORT SOURCES	**6,703**	**2,697**

ESTIMATED VOC EMISSIONS AT LOGAN AIRPORT
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	657	264
Service Vehicles	581	234
Airport-Related Motor Vehicles		
Parking/Curbside	35	14
On-airport vehicles	120	48
Total motor vehicle sources	155	62
Other Sources		
Fuel storage/handling	748	301
Miscellaneous sources**	6	2
Total other sources	754	303
TOTAL AIRPORT SOURCES	**2,147**	**864**

ESTIMATED PM10 EMISSIONS AT LOGAN AIRPORT
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	203	82
Service Vehicles	11	4
Airport-Related Motor Vehicles		
Parking/Curbside	0	0
On-airport vehicles	9	4
Total motor vehicle sources	9	4
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	16	6
Total other sources	16	6
TOTAL AIRPORT SOURCES	**239**	**96**

ESTIMATED CO EMISSIONS AT LOGAN AIRPORT
ALTERNATIVE 1
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	4,206	1,692
Service Vehicles	6,670	2,684
Airport-Related Motor Vehicles		
Parking/Curbside	469	189
On-airport vehicles	932	375
Total motor vehicle sources	1,401	564
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	45	18
Total other sources	45	18
TOTAL AIRPORT SOURCES	**12,322**	**4,958**

ESTIMATED NO_x EMISSIONS AT LOGAN AIRPORT
ALTERNATIVE 1
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	5,099	2,052
Service Vehicles	693	279
Airport-Related Motor Vehicles		
Parking/Curbside	19	8
On-airport vehicles	187	75
Total motor vehicle sources	206	83
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	533	214
Total other sources	533	214
TOTAL AIRPORT SOURCES	**6,531**	**2,628**

ESTIMATED VOC EMISSIONS AT LOGAN AIRPORT
ALTERNATIVE 1
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	529	213
Service Vehicles	581	234
Airport-Related Motor Vehicles		
Parking/Curbside	35	14
On-airport vehicles	120	48
Total motor vehicle sources	155	62
Other Sources		
Fuel storage/handling	748	301
Miscellaneous sources**	6	2
Total other sources	754	303
TOTAL AIRPORT SOURCES	**2,019**	**812**

ESTIMATED PM10 EMISSIONS AT LOGAN AIRPORT
ALTERNATIVE 1
2015 HIGH RJ FLEET

SOURCE CATEGORIES	KG/DAY	TONS/YEAR
Aircraft Sources*	178	72
Service Vehicles	11	4
Airport-Related Motor Vehicles		
Parking/Curbside	0	0
On-airport vehicles	9	4
Total motor vehicle sources	9	4
Other Sources		
Fuel storage/handling	0	0
Miscellaneous sources**	16	6
Total other sources	16	6
TOTAL AIRPORT SOURCES	**214**	**86**

2015 RJ Fleet –Dispersion Modeling Results

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
CO, SECOND HIGHEST ONE-HOUR LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	6,125
2. East Boston (Constitution Beach)	4,294
3. East Boston (Bayswater)	4,245
4. Winthrop (Court/Loring St.)	4,174
5. Winthrop (Cottage Park)	3,884
6. Winthrop (Grandview)	3,801
7. Castle Island	4,260
8. C & Broadway	3,856
9. South End (Union Park)	4,067
10. Eagle Hill	4,594
11. Orient Heights	4,069
12. Revere Beach	3,886

All concentrations include a background level of 3,420 $\mu g/m^3$

Ambient air quality standard = 40,000 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
CO, SECOND HIGHEST EIGHT-HOUR LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	2,922
2. East Boston (Constitution Beach)	2,307
3. East Boston (Bayswater)	2,308
4. Winthrop (Court/Loring St.)	2,300
5. Winthrop (Cottage Park)	2,133
6. Winthrop (Grandview)	2,161
7. Castle Island	2,236
8. C & Broadway	2,121
9. South End (Union Park)	2,186
10. Eagle Hill	2,319
11. Orient Heights	2,219
12. Revere Beach	2,148

All concentrations include a background level of 2,052 $\mu g/m^3$

Ambient air quality standard = 10,000 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
NO_2, SECOND HIGHEST ONE-HOUR LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	279
2. East Boston (Constitution Beach)	243
3. East Boston (Bayswater)	252
4. Winthrop (Court/Loring St.)	221
5. Winthrop (Cottage Park)	201
6. Winthrop (Grandview)	197
7. Castle Island	242
8. C & Broadway	202
9. South End (Union Park)	202
10. Eagle Hill	229
11. Orient Heights	225
12. Revere Beach	204

All concentrations include a background level of 163 $\mu g/m^3$

Ambient air quality standard = 320 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
NO_2, HIGHEST ANNUAL LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	56
2. East Boston (Constitution Beach)	55
3. East Boston (Bayswater)	55
4. Winthrop (Court/Loring St.)	55
5. Winthrop (Cottage Park)	54
6. Winthrop (Grandview)	54
7. Castle Island	54
8. C & Broadway	53
9. South End (Union Park)	53
10. Eagle Hill	54
11. Orient Heights	54
12. Revere Beach	53

All concentrations include a background level of 53 $\mu g/m^3$

Ambient air quality standard = 100 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
PM_{10}, SECOND HIGHEST 24-HOUR LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	48
2. East Boston (Constitution Beach)	47
3. East Boston (Bayswater)	47
4. Winthrop (Court/Loring St.)	47
5. Winthrop (Cottage Park)	46
6. Winthrop (Grandview)	46
7. Castle Island	46
8. C & Broadway	45
9. South End (Union Park)	46
10. Eagle Hill	46
11. Orient Heights	46
12. Revere Beach	46

All concentrations include a background level of 45 $\mu g/m^3$
Ambient air quality standard = 150 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
PM_{10}, HIGHEST ANNUAL LEVELS
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	24
2. East Boston (Constitution Beach)	23
3. East Boston (Bayswater)	23
4. Winthrop (Court/Loring St.)	23
5. Winthrop (Cottage Park)	23
6. Winthrop (Grandview)	23
7. Castle Island	23
8. C & Broadway	23
9. South End (Union Park)	23
10. Eagle Hill	23
11. Orient Heights	23
12. Revere Beach	23

All concentrations include a background level of 23 $\mu g/m^3$
Ambient air quality standard = 50 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
VOC, HIGHEST 24-HOUR LEVELS (OZONE INDICATOR)
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	49
2. East Boston (Constitution Beach)	35
3. East Boston (Bayswater)	16
4. Winthrop (Court/Loring St.)	16
5. Winthrop (Cottage Park)	9
6. Winthrop (Grandview)	9
7. Castle Island	12
8. C & Broadway	4
9. South End (Union Park)	5
10. Eagle Hill	28
11. Orient Heights	14
12. Revere Beach	9

No background levels are included
There is no applicable air quality standard

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
VOC, HIGHEST ONE-HOUR LEVELS (ODOR INDICATOR)
NO ACTION ALTERNATIVE
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	250
2. East Boston (Constitution Beach)	212
3. East Boston (Bayswater)	70
4. Winthrop (Court/Loring St.)	62
5. Winthrop (Cottage Park)	52
6. Winthrop (Grandview)	39
7. Castle Island	76
8. C & Broadway	26
9. South End (Union Park)	42
10. Eagle Hill	324
11. Orient Heights	140
12. Revere Beach	33

No background levels are included
There is no applicable air quality standard

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
CO, SECOND HIGHEST ONE-HOUR LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	6,104
2. East Boston (Constitution Beach)	4,275
3. East Boston (Bayswater)	4,082
4. Winthrop (Court/Loring St.)	4,126
5. Winthrop (Cottage Park)	3,802
6. Winthrop (Grandview)	3,749
7. Castle Island	4,131
8. C & Broadway	3,806
9. South End (Union Park)	4,022
10. Eagle Hill	4,461
11. Orient Heights	4,044
12. Revere Beach	3,814

All concentrations include a background level of 3,420 $\mu g/m^3$

Ambient air quality standard = 40,000 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
CO, SECOND HIGHEST EIGHT-HOUR LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	2,884
2. East Boston (Constitution Beach)	2,298
3. East Boston (Bayswater)	2,234
4. Winthrop (Court/Loring St.)	2,266
5. Winthrop (Cottage Park)	2,135
6. Winthrop (Grandview)	2,155
7. Castle Island	2,221
8. C & Broadway	2,113
9. South End (Union Park)	2,164
10. Eagle Hill	2,308
11. Orient Heights	2,204
12. Revere Beach	2,135

All concentrations include a background level of 2,052 $\mu g/m^3$

Ambient air quality standard = 10,000 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
NO_2, SECOND HIGHEST ONE-HOUR LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	290
2. East Boston (Constitution Beach)	226
3. East Boston (Bayswater)	210
4. Winthrop (Court/Loring St.)	200
5. Winthrop (Cottage Park)	202
6. Winthrop (Grandview)	209
7. Castle Island	214
8. C & Broadway	204
9. South End (Union Park)	191
10. Eagle Hill	221
11. Orient Heights	205
12. Revere Beach	187

All concentrations include a background level of 163 $\mu g/m^3$
Ambient air quality standard = 320 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
NO_2, HIGHEST ANNUAL LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	55
2. East Boston (Constitution Beach)	54
3. East Boston (Bayswater)	54
4. Winthrop (Court/Loring St.)	54
5. Winthrop (Cottage Park)	54
6. Winthrop (Grandview)	54
7. Castle Island	53
8. C & Broadway	53
9. South End (Union Park)	53
10. Eagle Hill	54
11. Orient Heights	54
12. Revere Beach	53

All concentrations include a background level of 53 $\mu g/m^3$
Ambient air quality standard = 100 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
PM_{10}, SECOND HIGHEST 24-HOUR LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	48
2. East Boston (Constitution Beach)	46
3. East Boston (Bayswater)	46
4. Winthrop (Court/Loring St.)	46
5. Winthrop (Cottage Park)	46
6. Winthrop (Grandview)	46
7. Castle Island	46
8. C & Broadway	45
9. South End (Union Park)	45
10. Eagle Hill	46
11. Orient Heights	46
12. Revere Beach	45

All concentrations include a background level of 45 $\mu g/m^3$
Ambient air quality standard = 150 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
PM_{10}, HIGHEST ANNUAL LEVELS
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	24
2. East Boston (Constitution Beach)	23
3. East Boston (Bayswater)	23
4. Winthrop (Court/Loring St.)	23
5. Winthrop (Cottage Park)	23
6. Winthrop (Grandview)	23
7. Castle Island	23
8. C & Broadway	23
9. South End (Union Park)	23
10. Eagle Hill	23
11. Orient Heights	23
12. Revere Beach	23

All concentrations include a background level of 23 $\mu g/m^3$
Ambient air quality standard = 50 $\mu g/m^3$

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
VOC, HIGHEST 24-HOUR LEVELS (OZONE INDICATOR)
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	46
2. East Boston (Constitution Beach)	35
3. East Boston (Bayswater)	11
4. Winthrop (Court/Loring St.)	14
5. Winthrop (Cottage Park)	8
6. Winthrop (Grandview)	9
7. Castle Island	11
8. C & Broadway	4
9. South End (Union Park)	4
10. Eagle Hill	27
11. Orient Heights	13
12. Revere Beach	8

No background levels are included
There is no applicable air quality standard

AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
VOC, HIGHEST ONE-HOUR LEVELS (ODOR INDICATOR)
ALTERNATIVE 1
2015 HIGH RJ FLEET

RECEPTOR LOCATION	CONCENTRATION ($\mu g/m^3$)
1. East Boston (Jeffries Point)	250
2. East Boston (Constitution Beach)	212
3. East Boston (Bayswater)	69
4. Winthrop (Court/Loring St.)	60
5. Winthrop (Cottage Park)	52
6. Winthrop (Grandview)	39
7. Castle Island	50
8. C & Broadway	26
9. South End (Union Park)	42
10. Eagle Hill	324
11. Orient Heights	140
12. Revere Beach	33

No background levels are included
There is no applicable air quality standard

Comparison of Air Quality Results for Alternatives
Excerpted from Draft EIS/EIR

Excerpt from the Airside Draft EIS/EIR
Air Quality Results

Table 6.3-1
Air Emissions Inventories Data Sources

Aircraft		Ground Service Equipment		Motor Vehicles		Miscellaneous	
Source	**Parameter**	**Source**	**Parameter**	**Source**	**Parameter**	**Source**	**Parameter**
Airside EIS/EIR	Fleet Mix Operations, by hour and aircraft type Runway Use Terminal Assignments In-flight Times-in-Mode(1) Runway End of Taxiway Queue Delay(1) Ground-based Times-in-mode	Massport	Equipment Type Service Times Fuel Type Load Factors Conversion Rates Emission Rates	GEIR	On-Airport ■ Traffic ■ Parking Curbside ■ Fleet mix East Boston ■ Airport Traffic ■ Non-airport traffic Region ■ Airport Traffic ■ Non-airport traffic	Massport	Heating Plant Factors Fuel Storage Facility Factors Fuel Distribution System Factors
FAA	Engine types, by aircraft Engine emission rates			MA DEP	Mobile 5b Input Factors Off-airport fleet mix Part 5 Emission Factors		
				EPA	Mobile 5b Emission Factors Part 5 Emission Factors		

(1) These data used for the 1997 Annual Update were obtained from the 1993 Final GEIR.

Table 6.3-2
Dispersion Modeling Averaging Times and Background Levels

Pollutant	Averaging Time	Standards (•g/m3)	Background Concentration (•g/m3)
CO	1-Hour	40,000	4,446
	8-Hour	10,000	2,502-2,262
HC	1-Hour (odor indicators)	N/A	N/A
	24-Hour (ozone indicators)	N/A	N/A
NO_2	1-Hour	320	163-173
	Annual	100	53-58
PM_{10}	24-Hour	150	45-48
	Annual	50	23

N/A not applicable

Table 6.3-3
Receptor Location for Dispersion Modeling

Receptor No.	Community	Location
1	East Boston	Jeffries Point Park tennis court, east end of Sumner Street
2	East Boston	Constitution Beach Bath House, east end of Coleridge Street
3	East Boston	Intersection of Annavoy and Bayswater Streets
4	Winthrop	Intersection of Court and Loring Roads
5	Winthrop	Cottage Park Yacht Club, south end of Orlando Avenue
6	Winthrop	Point Shirley intersection of Grandview and Bayview Avenues
7	Castle Island	Intersection of Farragut Road and First Street
8	South Boston	Intersection of Broadway and C Street
9	Southeast End	Union Park Street between Tremont Street and Shawmut Avenue
10	Eagle Hill	Intersection of Condor and Glendon Streets
11	Orient Heights	Intersection of Tower Drum Lane and Gladstone Street
12	Revere Beach	Public beach on Broad Sound

Table 6.3-4
CO Emissions Inventory - All Sources (kg/day)[1]

Alternative	1999		2010		
	29M Low	29M High	37.5M Low	37.5M High	45M High
Alternative 1 - All Actions	13,022	13,701	13,289	13,976	15,816
Alternative 2 - All Actions except Runway 14/32	13,262	13,835	13,576	14,183	16,135
Alternative 3 - No-Build	13,859	13,956	14,308	14,611	16,890
Alternative 4 - No Action	13,905	14,159	14,355	15,236	17,123
1997 Annual Update	14,470		16,686		

(1) Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Appendix M for individual sources.)

Table 6.3-5
NOx Emissions Inventory - All Sources

Alternative	1999		2010		
	29M Low	29M High	37.5M Low	37.5M High	45M High
Alternative 1 - All Actions	5,362	5,249	6,919	6,997	8,116
Alternative 2 - All Actions except Runway 14/32	5,391	5,267	6,961	7,027	8,164
Alternative 3 - No-Build	5,484	5,284	7,071	7,092	8,280
Alternative 4 - No Action	5,491	5,310	7,081	7,183	8,317
1997 Annual Update	6,670		8,343		

(1) Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Appendix M for individual sources.)

Table 6.3-6
Total VOC Emissions Inventory - All Sources (kg/day)

Alternative	1999		2010		
	29M Low	29M High	37.5M Low	37.5M High	45M High
Alternative 1 - All Actions	2,350	2,568	2,383	2,497	2,897
Alternative 2 - All Actions except Runway 14/32	2,418	2,599	2,440	2,535	2,955
Alternative 3 - No-Build	2,543	2,625	2,564	2,607	3,092
Alternative 4 - No Action	2,553	2,677	2,572	2,721	3,131
1997 Annual Update	3,269		3,207		

(1) Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Appendix M for individual sources.)

Table 6.3-7
Odor-causing Hydrocarbon Emissions Inventory - All Sources[1,2] (kg/day)

Alternative	1999		2010		
	29M Low	29M High	37.5M Low	37.5M High	45M High
Alternative 1 - All Actions	909	1,060	802	870	901
Alternative 2 - All Actions except Runway 14/32	977	1,091	859	908	959
Alternative 3 - No-Build	1,102	1,117	983	980	1,096
Alternative 4 - No Action	1,112	1,169	991	1,094	1,135

1 Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See Appendix M for individual sources.)
2 Odor-causing VOCs are not included in the GEIR.

Table 6.3-8
PM_{10} Emissions Inventory - All Sources [1,2,3] (kg/day)

Alternative	1999		2010		
	29M Low	29M High	37.5M Low	37.5M High	45M High
Alternative 1 - All Actions	217	231	251	268	299
Alternative 2 - All Actions except Runway 14/32	222	234	259	274	308
Alternative 3 - No-Build	237	236	279	285	330
Alternative 4 - No Action	238	242	280	301	336

1. Includes aircraft sources, ground service equipment, on-site motor vehicles, and other miscellaneous sources. (See TablesEI1-4, EI2-4, EI3-4 and EI4-4 in Appendix M for individual sources).
2. PM emissions are not included in the GEIR.
3. Assumes all PM emissions are PM_{10}.

Table 6.3-9
Off-Site Motor Vehicle Emissions[1] (kg/day)

Pollutant	1999	2010	
		37.5M	45M
Carbon Monoxide	2,883	2,506	2,763
Nitrogen Oxides	1,027	948	1,048
Hydrocarbons (VOCs)	526	401	443
Particulate Matter	60	41	46

1 Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Table 6.3-10
1999 29M Low Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)				Air Quality Standard (µg/m³)
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
CO, 1-hour, highest 2nd high	5,676	5,741	5,771	6,002	40,000
CO, 8-hour, highest 2nd high	2,734	2,739	2,768	2,808	10,000
NO_2, 1-hour, highest 2nd high	255	252	254	263	320
NO_2, annual highest	55	55	55	55	100
PM_{10}, 24-hour, highest 2nd high	48	48	48	48	150
PM_{10}, annual highest	24	24	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	16	17	18	18	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially-averaged highs	90	96	93	96	N/A

N/A denotes "not applicable".

Table 6.3-11
1999 29m High Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)				Air Quality Standard (µg/m³)
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
CO, 1-hour, highest 2nd high	5,742	5,813	5,819	6,042	40,000
CO, 8-hour, highest 2nd high	2,759	2,761	2,776	2,836	10,000
NO_2, 1-hour, highest 2nd high	250	251	251	261	320
NO_2, annual highest	55	55	55	55	100
PM_{10}, 24-hour, highest 2nd high	48	48	48	48	150
PM_{10}, annual highest	24	24	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	17	18	18	17	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially-averaged highs	90	95	94	90	N/A

N/A denotes "not applicable".

Table 6.3-12
2010 37.5m Low Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)				Air Quality Standard (µg/m³)
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
CO, 1-hour, highest 2nd high	5,858	5,866	5,890	5,948	40,000
CO, 8-hour, highest 2nd high	2,805	2,803	2,837	2,862	10,000
NO_2, 1-hour, highest 2nd high	288	276	277	280	320
NO_2, annual highest	56	56	56	56	100
PM_{10}, 24-hour, highest 2nd high	48	48	49	49	150
PM_{10}, annual highest	24	24	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	18	19	19	20	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially-averaged highs	115	114	114	116	N/A

N/A denotes "not applicable".

Table 6.3-13
2010 37.5m High Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)				Air Quality Standard (µg/m³)
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
CO, 1-hour, highest 2nd high	5,743	5,759	5,768	5,798	40,000
CO, 8-hour, highest 2nd high	2,792	2,792	2,820	2,844	10,000
NO_2, 1-hour, highest 2nd high	282	271	271	275	320
NO_2, annual highest	56	56	56	56	100
PM_{10}, 24-hour, highest 2nd high	48	48	48	49	150
PM_{10}, annual highest	24	24	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially-averaged highs	18	19	20	20	N/A
Odor indicator, Aircraft idle Mode VOHC, 1-hour, spatially-averaged highs	115	115	115	119	N/A

N/A denotes "not applicable".

Table 6.3-14
2010 45M High Dispersion Model Results Summary

Pollutant/Parameter	Community Air Concentration (µg/m³)				Air Quality Standard (µg/m³)
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	
CO, 1-hour, highest 2nd high	6,064	6,058	6,083	6,120	40,000
CO, 8-hour, highest 2nd high	2,899	2,894	2,910	2,952	10,000
NO_2, 1-hour, highest 2nd high	299	282	283	289	320
NO_2, annual highest	56	56	56	56	100
PM_{10}, 24-hour, highest 2nd high	49	49	49	49	150
PM_{10}, annual highest	24	24	24	24	50
Ozone indicator, Total VOC, 24-hour, spatially averaged highs	22	23	23	24	N/A
Odor indicator, Aircraft idle Mode VOC, 1-hour, spatially averaged highs	144	148	151	151	N/A

N/A denotes "not applicable."

FIGURE 6.3-2 CO EMISSIONS INVENTORY - ALL SOURCES
(kg/day)

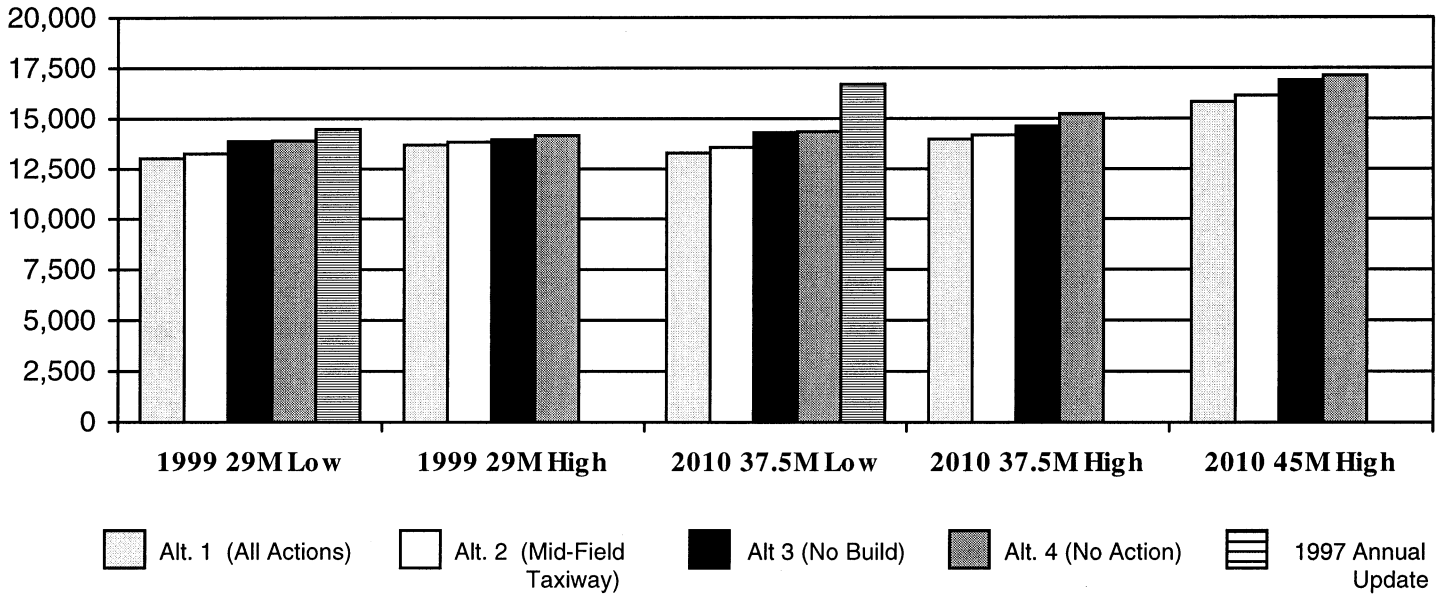


FIGURE 6.3-3 NOx EMISSIONS INVENTORY - ALL SOURCES
(kg/day)

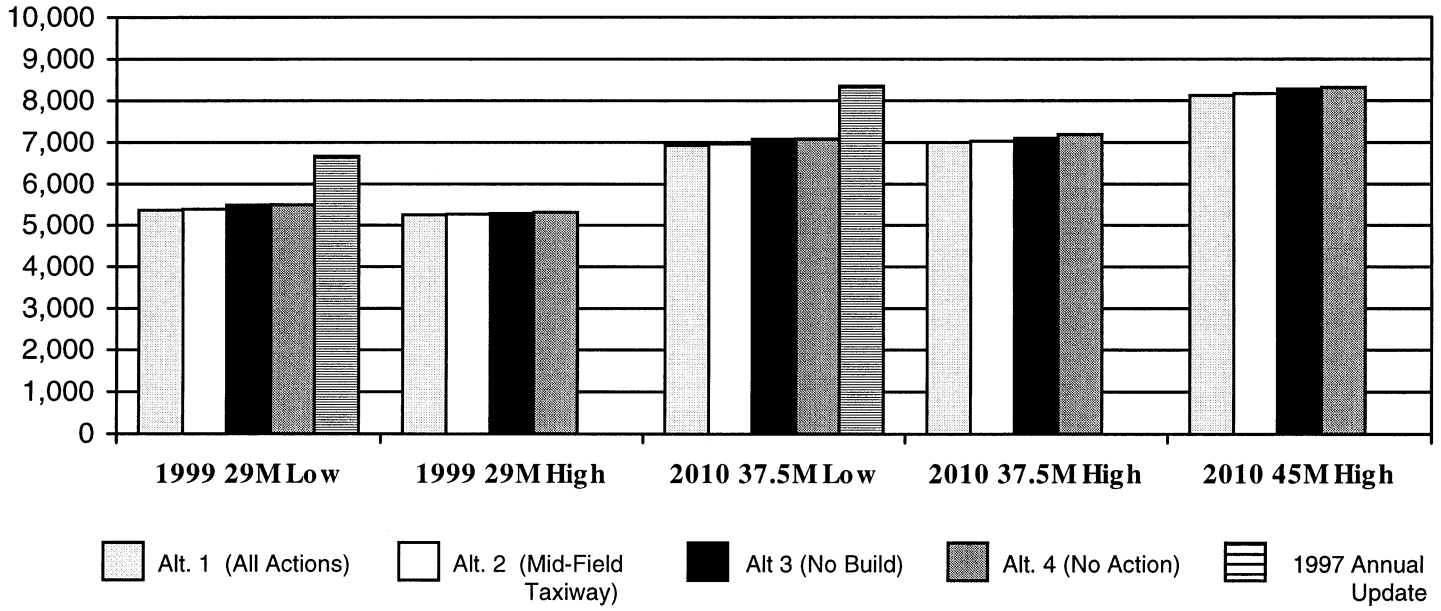


FIGURE 6.3-4 TOTAL VOCs EMISSIONS INVENTORY - ALL SOURCES (kg/day)

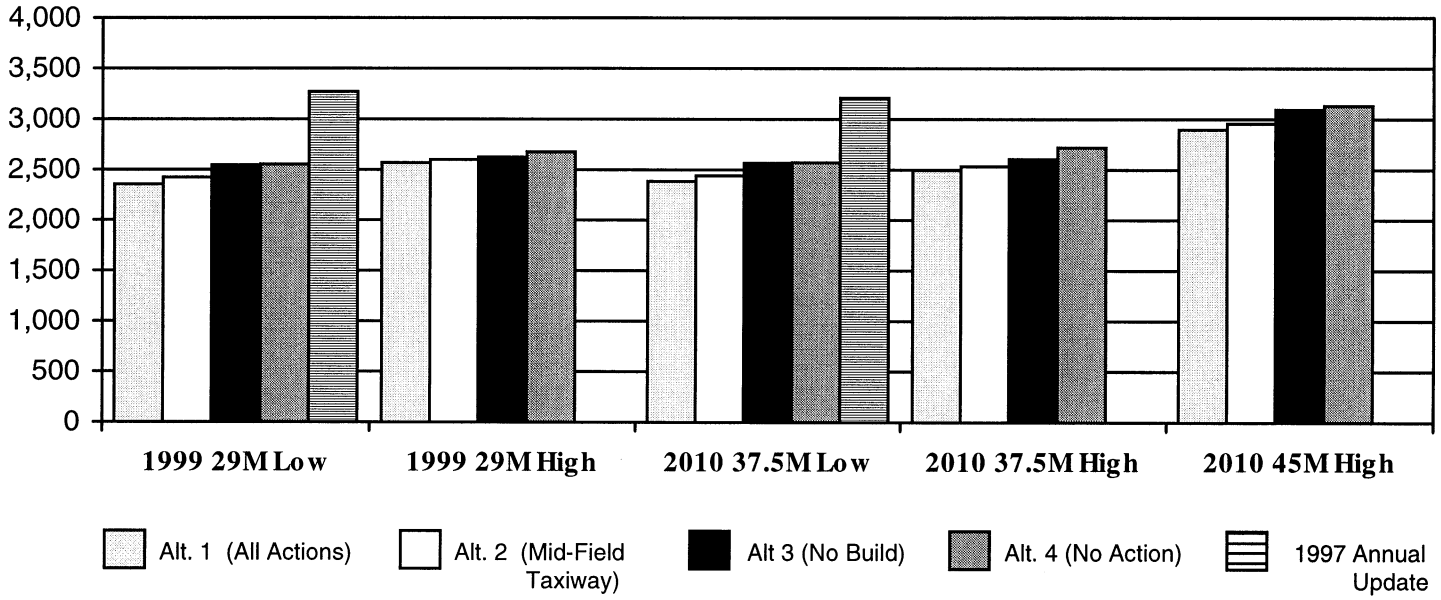


FIGURE 6.3-5 ODOR EMISSIONS INVENTORY - ALL SOURCES
(kg/day)

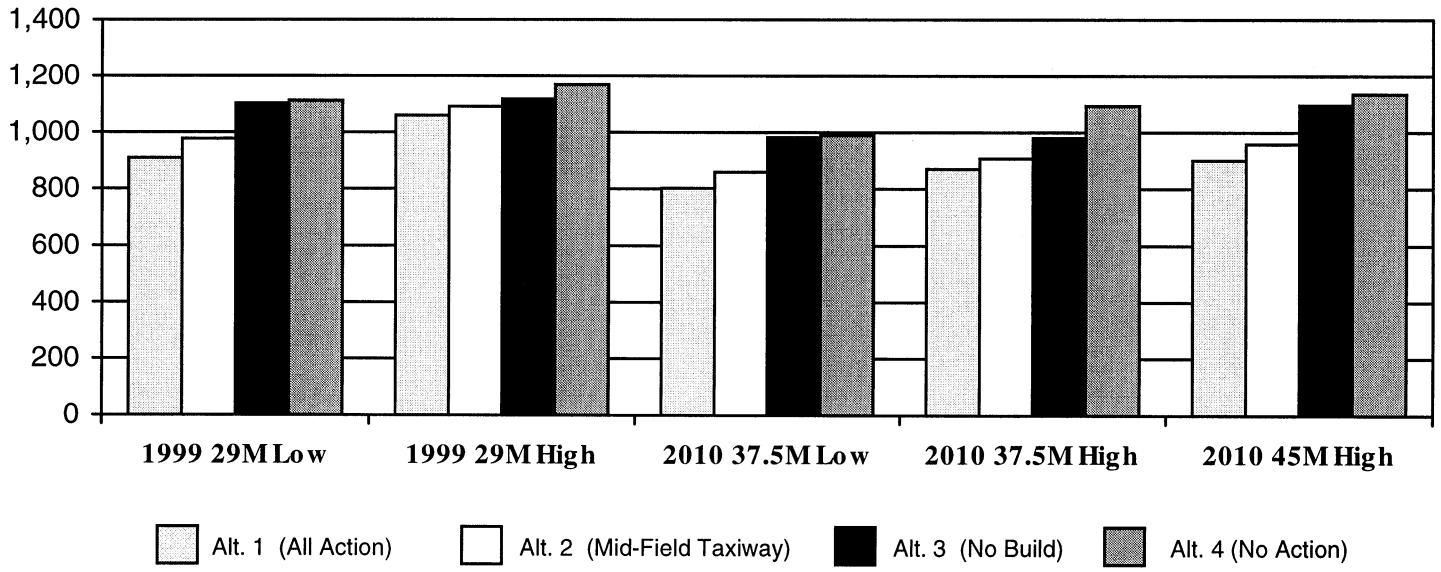


FIGURE 6.3-6 PM10 EMISSIONS INVENTORY - ALL SOURCES
(kg/day)

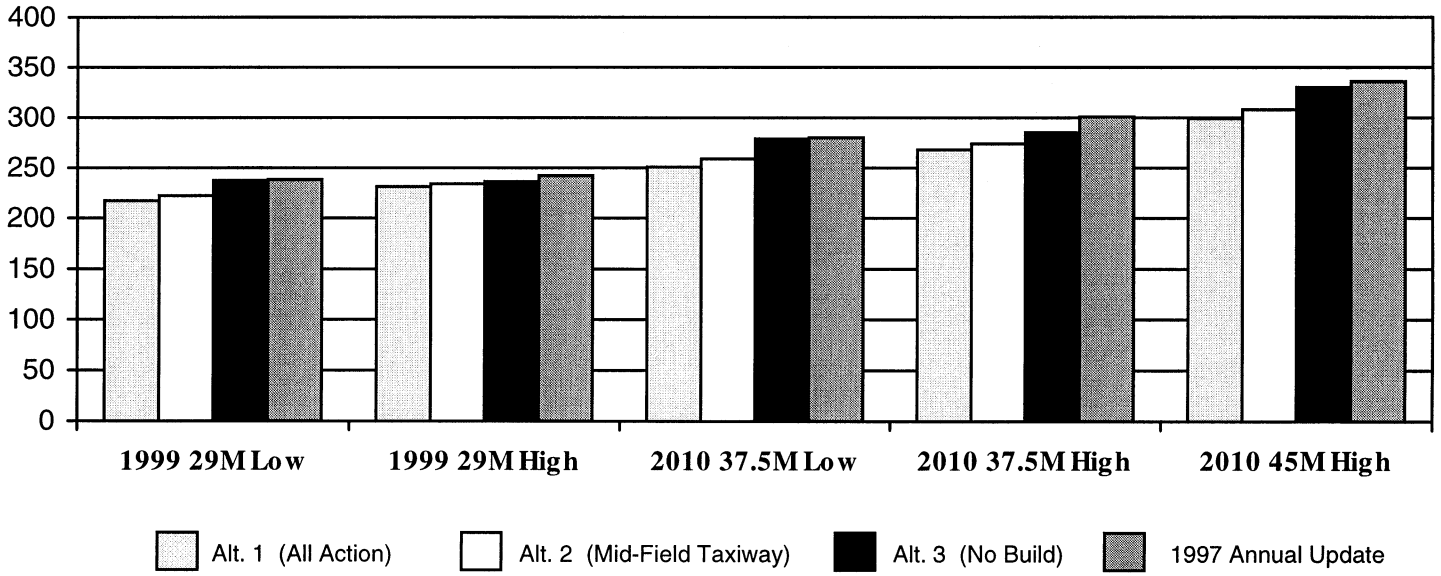
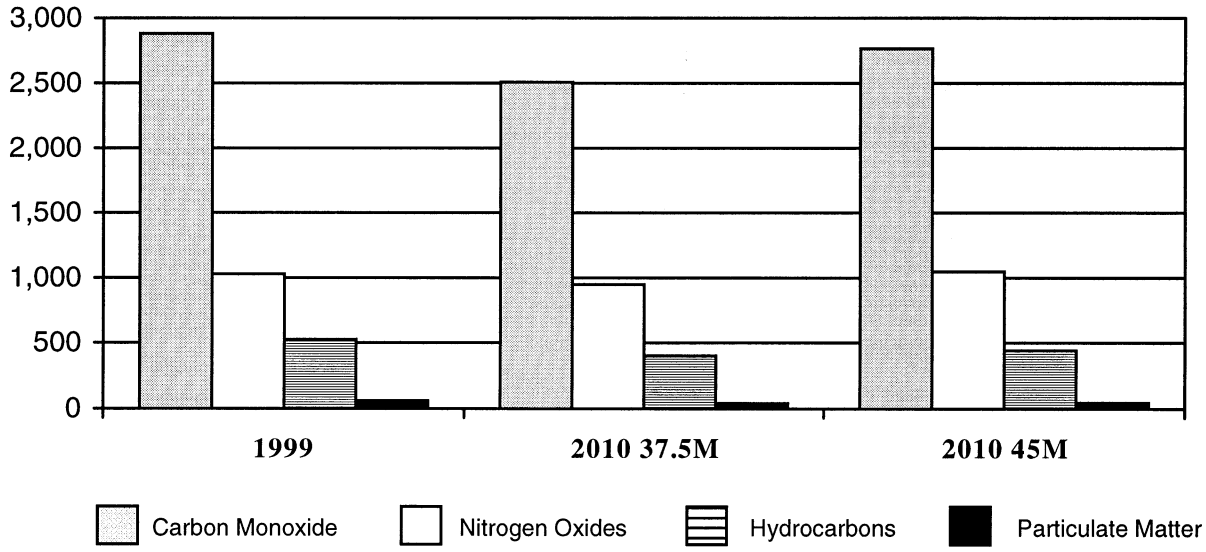


FIGURE 6.3-7 OFF-SITE MOTOR VEHICLE EMISSIONS
(kg/day)



Appendix G
Wildlife

➤ G.1 Letter from U.S. Fish and Wildlife Service dated April 1, 1997

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
22 Bridge Street, Unit #1
Concord, New Hampshire 03301-4996

April 1, 1997

Jennifer O'Reilly
Jason M. Cortell and Assoc. Inc.
244 Second Avenue
Waltham, MA 02154

Dear Ms. O'Reilly:

This responds to your letter dated March 17, 1997 for information on the presence of federally-listed and proposed, endangered or threatened species in accordance with preparation of an environmental impact statement/environmental impact report for improvements to airfield operations at Logan International Airport in Boston, Massachusetts.

Based on information currently available to us, the only federally-listed or proposed, threatened and endangered species under the jurisdiction of the U.S. Fish and Wildlife Service known to occur in the project area is the endangered peregrine falcon (*Falco peregrinus*). A pair of peregrine falcons nest in downtown Boston. Falcons are predators and the Boston peregrines are known to search for prey over the clear zones and other open spaces in and around Logan Airport. However, we do not anticipate that the peregrine falcons in Boston will be adversely affected by the proposed airfield improvements.

Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required. Should project plans change, or additional information on listed or proposed species becomes available, this determination may be reconsidered.

A list of federally-designated endangered and threatened species in Massachusetts is enclosed for your information. Thank you for your cooperation and please contact Michael Amaral of this office at 603-225-1411 if we can be of further assistance regarding endangered species.

Sincerely yours,

Michael J. Bartlett
Supervisor
New England Field Office

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

Common Name	Scientific Name	Status	Distribution
FISHES:			
Sturgeon, shortnose*	Acipenser brevirostrum	E	Atlantic coastal waters and rivers (Conn. R.)
REPTILES:			
Turtle, bog	Clemmys muhlenbergii	PT	Berkshire County
Turtle, green*	Chelonia mydas	T	Oceanic staggler in southern New England
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic straggler in southern New England
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resident
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident
Turtle, Atlantic ridley*	Lepidochelys kempii	E	Oceanic summer resident
Turtle, Plymouth redbelly	Chrysemys rubriventris bangsi	E	Plymouth & Dukes Counties
BIRDS:			
Eagle, bald	Haliaeetus leucocephalus	T	Nesting in Quabbin Res. and along Conn. R.; entire state-migratory
Falcon, American peregrine	Falco peregrinus anatum	E	Current nesting: Boston & Springfield; entire state-migratory
Falcon, Arctic peregrine	Falco peregrinus tundrius	T	Entire state-migratory
Plover, Piping	Charadrius melodus	T	Atlantic coast
Roseate Tern	Sterna dougallii dougallii	E	Atlantic coast
MAMMALS:			
Whale, blue*	Balaenoptera nyusculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic
Whale, humpback*	Megaptera novaeangliae	E	Oceanic
Whale, right*	Eubalaena spp. (all species)	E	Oceanic
Whale, sei*	Balaenoptera borealis	E	Oceanic
Whale, sperm*	Physeter catodon	E	Oceanic
MOLLUSKS:			
Mussel, Dwarf wedge	Alasmidonta heterodon	E	Hampshire County
INSECTS:			
Beetle, Puritan tiger	Cicindela puritana	T	Hampshire County (Conn. River Valley)
Beetle, northeastern beach tiger	Cicindela dorsalis dorsalis	T	Dukes & Bristol Counties (beaches, Cape Cod south)
Beetle, American burying	Nicrophorus americanus	E	Penikese & Nantucket Isl., reintroduced populations
PLANTS:			
Small Whorled Pogonia	Isotria medeoloides	T	Hampshire, Essex, Hampden, Worcester, Middlesex Counties
Gerardia, Sandplain	Agalinus acuta	E	Barnstable & Dukes Counties
Bulrush, Northeastern	Scirpus ancistrochaetus	E	Franklin County

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National marine Fisheries Service.

Rev. 2-19-97

Appendix H
Cultural Resources

➤ H.1 Letter from State Historical Preservation Officer (SHPO)

U.S. Department of Transportation
Federal Aviation Administration

New England Region

12 New England Executive Park
Burlington, MA 01803-5299

(E) 8562
NAME = FAA

RECEIVED
OCT 0 8 1999
MASS. HIST. COMM

October 6, 1999

Ms. Judith B. McDonough, State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125
Attn: Gary Hammer, Director of Architectural Review

Re: Logan Airside Improvements Planning Project, EOEA #10458
Boston-Logan International Airport, Boston, MA

Dear Ms. McDonough:

The Federal Aviation Administration (FAA) and the Massachusetts Port Authority (Massport) are undertaking a study of alternatives for reducing current and projected levels of aircraft delay at Boston-Logan International Airport. The FAA is the lead federal agency for purposes of airport layout plan approval and funding approval. The FAA is also the project proponent with respect to the reduction in runway approach minimums and implementation of runway instrumentation. Massport is the project proponent for all other improvement concepts that fall within its purview as proprietor of Logan.

The FAA and Massport prepared a draft Environmental Impact Statement/Draft Environmental Impact Report (Draft EIS/EIR) for the Logan Airside Improvement Planning Project (Airside Project). A copy of the document was forwarded to the Massachusetts Historical Commission (MHC) in February 1999. The Draft EIS/EIR reflects the analytic process for identifying and reviewing the operational and environmental implications of various improvement alternatives and designates a preferred alternative for implementation. The preferred alternative includes the construction of a runway to serve commuter planes, known as Runway 14/32. The runway will be designed and approved for unidirectional use only, with all arrivals and departures taking place over Boston Harbor.

The purpose of this letter is to coordinate consultation among the FAA, Massport, and the MHC in compliance with Section 106 of the National Historic Preservation Act, as amended (36 CFR 800), Section 4(f) of the Department of Transportation Act of 1966, and Massachusetts General Laws Chapter 9, Sections 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71). The FAA has determined under Section 106 that the Airside Project would constitute an undertaking and that it is a type of activity that has the potential to cause effects on historic properties (36 CFR 800.3).

The Draft EIS/EIR includes an assessment of impacts of the preferred alternative on historic properties. As summarized in Section 8.6 of the Draft EIS/EIR, the proposed runway would have no direct impacts to significant historic properties; however, sound insulation mitigation could have

the potential for indirect impacts. The analysis of potential impacts was performed by comparing the 65-decibel (dB) day-night average sound level (DNL) noise contours of the No Action Alternative (Alternative 4) and the Preferred Alternative (Alternative 1A). Project impact areas for historic properties are those areas where the 65-dB DNL contour for the preferred alternative extends beyond the 65-dB DNL contour for the no action alternative. Overall, the preferred alternative reduces the population exposed to the most severe noise impacts (greater than 70dB) when compared with the no action alternative. Where the 65-dB DNL contour increases with the preferred alternative, the increase is less than 1.5-dB, a threshold of significance in Part 150.

A review of MHC and local historical commission files and field survey conducted to confirm background research resulted in the identification of historic properties in Boston, Chelsea, and Winthrop that are within the 65-dB DNL. The historic properties are enumerated below and depicted on the enclosed figures.

Boston

St. Andrews Road MHC #EB1017, East Boston
Boston Army Supply Base, MHC #RT, South Boston (NR eligible 1997)
C Street Area, MHC #RU, South Boston (NR eligible 1997)

Chelsea

A section of the Bellingham Square Historic District (NR listed 1985)
A section of the Downtown Chelsea Residential District (NR listed 1988)

Winthrop

45 Enfield Road, MHC #67
240 Pleasant Street MHC #158 (NR eligible 1997)
75 & 77 Somerset Avenue MHC #196
88 Somerset Avenue MHC #197
94 Somerset Avenue MHC #198 (NR eligible 1997)

We evaluated airport noise and land use compatibility in accordance with land use guidelines expressed in Federal Aviation Regulation (FAR), Part 150, Airport Noise Compatibility Planning (14 CFR 150). FAR Part 150 does not include guidelines specific to historic sites; however, the identified historic properties are comprised of commercial, manufacturing, and residential land uses, for which guidance is provided. In addition, general guidance within FAR Part 150 indicates that noise levels generally do not affect the relevant characteristics of urban historic districts (for example, their architectural features and recognition of their place in history). FAR Part 150 provides that all land uses are considered to be compatible with noise levels less than 65-dB DNL and that commercial and manufacturing land uses are compatible land uses within the 65-dB to 70-dB DNL. FAR Part 150 further provides that residential land uses are not compatible within the 65-dB DNL, but does allow for noise impacts to be mitigated through sound insulation of affected residential structures.

The FAA and Massport propose to mitigate noise impacts by sound insulating all affected residences, historic and non-historic, that fall within the 65-dB DNL contour for the Preferred Alternative. The structures to be included within the noise mitigation program would be subject to a detailed block-by-block analysis during project implementation. All sound insulation of historic structures would be undertaken in compliance with applicable federal and state guidelines to ensure protection of the resources. Preservation measures to maintain the existing form, integrity, and materials of the historic properties would be accomplished in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68). The FAA and Massport would consult with the MHC as it has done previously with sound insulation of historic structures impacted by other Logan projects (i.e., South Boston).

Based on the level of planning to date, the FAA has determined that the sound insulation mitigation proposed under the Preferred Alternative has the potential to cause effects on historic properties (36 CFR 800.3). Given FAA and Massports' intent to specify as a mitigation measure that sound insulation will be implemented in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68), we propose a Determination of No Adverse Effect (36 CFR 800.5 (b)) on significant historic properties.

The FAA and Massport welcome the opportunity to review in more detail the proposed undertaking, identification of historic properties, and proposed determination of effect with the MHC. Please do not hesitate to contact Maureen Cavanaugh of Frederic R. Harris, Inc. (617-371-4489) or me if you have any questions or require additional information. Thank you in advance for your careful consideration of the Logan Airside Project.

Sincerely,

John C. Silva
Manager, Environmental Programs

Enclosures (2)

CONCURRENCE: Judith B. McDonough

JUDITH B. McDONOUGH 12/21/99
STATE HISTORIC
PRESERVATION OFFICER
MASSACHUSETTS
HISTORICAL COMMISSION

cc: Flavio Leo, Massport
Boston Landmarks Commission
Chelsea & Winthrop Historical Commissions

cc: Betty Desrosiers, Massachusetts Port Authority
Arthur Pugsley, Executive Office of Environmental Affairs MEPA Unit

Appendix I
Environmental Justice

- I.1 U.S. Census Bureau Poverty Thresholds – 1990
- I.2 DEP Site/Reportable Release for the City of Chelsea

U. S. Census Bureau Poverty Thresholds: 1990

U.S. Census Bureau
Poverty Thresholds: 1990

Size of Family Unit	Weighted Average Thresholds	Related Children Under 18 Years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight
One person (unrelated individual)	$6,652									
Under 65 years	6,800	6,800								
65 years and over	6,268	6,268								
Two persons	8,509									
Householder under 65 years	8,794	8,752	9,009							
Householder 65 years and over	7,905	7,900	8,975							
Three persons	10,419	10,223	10,520	10,530						
Four persons	13,359	13,481	13,701	13,254	13,301					
Five persons	15,792	16,257	16,494	15,989	15,598	15,359				
Six persons	17,839	18,693	18,773	18,386	18,015	17,464	17,137			
Seven persons	20,241	21,515	21,650	21,187	20,864	20,262	19,561	18,791		
Eight persons	22,582	24,063	24,276	23,839	23,456	22,913	22,223	21,505	21,323	
Nine persons or more	26,848	28,946	29,087	28,700	28,375	27,842	27,108	26,445	26,280	25,268

Source: U.S, Census Bureau, Current Population Survey.

DEP Site/Reportable Release for the City of Chelsea

SITE/REPORTABLE RELEASE LOOK UP
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0000099	Tobin Bridge	Massport		1/15/1987	NFA	7/23/1993	No Phase		Hazardous Material
3-0000163	123 Eastern Ave	Cumberland Farms Oil Terminal		1/15/1987	Tier 2	7/30/1998	Phase IV		Oil and Hazardous Material
3-0000291	229 Marginal St	Samuel Cabot Inc.		1/15/1987	Tier IA	1/15/1990	Phase IV		Oil and Hazardous Material
3-0000292	Forbes Indus Park/Near Marginal St.	Morrell Realty Trust (Fmr)		1/15/1987	Pending	7/23/1993	Phase II		
3-0000508	333 Third St	Samuel Gordon & Sons Inc.		1/15/1987	Tier 2	5/18/1998	Phase III	A3	
3-0000548	Beacham St (Everett Line)	U.S. Postal Service		1/15/1987	Tier 2	8/8/1995	Phase IV		Oil and Hazardous Material
3-0000710	Everett Ave – Mystic Mall	Pizza Hut		10/15/1988	NDS	5/13/1996	Phase I		Hazardous Material
3-0000821	257-324 Marginal St	Northeast Petroleum		4/15/1987	RAO	10/30/1997	Phase IV	C	Oil and Hazardous Material
3-0000921	91 Crest Ave	Soldiers Home		7/15/1987	Def Tier 1B	8/2/1995	Phase I		
3-0001004	979 Broadway	Exxon Service		1/15/1990	Rao	12/2/1998	Phase V	C	Oil
3-0001186	Second St	Murray Industrial Park		1/15/1987	NFA	7/23/1993	No Phase		Hazardous Material
3-0001237	350a Beacham St	B&K Distributors		10/15/1988	NFA	5/9/1996	Phase I		Hazardous Material
3-0001755	1 Forbes & Marginal Sts.	Forbes Lithographic Co. (Fmr)		1/15/1987	Tier 2	3/14/1997	Phase II		Hazardous Material
3-0001791	276 Beacham St	William St. Coal Tar Dump (Fmr)		1/15/1989	RAO	5/14/1998	Phase I		Oil
3-0001795	295 Eastern Ave	Property		1/15/1989	Tier 2	8/9/1996	Phase II		

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0001800	102 Crescent Ave	Joseph Botti Co		1/15/1989	RAO	10/15/1997	Phase II	A1	Oil
3-0001946	Drainage Project	Mill Creek		1/15/1989	NDS	7/23/1993	No Phase		Hazardous Material
3-0002029	8-24 Griffin Way	Logan Office Complex		4/15/1989	RAO	2/12/1997	Phase I		Oil
3-0002060	11 Broadway	Petroleum Terminal		4/15/1989	Tier 2	12/21/1998	Phase II		Oil
3-0002069	1012 Broadway	American Finish & Chem Co.		4/15/1989	Tier 2	2/18/1999	Phase II		Oil and Hazardous Material
3-0002093	44-46 Arlington St	Oscar Cutlery Co.		4/15/1989	NFA	9/27/1993	Phase II		Oil And Hazardous Material
3-0002107	148 Hawthorne St	C&C Oil		4/15/1989	Def Tier IB	8/2/1996	Phase I		Oil
3-0002124	110- 112 Prescott Ave	Property		4/15/1989	Pending NFA	7/15/1996	Phase I		Oil
3-0002211	281 Eastern Ave	Gulf Oil Terminal		10/15/1989	Def Tier 1B	8/2/1996	No Phase		Oil
3-0002248	251 Everett Ave	BP Gasoline Station		10/15/1989	RAO	11/17/1997	Phase III	A2	Oil
3-0002262	20-30 Eden St	Tank Farm (Fmr)		1/15/1990	RAO	2/5/1997	Phase II	A2	Oil
3-0002298	340 Marginal St	Chelsea Creek Headworks		1/15/1990	Tier 2	8/2/1996	Phase III		Oil
3-0002445	190 Everett Ave	Nasco Inc		1/15/1993	RAO	4/21/1999	Phase II	A2	Oil and Hazardous Material
3-0002564	140-180 Spruce St	Property		7/15/1993	Def Tier 1B	6/16/1998	Phase II		Oil and Hazardous Material
3-0002645	99 Marginal St	Belcher Tank Farm		1/15/1990	RAO	3/14/1997	Phase II	A3	Oil
3-0002994	211 Everett Ave	Property		10/15/1991	NDS	4/19/1994	No Phase		Oil
3-0003208	160-180 Second St	Property		7/15/1990	NFA	4/10/1996	No Phase		Oil
3-0003231	Second St	Property		7/15/1990	NFA	6/23/1997	Phase II		Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0003550	111 Eastern Ave	Amoco Petroleum Terminal		4/15/1991	RAO	11/10/1997	Phase IV	C	Oil and Hazardous Material
3-0003669	90 New England Produce Ctr.	New England Produce Center		7/15/1991	RAO	8/9/1996	Phase II	C	Oil and Hazardous Material
3-0003671	181 Spencer St	Emtex		7/15/1991	RAO	5/20/1997	Phase I		Oil
3-0004246	449 Crescent Ave	Chelsea Housing Authority		1/15/1993	RAO	1/15/1999	Phase II	A2	Oil
3-0004410	156 Williams St	Top Gas Station		7/15/1993	RAO	8/4/1997	No Phase		Oil
3-0004411	3-5 Saipan Rd	Chelsea Housing Authority		7/15/1993	NFA	6/5/1996	No Phase		Oil
3-0004611	101 Park St	Auto Dealership (Former)		10/1/1993	Tier 2	8/8/1997	Phase II		Oil and Hazardous Material
3-0004713	150 Sagamore Ave	Property		10/1/1993	NFA	6/5/1996	No Phase		Oil
3-0004805	311 Chestnut St	Metropolitan Credit Union		10/1/1993	NFA	6/5/1996	No Phase		Oil
3-0010105	111 Eastern Ave	Amocotank Farm	Two Hour	10/26/1993	RTN Closed	11/8/1994	No Phase		Oil
3-0010112	90 Spencer Ave	No Location Aid	Two Hour	10/27/1993	RAO	10/27/1994	Phase II	A1	Oil
3-0010156	Suffolk St/Shurtleff St	No Location Aid	Two Hr	11/5/1993	RAO	4/13/1994	No Phase	A1	Oil
3-0010214	Revere Beach Pkwy	By Webster Ave	Two Hour	11/22/1993	RAO	3/8/1994	No Phase		Oil
3-0010222	315 Crescent Ave	Vacant lot	72 Hour	11/23/1993	RAO	11/25/1994		A3	Oil
3-0010382	721 Broadway	No Location Aid	Two Hour	12/31/1993	RAO	12/13/1994		A2	Oil
3-0010476	281 Eastern Ave	Gulf Terminal-Chelsea Creek	Two Hour	1/24/1994	RAO	10/10/1995		A1	Oil
3-0010478	284 Eastern Ave	No Location Aid	Two Hour	1/26/1994	RAO	2/17/1995		A2	Oil
3-0010491	11 Broadway	Chelsea Creek- Off Loading Dock	Two Hour	1/30/1994	RAO	4/1/1994	No Phase	A1	Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0010556	215 Williams St	Former Native Poultry Property	Two Hour	2/9/1994	RAO	1/31/1995	No Phase	A3	Oil
3-0010608	200 Second St	No Location Aid	120 Day	11/30/1993	RAO	11/30/1993	No Phase	B1	Oil and Hazardous Material
0010688	215 Williams St	No Location Aid	120 Day	2/1/1994	RAO	1/31/1995	No Phase		Hazardous Material
3-0010694	285 Central Ave	Corner of Eastern Ave	120 Day	2/24/1994	RAO	1/30/1997	Phase II	B2	Hazardous Material
3-0010709	281 Eastern Ave	Gulf Oil Terminal	Two Hour	3/19/1994	RAO	5/17/1994	No Phase	A1.	Oil
3-0010750	315 Crescent St	Parcel 1,2,4,5	120 Day	3/18/1994	RAO	11/15/1996	Phase II	A3	Oil
3-0010776	90-104 Williams St	Below Williams St section of Tobin Bridge	Two Hour	3/30/1994	RAO	5/31/1994	No Phase	Al.	Oil
3-0010822	135 Chestnut	No Location	Two Hour	4/11/1994	RAO	6/6/1994	No Phase	Al	Oil
3-0010924	Beacham St	New England Produce Center	Two Hour	4/27/1994	RAO	6/23/1994	No Phase	A1	Oil
3-0010979	Spruce St	Market Basket	Two Hour	5/10/1994	RAO	8/5/1994	No Phase	A2	Hazardous Material
3-0010989	155 Cresent St	Across from Manson Corp	72 Hour	5/11/1994	Def Tier 1B	5/18/1995	No Phase		Oil
3-0011296	412 Eastern Ave	No Location Aid	72 Hour	7/13/1994	Def Tier 1B	7/20/1995	No Phase		Oil
3-0011320	11 Broadway	Petroleum Terminal	Two Hour	7/16/1994	RTN Closed	6/16/1995	No Phase		Oil
3-0011321	37 Marginal Ave	M/V Milta	Two Hour	7/18/1994	RAO	9/22/1994	No Phase	A1	Oil
3-0011453	281 Everett Ave	Memorial Stadium	72 Hour	8/10/1994	RAO	10/11/ 1994	No Phase	A2	Oil
3-0011596	295 Eastern Ave	No Location Aid	Two Hour	9/15/1994	Tier 2	8/9/1996	Phase II	Al	Oil
3-0011620	980 Broadway	Vacant Building	120 Day	9/22/1994	RAO	9/22/1995	No Phase	A1	Oil
3-0011647	170-180 Walnut St	Williams School	120 Day	9/22/1994	RAO	8/28/1998	Phase II	A3	Hazardous Material

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0011673	257 Marginal St	No Location Aid	72 Hour	9/30/1994	RAO	10/30/1997	No Phase	C	Oil and Hazardous Material
3-0011792	Chelsea Creek at Marginal St	Manhole 25291	Two Hour	10/31/1994	RAO	2/16/1995	No Phase	Al	Oil
3-0011842	423 Washington Ave	Opposite Pratville School Fremont St	Two Hour	11/9/1994	RAO	12/14/1994	No Phase	Al	Oil
3-0011846	99 Marginal St	Chelsea Creek/Coastal Oil	Two Hour	11/11/1994	RAO	11/8/1995	No Phase	Al	Hazardous Material
3-0011905	123 Eastern Ave	Gulf Terminal Chelsea Creek	Two Hour	11/29/1994	RTN Closed	8/19/1996	No Phase		Oil
3-0012152	110rangest	No Location Aid	Two Hour	2/8/1995	RAO	3/3/1995	No Phase	Al	Oil
3-0012360	380 Beacham St	DPW Yard	72 Hour	4/7/1995	Tier 2	4/12/1996	Phase IV		Oil
3-0012556	76 Congress Ave	Shurtleff School	120 Day	6/6/1995	RAO	6/3/1999	Phase II	B1	Oil and Hazardous Material
3-0012625	158 Carter St	No Location Aid	120 Day	6/26/1995	RTN Closed	1/23/1997	No Phase		Hazardous Material
3-0012643	Everett Ave	No Location Aid	Two Hour	6/29/1995	RAO	8/31/1995	No Phase	A1	Oil
3-0012748	17 Normandy Rd	No Location Aid	72 Hour	7/28/1995	RAO	4/12/1996	No Phase	A1	Oil
3-0012784	39 Normandy Rd	Chelsea Housing Authority	72 Hour	8/8/1995	RAO	4/12/1996	No Phase	A1	Oil
3-0012785	41 Normandy Rd	Chelsea Housing Authority	72 Hour	8/8/1995	RAO	4/12/1996	No Phase	A1	Oil
3-0012790	40-42 Gerrish Ave	Off Griffin Way near Eastern Ave	120 Day	8/3/1995	RAO	4/2/1996	Phase II	B2	Hazardous Material
3-0012837	4 Saipan Rd	No Location Aid	72 Hour	8/23/1995	RAO	4/12/1996	No Phase	Al	Oil
3-0012838	6 Saipan Rd	No Location Aid	72 Hour	8/23/1995	RAO	4/12/1996	No Phase	Al.	Oil
3-0012845	8 Saipan Rd	No Location	72 Hour	8/24/1995	RAO	4/12/1996	No Phase	A2	Oil
3-0012846	10 Saipan Rd	Chelsea Housing Authority	72 Hour	8/24/1995	RAO	4/12/1996	No Phase	A2	Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0012859	979 Broadway	Exxon	Two Hour	8/28/1995	RTN Closed	12/26/1995	No Phase		Oil
3-0012865	374 Revere Beach Pkwy Rte 16	Chelsea Housing Authority	72 Hour	8/30/1995	RAO	4/12/1996	No Phase	Al	Oil
3-0012867	376 Revere Beach Pkwy Rte 16	Chelsea Housing Authority	72 Hour	8/30/1995	RAO	4/12/1996	No Phase	Al	Oil
3-0012868	12 Saipan Rd	Chelsea Housing Authority	72 Hour	8/30/1995	RAO	4/12/1996	No Phase	A2	Oil
3-0012869	13 Saipan Rd	Chelsea Housing Authority	72 Hour	8/30/1995	RAO	4/12/1996	No Phase	A2	Oil
3-0012913	31-33 Marlboro St	No Location Aid	Two Hour	9/10/1995	RAO	9/18/1996	No Phase	A3	Oil
3-0013032	35 Burma Rd	No Location Aid	72 Hour	10/13/1995	RAO	4/12/1996	No Phase	A2	Oil
3-0013033	37 Burma Rd	No Location Aid	72 Hour	10/13/1995	RAO	4/12/1996	No Phase	A2	Oil
3-0013122	122 Broadway	No Location Aid	120 Day	11/7/1995	Tier 2	11/14/1996	Phase II		Oil and Hazardous Material
3-0013432	16 Cheever St	No Location Aid	Two Hour	2/8/1996	RAO	6/6/1996	No Phase	A2	Oil
3-0013448	Broadway/William St	Paved Roadway at Intersection	Two Hour	2/13/1996	RAO	4/5/1996	No Phase	Al	Oil
3-0013498	1100 Revere Beach Pkwy	Webster St	120 Day	2/4/1997	Def Tier 1B	3/3/1998	No Phase		Oil
3-0013541	1000 Justin Dr	Parking Lot	120 Day	3/7/1996	Def Tier 1B	3/14/1997	No Phase		Oil
3-0013542	1000 Justin Dr	Marina	120 Day	3/7/1996	Def Tier 1B	3/14/1997	No Phase		Hazardous Material
3-0013544	11 Broadway St	Chelsea Creek	Two Hour	3/11/1996	RAO	5/20/1996	No Phase	Al.	Oil
3-0013665	295 Eastern Ave	Glen Mor Fuel Oil Co	72 Hour	4/11/1996	Tier 2	8/9/1996	Phase II		Oil
3-0013796	175 Hawthorne St	Former Post Office	120 Day	5/20/1996	RAO	2/20/1997	No Phase	B1	Oil
3-0013919	151 Everett Ave	Spruce St	120 Day	7/10/1996	RAO	8/10/1999	Phase II	A3	Oil and Hazardous Material
3-0013928	281 Eastern Ave	No Location Aid	Two Hour	6/25/1996	RTN Closed	6/19/1997	No Phase		Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0014071	99 Marginal St	Tank Farm	Two Hour	7/31/1996	RAO	9/25/1996	No Phase	Al	Hazardous Material
3-0014122	Rte 16/Pkwy Plaza	Near Bradlees/at Webster Avenue	Two Hour	8/15/1996	RAO	10/ 11/ 1996	No Phase	Al.	
3-0014181	22 Willow St	Willow/Suffolk/Congress/ Highland	72 Hour	8/30/1996	Tier 2	9/8/1997	Phase II		Oil
3-0014339	22 Willow St	Willow/Suffolk/C	120 Day	10/10/1996	Tier 2	9/8/1997	Phase II		Oil and Hazardous Material
3-0014476	62 Broadway	Tobin Bridge Maintenance Garage	120 Day	11/6/1996	RAO	11/10/1997	No Phase	A2	Oil
3-0014675	Beacon St	Fr Tobin Bridge Exit	Two Hour	12/30/1996	RAO	2/20/1997	No Phase	Al	Oil
3-0014812	300 Beecham St	N.E. Produce Market,	Two Hour	2/11/1997	RAO	4/7/1997	No Phase	Al.	Oil
3-0014827	120 Eastern Ave	No Location Aid	120 Day	2/13/1997	RAO	4/30/1999	No Phase	A3	Oil
3-0014846	324 Marginal St	No Location Aid	72 Hour	2/21/1997	DPS	10/30/1997	No Phase		Hazardous Material
3-0014917	281 Eastern Ave	Gulf Oil Terminal	Two Hour	3/15/1997	RTN Closed	3/17/1998	No Phase		Oil
3-0015111	11 Broadway	Chelsea Terminal	Two Hour	5/17/1997	RTN Closed	7/23/1997	No Phase		Oil
3-0015159	571 Washington St	Pezzi Service Center	72 Hour	6/3/1997	RAO	3/27/1998	No Phase	A2	Oil
3-0015176	19 Park St	Old Police Station	72 Hour	6/6/1997	RAO	6/4/1998	No Phase	A2	Oil
3-0015177	28 Gerrish Ave	No Location Aid	Two Hour	6/6/1997	Tier 2	6/15/1998	Phase II		Oil
3-0015178	Tobin Bridge & Beacon St Ramp	No Location Aid	Two Hour	6/7/1997	RAO	7/28/1997	No Phase	Al	Oil
3-0015259	122 Broadway	No Location Aid	120 Day	6/16/1997	RTN Closed	5/19/1998	No Phase		Oil
3-0015318	85 Market St	Striker Transportation	Two Hour	7/21/1997	Def Tier 1B	7/28/1998	No Phase		Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0015330	80 Eastern Ave	Corner of Cottage St & Bellingham St	120 Day	7/24/1997	RAO	7/24/1997	No Phase	A2	Hazardous Material
3-0015365	295 Eastern Ave	Glenmor Oil	Two Hour	7/30/1997	RAO	10/1/1997	No Phase	Al	Oil
3-0015421	99 Everett Ave	No Location Aid	120 Day	8/13/1997	RAO	8/13/1997	No Phase	A2	Oil
3-0015493	380 Beacham St	DPW Garage	72 Hour	9/4/1997	RTN Closed	11/3/1997	No Phase		Oil and Hazardous Material
3-0015648	1100 Revere Beach Pkwy	Intersection of Webster Ave and Gillooly Rd	120 Day	10/17/1997	Tier 2	11/3/1998	Phase II		Oil and Hazardous Material
3-0015990	39 Winnisimmet St	Fitzgerald Shipyard	120 Day	2/6/1998	Tier 2	1/28/1999	Phase II		Oil and Hazardous Material
3-0016509	357 Beacham St	At Market St	120 Day	2/13/1998	RAO	3/5/1998	No Phase	B2	Hazardous Material
3-0016572	281 Eastern Ave	No Location Aid	Two Hour	3/9/1998	RAO	7/16/1998	No Phase	A2	Oil
3-0016789	201 Maple St	No Location Aid	72 Hour	5/13/1998	RAO	5/19/1999	No Phase	A2	Oil
3-0017010	505 Washington Ave	No Location Aid	120 Day	7/3/1998	Tier 2	6/28/1999	Phase II		Oil
3-0017025	10 Broadway	No Location Aid	Two Hour	7/11/1998	RAO	1/12/1999	No Phase	Al	Hazardous Material
3-0017142	215 Williams St	No Location Aid	Two Hour	8/12/1998	RAO	8/12/1999	No Phase	Al	Oil
3-0017266	Marginal St	MWRA Right of Way	120 Day	9/1/1998	Tier 2	9/1/1999	Phase II		Oil and Hazardous Material
3-0017267	Vale And Carter Sts.	North of Intersection	120 Day	9/1/1998	Tier 2	9/7/1999	Phase II		Oil and Hazardous Material
3-0017357	99 Marginal St	Coastal Oil Bulk Oil Terminal	120 Day	9/28/1998	RAO	9/28/1998	No Phase	B1	Hazardous Material
3-0017398	145 Webster Ave	Parkway Plaza	Two Hour	10/8/1998	Preclassified	10/8/1998	No Phase		Hazardous Material
3-0017421	38 Sagamore St	DPW Public Safety Building.	72 Hour	10/14/1998	RAO	2/11/1999	No Phase	A2	Oil

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0017467	11 Broadway	Loading Rack E	Two Hour	10/29/1998	RAO	12/30/1998	No Phase	Al	Oil
3-0017471	553a Washington Ave	No Location Aid	72 Hour	10/22/1998	Preclassified	10/22/1998	No Phase		Oil
3-0017597	51 Park St	Greg's Service Station	72 Hour	11/19/1998	RAO	3/8/1999	No Phase	A2	Oil
3-0017621	Williams St	Near Chestnut St	72 Hour	11/13/1998	Preclassified	11/13/1998	No Phase		Oil and Hazardous Material
3-0017640	1020 Revere Beach Pkwy	No Location Aid	120 Day	11/25/1998	Preclassified	11/25/1998	No Phase		Hazardous Material
3-0017646	Beacham St	Pole 11	Two Hour	11/29/1998	RAO	12/15/1998	No Phase	Al.	Oil
3-0017653	11 Broadway	Near Marginal Way and Medford St	Two Hour	11/30/1998	RAO	1/26/1999	No Phase	Al	Oil
3-0017722	2 Griffin Way	No Location Aid	120 Day	12/11/1998	Preclassified	12/11/1998	No Phase		Oil
3-0017739	11 Broadway	No Location Aid	Two Hour	12/14/1998	RAO	2/12/1999	No Phase	Al	Oil
3-0017752	380 Beacham St	Chelsea Dept of Public Works	72 Hour	12/18/1998	Preclassified	12/18/1998	No Phase		Oil
3-0017824	11 Broadway	Loading Rack M	Two Hour	1/6/1999	RAO	3/5/1999	No Phase	Al	Oil
3-0017856	31 Second St	No Location Aid	72 Hour	1/12/1999	Preclassified	1/12/1999	No Phase		Oil
3-0017914	203 Everett Ave	Intersection with Maple St	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Hazardous Material
3-0017915	204 Maple St	Intersection with Beech St	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Oil and Hazardous Material
3-0017916	144 Beech St	No Location Aid	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Hazardous Material
3-0017917	144 Through 155 Beech St	Intersection with Carter St	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Oil
3-0017918	177 Everett Ave	Intersection with Maple St	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Hazardous Material

SITE/REPORTABLE RELEASE LOOK UP (continued)
CITY/TOWN OF CHELSEA

Release Tracking #(RTN)	Release Address	Site Name/ Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0017919	211 Everett Ave	No Location Aid	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Oil and Hazardous Material
3-0017920	190 Through 200 Spruce St	Intersection with Beech St	120 Day	1/25/1999	Preclassified	1/25/1999	No Phase		Hazardous Material
3-0018006	644 Washington St	No Location Aid	72 Hour	2/18/1999	Preclassified	2/18/1999	No Phase		Oil
3-0018052	11 Broadway	Near Marginal Way and Medford St	Two Hour	3/4/1999	Preclassified	3/4/1999	No Phase		Oil
3-0018080	281 Eastern Ave	No Location Aid	Two Hour	3/11/1999	RTN Closed	7/15/1999	No Phase		Oil
3-0018146	201 Marginal St	No Location Aid	120 Day	3/31/1999	Preclassified	3/31/1999	No Phase		Hazardous Material
3-0018195	37 Marginal St	Eastern Minerals Salt Dock	Two Hour.	4/13/1999	RAO	6/21/1999	No Phase	Al	Oil
3-0018612	135 Library St	Shawmut Printing Parking Lot	120 Day	7/2/1999	RAO	7/2/1999	No Phase	B1	Hazardous Material
3-0018630	505 Washington St	No Location Aid	72 Hour	8/12/1999	Preclassified	8/12/1999	No Phase		Oil
3-0018693	211 Everett St	Maple St	120 Day	8/23/1999	Preclassified	8/23/1999	No Phase		Hazardous Material

Total of 167 Records Matched

Source: Massachusetts Department of Environmental Protection's Internet Site List 10/29/99.

Appendix J
Construction

- J.1 Construction Equipment Detail
- J.2 Construction Noise
- J.3 Annual Construction-Related Air Emissions, 2003-2007

Construction Equipment Detail

[redacted] - USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MIDFIELD TAXIWAY - DAYS																									
Bulldozer - Small	90										2	2	2												
Bulldozer - Large	80										4	4													
Excavators - Small											4														
Excavators - Medium	80										3	3													
Excavators - Large	90										2														
Front End Loaders - Large	80										4	4													
Graders - Small	35										4		2												
Graders - Large	70											2													
Dump Trucks - Small	60										2	2	4												
Dump Trucks - Large	70										12	25	10												
Trailer Dump Trucks - Large	70										8	16	4												
Vibratory Compactors - Large	80										8	12	8												
Plate Compactors - Small	30										4	4	2												
Static Compactors - Large	80											2	1												
Water Trucks	50										2	2	2												
Backhoes - Small	60											2	2												
Backhoes - Large	60										2	2													
Stake Bed Trucks - Small	20												2												
Stake Bed Trucks - Medium	20										4	4	1												
Stake Bed Trucks - Large	20											2	2												
Pick Up Trucks - Small	35										6	8	6												
Flatbed Trucks for Equipment Transport	5										2	3	2												
Sweepers - Small	90										2	2	2												
Sweepers - Large	90										2	4	2												
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	50										2	4	2												
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium																									
Electrical Generators W/Power Tools																									
Paving Machine - Large	80											2	1												
Pavement Saw - Large																									
Core Drill Machine	30											1	1												
Liquid Ashphalt Tanker Trucks	30											1	1												
Pavement Milling Machines - Small																									
Pavement Milling Machines - Medium																									
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large																									
Mobile Cranes - Small																									
Mobile Cranes - Medium	30										2														
Mobile Cranes - Large																									
Concrete Trucks - Large	**VARIES**																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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[redacted] - USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MIDFIELD TAXIWAY - NIGHTS (10:00 p.m. - 6:00 a.m.)																									
Bulldozer - Small	60											2													
Bulldozer - Large	60											4													
Excavators - Small																									
Excavators - Medium	60											3													
Excavators - Large																									
Front End Loaders - Large	70											4													
Graders - Small																									
Graders - Large	60											2													
Dump Trucks - Small	50											2													
Dump Trucks - Large	70											25													
Trailer Dump Trucks - Large	70											16													
Vibratory Compactors - Large	80											12													
Plate Compactors - Small	30											4													
Static Compactors - Large	80											2													
Water Trucks	50											2													
Backhoes - Small	70											2													
Backhoes - Large																									
Stake Bed Trucks - Small	20											4													
Stake Bed Trucks - Medium	20											2													
Stake Bed Trucks - Large	20											8													
Pick Up Trucks - Small	35											3													
Flatbed Trucks for Equipment Transport	5											2													
Sweepers - Small	90											2													
Sweepers - Large	90											4													
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	40											4													
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium	90											15													
Electrical Generators W/Power Tools	60											8													
Paving Machine - Large	80											2													
Pavement Saw - Large	20											2													
Core Drill Machine	30											1													
Liquid Ashphalt Tanker Trucks	30											1													
Pavement Milling Machines - Small	20											1													
Pavement Milling Machines - Medium	35											2													
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large	20											1													
Mobile Cranes - Small																									
Mobile Cranes - Medium	30											1													
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RUNWAY 14-32 - DAYS																									
Bulldozer - Small	70					4	2	2	2																
Bulldozer - Large	80					7	2																		
Excavators - Small																									
Excavators - Medium	70					3	2	2																	
Excavators - Large	80					4	1																		
Front End Loaders - Large	70					6	2	2	1																
Graders - Small	50						1	1	1																
Graders - Large	60					2	2	1	1																
Dump Trucks - Small	60					6	4	2	2																
Dump Trucks - Large	70					35	25	20	5																
Trailer Dump Trucks - Large	70					20	16	10	2																
Vibratory Compactors - Large	80					6	6	6	2																
Plate Compactors - Small	30					4	4	4																	
Static Compactors - Large	80					2	2	2																	
Water Trucks	50					5	3	3	1																
Backhoes - Small	60						2	2	1																
Backhoes - Large	60					4	2	1																	
Stake Bed Trucks - Small	20					2	2	2	2																
Stake Bed Trucks - Medium	20					4			1																
Stake Bed Trucks - Large	20					4	2	2																	
Pick Up Trucks - Small	35					18	14	8	6																
Flatbed Trucks for Equipment Transport	5					3	2	2																	
Sweepers - Small	90					2	2	2	1																
Sweepers - Large	90					6	4	4	2																
Air Compressors W/Tools - Small	30						1	1																	
Air Compressors W/Tools - Medium	40					4	2	2	1																
Air Compressors W/Tools - Large	40					3	2																		
Light Towers(generator powered) - Medium	50					16																			
Electrical Generators W/Power Tools	40					12	18	6	2																
Paving Machine - Large	70					2	2	2																	
Pavement Saw - Large	20					2	2	2																	
Core Drill Machine	20					1	1	1																	
Liquid Ashphalt Tanker Trucks	30					1	1	1																	
Pavement Milling Machines - Small	20					1	1	1																	
Pavement Milling Machines - Medium	30					1		1																	
Pavement Milling Machines - Large	30						1																		
Vermeer Trenching Machine - Large	25					1	1	1																	
Mobile Cranes - Small																									
Mobile Cranes - Medium	40					1	1																		
Mobile Cranes - Large	40					1																			
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small	70					1																			
Backhoes W/Hoe Rams - Large	70					2																			
Cutting Torches	70					6																			
Demolition Hammers	40					2																			

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RUNWAY 14-32 - NIGHTS (10:00 p.m. - 6:00a.m.)																									
Bulldozer - Small	50						1																		
Bulldozer - Large	40						2																		
Excavators - Small																									
Excavators - Medium	40						2																		
Excavators - Large																									
Front End Loaders - Large	50						2																		
Graders - Small	50						1																		
Graders - Large	50						1																		
Dump Trucks - Small	60						2																		
Dump Trucks - Large	70						25																		
Trailer Dump Trucks - Large	70						16																		
Vibratory Compactors - Large	80						6																		
Plate Compactors - Small	30						4																		
Static Compactors - Large	70						2																		
Water Trucks	50						2																		
Backhoes - Small	50						2																		
Backhoes - Large																									
Stake Bed Trucks - Small	20						2																		
Stake Bed Trucks - Medium																									
Stake Bed Trucks - Large	20						2																		
Pick Up Trucks - Small	35						8																		
Flatbed Trucks for Equipment Transport	5						2																		
Sweepers - Small	90						2																		
Sweepers - Large	90						4																		
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	40						2																		
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium	90						12																		
Electrical Generators W/Power Tools	70						6																		
Paving Machine - Large	80						2																		
Pavement Saw - Large	20						2																		
Core Drill Machine	30						1																		
Liquid Ashphalt Tanker Trucks	30						1																		
Pavement Milling Machines - Small	20						1																		
Pavement Milling Machines - Medium	35						1																		
Pavement Milling Machines - Large	35						1																		
Vermeer Trenching Machine - Large	20						1																		
Mobile Cranes - Small																									
Mobile Cranes - Medium																									
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SOUTHWEST CORNER - DAYS																									
Bulldozer - Small	30																1								
Bulldozer - Large																									
Excavators - Small																									
Excavators - Medium	30															1									
Excavators - Large																									
Front End Loaders - Large	30															1									
Graders - Small	30																1								
Graders - Large																									
Dump Trucks - Small	30															2	2								
Dump Trucks - Large	30															3	2								
Trailer Dump Trucks - Large																									
Vibratory Compactors - Large	30															1									
Plate Compactors - Small	30															2	2								
Static Compactors - Large	30																								
Water Trucks	30															1	1								
Backhoes - Small	30															1	2								
Backhoes - Large	30															1									
Stake Bed Trucks - Small	20															1									
Stake Bed Trucks - Medium																	2								
Stake Bed Trucks - Large	15																								
Pick Up Trucks - Small	20															8	6								
Flatbed Trucks for Equipment Transport	5															1	1								
Sweepers - Small	90															2	1								
Sweepers - Large	90															2	1								
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	40															2									
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium																									
Electrical Generators W/Power Tools	20															2									
Paving Machine - Large																									
Pavement Saw - Large																									
Core Drill Machine																									
Liquid Ashphalt Tanker Trucks																									
Pavement Milling Machines - Small																									
Pavement Milling Machines - Medium																									
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large	20															1									
Mobile Cranes - Small																									
Mobile Cranes - Medium	20															1									
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SOUTHWEST CORNER - NIGHTS (10:00 p.m. - 6:00 a.m.)																									
Bulldozer - Small	30																1								
Bulldozer - Large																									
Excavators - Small	50														1										
Excavators - Medium	50														1										
Excavators - Large																									
Front End Loaders - Large	70														2	1	1								
Graders - Small	50														1		1								
Graders - Large																									
Dump Trucks - Small	40														2		2								
Dump Trucks - Large	60														14	10	12								
Trailer Dump Trucks - Large	60														6	4	4								
Vibratory Compactors - Large	70														6	4	4								
Plate Compactors - Small	30														2	2	2								
Static Compactors - Large	70														2	2	2								
Water Trucks	50														2	1	2								
Backhoes - Small															1	1	2								
Backhoes - Large	70														1										
Stake Bed Trucks - Small	20														2	2	2								
Stake Bed Trucks - Medium	20														1		2								
Stake Bed Trucks - Large	20														1	1	1								
Pick Up Trucks - Small	35														8	6	8								
Flatbed Trucks for Equipment Transport	5														2	1	1								
Sweepers - Small	90														2	2	2								
Sweepers - Large	90														4	4	4								
Air Compressors W/Tools - Small	30														1	1	1								
Air Compressors W/Tools - Medium	40														2	2	2								
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium	90														16	16	16								
Electrical Generators W/Power Tools	70														6	4	4								
Paving Machine - Large	80														1	1	1								
Pavement Saw - Large	20														2	2	2								
Core Drill Machine	30														1	1	1								
Liquid Ashphalt Tanker Trucks	30														1	1	1								
Pavement Milling Machines - Small	20														1	1	1								
Pavement Milling Machines - Medium	35														1	1	1								
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large	30														1										
Mobile Cranes - Small																									
Mobile Cranes - Medium	30														1										
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EXTEND TAXIWAY D - DAYS																									
Bulldozer - Small	50																		1	1					
Bulldozer - Large	40																		2	1					
Excavators - Small	40																		1	1					
Excavators - Medium	40																		2	1					
Excavators - Large																									
Front End Loaders - Large	40																		2	2					
Graders - Small																									
Graders - Large	40																		1	1					
Dump Trucks - Small	60																		4	2					
Dump Trucks - Large	70																		25	18					
Trailer Dump Trucks - Large	70																		6	4					
Vibratory Compactors - Large	70																		6	4					
Plate Compactors - Small	30																		4	2					
Static Compactors - Large	30																		2	1					
Water Trucks	30																		2	2					
Backhoes - Small	40																		3	2					
Backhoes - Large	40																		1						
Stake Bed Trucks - Small	20																		1	1					
Stake Bed Trucks - Medium	20																		1	1					
Stake Bed Trucks - Large	20																		1	1					
Pick Up Trucks - Small	35																		8	8					
Flatbed Trucks for Equipment Transport	5																		2	2					
Sweepers - Small	90																		2	2					
Sweepers - Large	90																		4	4					
Air Compressors W/Tools - Small	20																		1	1					
Air Compressors W/Tools - Medium	20																		3	2					
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium																									
Electrical Generators W/Power Tools	20																		2	2					
Paving Machine - Large	70																		1	1					
Pavement Saw - Large																									
Core Drill Machine	20																		1	1					
Liquid Ashphalt Tanker Trucks	20																		1	1					
Pavement Milling Machines - Small																									
Pavement Milling Machines - Medium																									
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large																									
Mobile Cranes - Small																									
Mobile Cranes - Medium	20																		1	1					
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EXTEND TAXIWAY D - NIGHTS (10:00 p.m. - 6:00 a.m.)																									
Bulldozer - Small	30																			1					
Bulldozer - Large																									
Excavators - Small																									
Excavators - Medium	40																			1					
Excavators - Large																									
Front End Loaders - Large	30																			1					
Graders - Small	30																			1					
Graders - Large																									
Dump Trucks - Small	60																			2					
Dump Trucks - Large	70																			14					
Trailer Dump Trucks - Large	70																			4					
Vibratory Compactors - Large	70																			4					
Plate Compactors - Small	20																			2					
Static Compactors - Large	70																			1					
Water Trucks	30																			2					
Backhoes - Small	25																			1					
Backhoes - Large	25																			1					
Stake Bed Trucks - Small	20																			1					
Stake Bed Trucks - Medium	20																			1					
Stake Bed Trucks - Large	20																			1					
Pick Up Trucks - Small	35																			8					
Flatbed Trucks for Equipment Transport	5																			2					
Sweepers - Small	90																			2					
Sweepers - Large	90																			4					
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	30																			2					
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium	90																			12					
Electrical Generators W/Power Tools	40																			4					
Paving Machine - Large	70																			1					
Pavement Saw - Large	30																			2					
Core Drill Machine	20																			1					
Liquid Ashphalt Tanker Trucks	20																			1					
Pavement Milling Machines - Small	10																			1					
Pavement Milling Machines - Medium	20																			1					
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large	10																			1					
Mobile Cranes - Small																									
Mobile Cranes - Medium	10																			1					
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RE-ALIGN TAXIWAY N - DAYS																									
Bulldozer - Small	35																						1	1	
Bulldozer - Large	30																						1		
Excavators - Small																									
Excavators - Medium	30																						1		
Excavators - Large																									
Front End Loaders - Large	30																						1		
Graders - Small	30																							1	
Graders - Large	30																						1		
Dump Trucks - Small	35																						2	2	
Dump Trucks - Large	40																						14	4	
Trailer Dump Trucks - Large	40																						6		
Vibratory Compactors - Large	40																						6		
Plate Compactors - Small	15																						2		
Static Compactors - Large	35																						1		
Water Trucks	25																						2	1	
Backhoes - Small	50																						1	1	
Backhoes - Large	40																						1	1	
Stake Bed Trucks - Small	10																						1	1	
Stake Bed Trucks - Medium	10																						1	1	
Stake Bed Trucks - Large	10																						1		
Pick Up Trucks - Small	35																						8	4	
Flatbed Trucks for Equipment Transport	5																						2	1	
Sweepers - Small	90																						2		
Sweepers - Large	90																						4	2	
Air Compressors W/Tools - Small																									
Air Compressors W/Tools - Medium	35																						2		
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium																									
Electrical Generators W/Power Tools	15																						2		
Paving Machine - Large	40																						1		
Pavement Saw - Large	15																						1		
Core Drill Machine	15																						1		
Liquid Ashphalt Tanker Trucks	15																						1		
Pavement Milling Machines - Small																									
Pavement Milling Machines - Medium																									
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large																									
Mobile Cranes - Small																									
Mobile Cranes - Medium	15																						1		
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RE-ALIGN TAXIWAY N - NIGHTS (10:00 p.m. - 6:00 a.m.)																									
Bulldozer - Small	30																						1	1	
Bulldozer - Large	30																						1		
Excavators - Small																									
Excavators - Medium	40																						2		
Excavators - Large																									
Front End Loaders - Large	40																						1	1	
Graders - Small																									
Graders - Large	30																						1		
Dump Trucks - Small	60																						2	2	
Dump Trucks - Large	60																						16	14	
Trailer Dump Trucks - Large	60																						4	4	
Vibratory Compactors - Large	50																						4	4	
Plate Compactors - Small	20																						2	2	
Static Compactors - Large	50																						1	1	
Water Trucks	30																						2	2	
Backhoes - Small	60																						2	1	
Backhoes - Large	50																						1	1	
Stake Bed Trucks - Small	20																						1	1	
Stake Bed Trucks - Medium	20																						1		
Stake Bed Trucks - Large	20																						1	1	
Pick Up Trucks - Small	35																						8	6	
Flatbed Trucks for Equipment Transport	5																						2	1	
Sweepers - Small	90																						2	2	
Sweepers - Large	90																						4	4	
Air Compressors W/Tools - Small	20																						1		
Air Compressors W/Tools - Medium	20																						2	2	
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium	90																						16	16	
Electrical Generators W/Power Tools	40																						2	2	
Paving Machine - Large	70																						1	1	
Pavement Saw - Large	20																						2	2	
Core Drill Machine	20																						1	1	
Liquid Ashphalt Tanker Trucks	20																						1	1	
Pavement Milling Machines - Small	10																						1	1	
Pavement Milling Machines - Medium	20																						1	1	
Pavement Milling Machines - Large																									
Vermeer Trenching Machine - Large	10																						1		
Mobile Cranes - Small																									
Mobile Cranes - Medium	20																						1		
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SUMMARY - DAYS																									
Bulldozer - Small						4	2	2	2		2	2	2				1		1	1			1	1	
Bulldozer - Large						7	2				4	4							2	1			1		
Excavators - Small											4								1	1					
Excavators - Medium						3	2	2			3	3				1			2	1			1		
Excavators - Large						4	1				2														
Front End Loaders - Large						6	2	2	1		4	4				1			2	2			1		
Graders - Small							1	1	1		4		2				1							1	
Graders - Large						2	2	1	1			2							1	1			1		
Dump Trucks - Small						6	4	2	2		2	2	4			2	2		4	2			2	2	
Dump Trucks - Large						35	25	20	5		12	25	10			3	2		25	18			14	4	
Trailer Dump Trucks - Large						20	16	10	2		8	16	4						6	4			6		
Vibratory Compactors - Large						6	6	6	2		8	12	8			1			6	4			6		
Plate Compactors - Small						4	4	4			4	4	2			2	2		4	2			2		
Static Compactors - Large						2	2	2				2	1						2	1			1		
Water Trucks						5	3	3	1		2	2	2			1	1		2	2			2	1	
Backhoes - Small							2	2	1			2	2			1	2		3	2			1	1	
Backhoes - Large						4	2	1			2	2				1			1				1	1	
Stake Bed Trucks - Small						2	2	2	2				2			1			1	1			1	1	
Stake Bed Trucks - Medium						4			1		4	4	1				2		1	1			1	1	
Stake Bed Trucks - Large						4	2	2				2	2						1	1			1		
Pick Up Trucks - Small						18	14	8	6		6	8	6			8	6		8	8			8	4	
Flatbed Trucks for Equipment Transport						3	2	2			2	3	2			1	1		2	2			2	1	
Sweepers - Small						2	2	2	1		2	2	2			2	1		2	2			2		
Sweepers - Large						6	4	4	2		2	4	2			2	1		4	4			4	2	
Air Compressors W/Tools - Small							1	1											1	1					
Air Compressors W/Tools - Medium						4	2	2	1		2	4	2			2			3	2			2		
Air Compressors W/Tools - Large						3	2																		
Light Towers(generator powered) - Medium						16																			
Electrical Generators W/Power Tools						12	18	6	2							2			2	2			2		
Paving Machine - Large						2	2	2				2	1						1	1			1		
Pavement Saw - Large						2	2	2															1		
Core Drill Machine						1	1	1				1	1						1	1			1		
Liquid Ashphalt Tanker Trucks						1	1	1				1	1						1	1			1		
Pavement Milling Machines - Small						1	1	1																	
Pavement Milling Machines - Medium						1		1																	
Pavement Milling Machines - Large							1																		
Vermeer Trenching Machine - Large						1	1	1								1									
Mobile Cranes - Small																									
Mobile Cranes - Medium						1	1				2					1			1	1			1		
Mobile Cranes - Large						1																			
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small						1																			
Backhoes W/Hoe Rams - Large						2																			
Cutting Torches						6																			
Demolition Hammers						2																			

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- USES NORTH GATE FOF ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

EQUIPMENT SOURCE	U.F.(%)	NUMBER OF PIECES OF EQUIPMENT ON SITE PER CONSTRUCTION QUARTER																							
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5				YEAR 6			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SUMMARY - NIGHTS (10:00 p.m. - 6:00 a.m.)																									
Bulldozer - Small							1					2					1			1			1	1	
Bulldozer - Large							2					4											1		
Excavators - Small															1										
Excavators - Medium							2					3			1					1			2		
Excavators - Large																									
Front End Loaders - Large							2					4			2	1	1			1			1	1	
Graders - Small							1								1		1			1					
Graders - Large							1					2											1		
Dump Trucks - Small							2					2			2		2			2			2	2	
Dump Trucks - Large							25					25			14	10	12			14			16	14	
Trailer Dump Trucks - Large							16					16			6	4	4			4			4	4	
Vibratory Compactors - Large							6					12			6	4	4			4			4	4	
Plate Compactors - Small							4					4			2	2	2			2			2	2	
Static Compactors - Large							2					2			2	2	2			1			1	1	
Water Trucks							2					2			2	1	2			2			2	2	
Backhoes - Small							2					2			1	1	2			1			2	1	
Backhoes - Large															1					1			1	1	
Stake Bed Trucks - Small							2					4			2	2	2			1			1	1	
Stake Bed Trucks - Medium												2			1		2			1			1		
Stake Bed Trucks - Large							2					8			1	1	1			1			1	1	
Pick Up Trucks - Small							8					3			8	6	8			8			8	6	
Flatbed Trucks for Equipment Transport							2					2			2	1	1			2			2	1	
Sweepers - Small							2					2			2	2	2			2			2	2	
Sweepers - Large							4					4			4	4	4			4			4	4	
Air Compressors W/Tools - Small															1	1	1						1		
Air Compressors W/Tools - Medium							2					4			2	2	2			2			2	2	
Air Compressors W/Tools - Large																									
Light Towers(generator powered) - Medium							12					15			16	16	16			12			16	16	
Electrical Generators W/Power Tools							6					8			6	4	4			4			2	2	
Paving Machine - Large							2					2			1	1	1			1			1	1	
Pavement Saw - Large							2					2			2	2	2			2			2	2	
Core Drill Machine							1					1			1	1	1			1			1	1	
Liquid Ashphalt Tanker Trucks							1					1			1	1	1			1			1	1	
Pavement Milling Machines - Small							1					1			1	1	1			1			1	1	
Pavement Milling Machines - Medium							1					2			1	1	1			1			1	1	
Pavement Milling Machines - Large							1																		
Vermeer Trenching Machine - Large							1					1			1					1			1		
Mobile Cranes - Small																									
Mobile Cranes - Medium												1			1					1			1		
Mobile Cranes - Large																									
Concrete Trucks - Large	VARIES																								
Backhoes W/Hoe Rams - Small																									
Backhoes W/Hoe Rams - Large																									
Cutting Torches																									
Demolition Hammers																									

Construction Noise

- USES NORTH GATE FOR ACCESS; ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

SOURCE Leq @ 50 FEET DAY		2003				2004				2005				2006				2007			
CONSTRUCTION PROJECT		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Position																					
Midfield Taxiway South																					
1							93.8	94.6	91.1												
2							93.8	94.6	91.1												
3							93.8	94.6	91.1												
Midfield Taxiway North																					
1							93.8	94.6	91.1												
Runway 14-32																					
1		94.2	93.8	95.3	93.8																
2		94.2	93.8	95.3	93.8																
3		94.2	93.8	95.3	93.8																
Southwest Taxiways																					
1												92.2	92.2								
Delta Taxiway Extension																					
1															97.5	94.2					
November Taxiway																					
1																			94.4	94.1	

SOURCE Leq @ 50 FEET NIGHT		2003				2004				2005				2006				2007			
CONSTRUCTION PROJECT		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Position																					
Midfield Taxiway South																					
1								91.9													
2								91.9													
3								91.9													
Midfield Taxiway North																					
1								91.9													
Runway 14-32																					
1			92.8																		
2			92.8																		
3			92.8																		
Southwest Taxiways																					
1											96.4	96.3	96.3								
Delta Taxiway Extension																					
1																95.2					
November Taxiway																					
1																			96.0	96.5	

SOURCE LDN @ 50 FEET		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position						N				N				N				N			
Midfield Taxiway South						O				O				O				O			
1							91.5	98.4	88.8												
2						W	91.5	98.4	88.8	W				W				W			
3						O	91.5	98.4	88.8	O				O				O			
						R				R				R				R			
Midfield Taxiway North						K				K				K				K			
1							91.5	98.4	88.8												
						W				W				W				W			
Runway 14-32						I				I				I				I			
1		91.9	98.9	93.0	91.5	N				N				N				N			
2		91.9	98.9	93.0	91.5	T				T				T				T			
3		91.9	98.9	93.0	91.5	E				E				E				E			
						R				R				R				R			
Southwest Taxiways																					
1						S				S	101.6	101.8	101.8	S				S			
						H				H				H				H			
Delta Taxiway Extension						U				U				U				U			
1						T				T				T	95.2	101.0		T			
						D				D				D				D			
November Taxiway						O				O				O				O			
1						W				W				W				W	101.7	102.1	
						N				N				N				N			

NUMBER OF DAILY TRUCK TRIPS		Ldn																			
		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Day	61	43	61	61	0	92	46	92	0	0	5	5	0	47	38	0	0	28	28	
	Night	0	18	0	0	0	0	46	0	0	18	13	13	0	0	9	0	0	28	28	

SOURCE DISTANCES IN FEET		RECEIVER POSITIONS																			
		6	7	10	12	C(E1)	A(B1)	14	E												
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1		7800	8700	10680	9240	9000	6380	5280	8500												
2		5820	6420	8220	6900	6960	6180	5220	10700												
3		4200	4200	5880	4800	5040	6840	6180	13000												
Midfield Taxiway North																					
1		3720	2400	3480	3180	3900	8220	9600	15800												
Runway 14-32																					
1		9400	10080	11580	9600	9300	4980	3900	7400												
2		9000	10020	12000	10440	10200	6780	5700	7000												
3		9000	10320	12600	11400	11400	8580	7500	6900												
Southwest Taxiways																					
1		7560	8220	9960	8400	8100	5580	4620	9000												
Delta Taxiway Extension																					
1		5400	7140	8880	8280	8400	8040	7080	10500												
November Taxiway																					
1		4980	4440	5340.0	3840.0	3960.0	6180.0	5700.0	13700.0												
Nearest Perimeter Roads	6	9500	9500	9500	9500		3600	3600	3600	W	8800	8800	8800	W	5500	5500		W	5000	5000	
	7	10300	10300	10300	10300		2100	2100	2100	N	9300	9300	9300	N	7500	7500		N	4000	4000	
	10	12000	12000	12000	12000		1800	1800	1800	W	10600	10600	10600	W	10000	10000		W	5000	5000	
	12	9300	9300	9300	9300		1800	1800	1800	W	8300	8300	8300	W	8400	8400		W	2520	2520	
	C	8800	8800	8800	8800		1680	1680	1680	N	8000	8000	8000	N	8500	8500		N	2520	2520	
	A	3000	3000	3000	3000		5300	5300	5300		5000	5000	5000		3000	3000			5300	5300	
	14	2100	2100	2100	2100		5300	5300	5300		4500	4500	4500		2100	2100			5300	5300	
	E	6500	6500	6500	6500		12300	12300	12300		8300	8300	8300		6500	6500			12300	12300	

ATTENUATION		RECEIVER POSITIONS							
		6	7	10	12	C(E1)	A(B1)	14	E
CONSTRUCTION PROJECT									
Position									
Midfield Taxiway South									
1							0.0	7.0	
2							12.0	12.0	
3							9.0	12.0	
Midfield Taxiway North									
1							0.0	6.0	
Runway 14-32									
1							0.0	0.0	
2							5.0	7.0	
3							5.0	7.0	
Southwest Taxiways									
1							4.0	8.0	
Delta Taxiway Extension									
1							5.0	10.0	
November Taxiway									
1							5.0	7.0	
Nearest Perimeter Roads									
1							0.0	0.0	

- USES NORTH GATE FOR ACCESS; ALL OTHER QUARTERS WILL USE SOUTH OR CONSTRUCTION GATE TO GAIN ACCESS

Leq DAY		2003				2004				2005				2006				2007			
RECEIVING POSITION NMS 6		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							48.6	49.4	45.9												
2							51.3	52.1	48.6												
3							54.4	55.2	51.7												
Total							56.8	57.6	54.1												
Midfield Taxiway North																					
1							55.5	56.3	52.8												
Runway 14-32																					
1		44.9	52.0	46.0	44.5																
2		45.3	52.4	46.4	44.9																
3		45.3	52.4	46.4	44.9																
Total		50.0	57.0	51.1	49.6																
Southwest Taxiways																					
1												47.3	47.3								
Delta Taxiway Extension																					
1															55.7	52.4					
November Taxiway																					
1																			53.4	53.1	
Truck Trips																					
Day 1		34.9	33.4	34.9	34.9		41.5	38.5	41.5			24.4	24.4		36.5	35.5			34.7	34.7	
2																					
Total Trucks		34.9	33.4	34.9	34.9		41.5	38.5	41.5			24.4	24.4		36.5	35.6			34.7	34.7	
Total for All Activity		50.1	57.0	51.2	49.7		59.3	60.1	56.7			47.3	47.3		55.8	52.5			53.4	53.2	

Leq DAY RECEIVING POSITION NMS 7		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							47.6	48.4	44.9												
2							50.4	51.2	47.7												
3							54.4	55.2	51.7												
Total							56.4	57.2	53.7												
Midfield Taxiway North																					
1							59.6	60.4	56.9												
Runway 14-32																					
1		46.6	46.2	47.7	46.2																
2		46.7	46.3	47.8	46.3																
3		46.4	46.0	47.5	46.0																
Total		51.3	50.9	52.4	50.9																
Southwest Taxiways																					
1												46.5	46.5								
Delta Taxiway Extension																					
1															55.7	49.8					
November Taxiway																					
1																			54.5	54.2	
Truck Trips																					
Day 1		34.5	33.0	34.5	34.5		44.2	41.2	44.2			24.1	24.1		34.9	34.0			35.8	35.8	
2																					
Total Trucks		34.5	33.0	34.5	34.5		44.2	41.2	44.2			24.1	24.1		34.9	34.0			35.8	35.8	
Total for All Activity		51.4	51.0	52.5	51.0		61.4	62.2	58.8			46.5	46.5		55.8	49.9			54.5	54.2	

Leq DAY RECEIVING POSITION NMS 10		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							45.7	46.5	43.0												
2							48.1	48.9	45.4												
3							51.2	52.0	48.5												
Total							53.7	54.5	51.0												
Midfield Taxiway North																					
1							56.1	56.9	53.4												
Runway 14-32																					
1		45.3	44.9	46.4	44.9																
2		45.0	44.6	46.1	44.6																
3		44.5	44.1	45.6	44.1																
Total		49.7	49.3	50.8	49.3																
Southwest Taxiways																					
1												44.7	44.7								
Delta Taxiway Extension																					
1															51.1	47.8					
November Taxiway																					
1																			52.7	52.4	
Truck Trips																					
Day 1		33.7	32.2	33.7	33.7		45.0	42.0	45.0			23.5	23.5		33.5	32.6			34.7	34.7	
2																					
Total Trucks		33.7	32.2	33.7	33.7		45.0	42.0	45.0			23.5			33.5	32.6			34.7	34.7	
Total for All Activity		49.8	49.4	50.9	49.4		58.3	59.0	55.8			44.7	44.7		51.2	47.9			52.8	52.5	

Leq DAY		2003				2004				2005				2006				2007			
RECEIVING POSITION NMS 12		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							47.0	47.8	44.3												
2							49.7	50.5	47.0												
3							53.1	53.9	50.4												
Total							55.4	56.2	52.7												
Midfield Taxiway North																					
1							57.0	57.8	54.3												
Runway 14-32																					
1		47.1	46.7	48.2	46.7																
2		46.3	45.9	47.4	45.9																
3		45.5	45.1	46.6	45.1																
Total		51.1	50.7	52.2	50.7																
Southwest Taxiways																					
1												46.3	46.3								
Delta Taxiway Extension																					
1															51.7	48.4					
November Taxiway																					
1																			55.8	55.5	
Truck Trips																					
Day 1		35.0	33.5	35.0	35.0		45.0	42.0	45.0			24.7	24.7		34.4	33.4			38.1	38.1	
2																					
Total Trucks		35.0	33.5	35.0	35.0		45.0	42.0	45.0			24.7	24.7		34.4	33.4			38.1	38.1	
Total for All Activity		51.2	50.8	52.3	50.8		59.4	60.2	56.9			46.3	46.3		51.8	48.6			55.9	55.6	

Leq DAY RECEIVING POSITION C (E1)		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							47.3	48.1	44.6												
2							49.7	50.5	47.0												
3							52.7	53.5	50.0												
Total							55.2	56.0	52.5												
Midfield Taxiway North																					
1							55.1	55.9	52.4												
Runway 14-32																					
1		47.4	47.0	48.5	47.0																
2		46.5	46.1	47.6	46.1																
3		45.5	45.1	46.6	45.1																
Total		51.3	50.9	52.4	50.9																
Southwest Taxiways																					
1												46.6	46.6								
Delta Taxiway Extension																					
1															51.6	48.3					
November Taxiway																					
1																			55.5	55.2	
Truck Trips																					
Day 1		35.3	33.7	35.3	35.3		45.3	42.3	45.3			24.9	24.9		34.3	33.4			38.1	38.1	
2																					
Total Trucks		35.3	33.7	35.3	35.3		45.3	42.3	45.3			24.9	24.9		34.3	33.4			38.1	38.1	
Total for All Activity		51.4	51.0	52.5	51.0		58.4	59.0	55.8			46.7	46.7		51.7	48.4			55.6	55.3	

Leq DAY		2003				2004				2005				2006				2007			
RECEIVING POSITION A (B1)		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							50.5	51.3	47.8												
2							38.8	39.6	36.1												
3							40.8	41.6	38.1												
Total							51.2	52.0	48.5												
Midfield Taxiway North																					
1							48.1	48.9	45.4												
Runway 14-32																					
1		53.2	52.8	54.3	52.8																
2		50.3	49.9	51.4	49.9																
3		48.1	47.7	49.2	47.7																
Total		55.8	55.4	56.9	55.4																
Southwest Taxiways																					
1												46.1	46.1								
Delta Taxiway Extension																					
1															47.0	43.7					
November Taxiway																					
1																			46.4	46.1	
Truck Trips																					
Day 1		40.6	39.1	40.6	40.6		39.6	36.6	39.6			27.2	27.2		39.5	38.6			34.4	34.4	
2																					
Total Trucks		40.6	39.1	40.6	40.6		39.6	36.6	39.6			27.2	27.2		39.5	38.6			34.4	34.4	
Total for All Activity		55.9	55.5	57.0	55.5		53.1	53.8	50.6			46.2	46.2		47.7	44.9			46.6	46.4	

Leq DAY RECEIVING POSITION NMS 14		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							52.2	53.0	49.5												
2							40.3	41.1	37.6												
3							38.8	39.6	36.1												
Total							52.7	53.5	50.0												
Midfield Taxiway North																					
1							40.7	41.5	38.0												
Runway 14-32																					
1		55.5	55.1	56.6	55.1																
2		51.9	51.5	53.0	51.5																
3		49.4	49.0	50.5	49.0																
Total		57.7	57.3	58.8	57.3																
Southwest Taxiways																					
1												43.9	43.9								
Delta Taxiway Extension																					
1															43.2	39.9					
November Taxiway																					
1																			45.1	44.8	
Truck Trips																					
Day 1		42.4	40.9	42.4	42.4		39.6	36.6	39.6			27.7	27.7		41.3	40.4			34.4	34.4	
2																					
Total Trucks		42.4	40.9	42.4	42.4		39.6	36.6	39.6			27.8	27.8			40.4			34.4	34.4	
Total for All Activity		57.9	57.4	58.9	57.5		53.2	53.8	50.6			44.0	44.0		43.2	43.1			45.5	45.2	

Leq DAY RECEIVING POSITION E		2003				2004				2005				2006				2007			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CONSTRUCTION PROJECT																					
Position																					
Midfield Taxiway South																					
1							47.8	48.6	45.1												
2							45.6	46.4	42.9												
3							43.8	44.6	41.1												
Total							50.8	51.6	48.1												
Midfield Taxiway North																					
1							42.0	42.8	39.3												
Runway 14-32																					
1		49.5	49.1	50.6	49.1																
2		50.0	49.6	51.1	49.6																
3		50.1	49.7	51.2	49.7																
Total		54.7	54.3	55.8	54.3																
Southwest Taxiways																					
1												45.7	45.7								
Delta Taxiway Extension																					
1															49.5	46.2					
November Taxiway																					
1																			43.9	43.6	
Truck Trips																					
Day 1		36.8	35.3	36.8	36.8		35.4	32.4	35.4			24.7	24.7		35.6	34.7			30.2	30.2	
2																					
Total Trucks		36.8	35.3	36.8	36.8		35.4	32.4	35.4			24.7	24.7			34.7			30.2	30.2	
Total for All Activity		54.7	54.3	55.8	54.3		51.5	52.2	48.9			45.7	45.7		49.5	46.5			44.1	43.8	

AIRSIDE CONSTRUCTION NOISE		Leq DAY in Decibels				All Projects															
		2003				2004				2005				2006				2007			
RECEIVING POSITION	ACTIVITY	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NMS 6																					
	Construction	50.1	57.0	51.2	49.7	0.0	59.3	60.1	56.7	0.0	0.0	47.3	47.3	0.0	55.8	52.5	0.0	0.0	53.4	53.2	0.0
	Ambient	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
	Total	64.5	65.1	64.5	64.5	64.3	65.5	65.7	65.0	64.3	64.3	64.4	64.4	64.3	64.9	64.6	64.3	64.3	64.7	64.7	64.3
NMS 7																					
	Construction	51.4	51.0	52.5	51.0	0.0	61.4	62.2	58.8	0.0	0.0	46.5	46.5	0.0	55.8	49.9	0.0	0.0	54.5	54.2	0.0
	Ambient	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
	Total	72.3	72.3	72.3	72.3	72.3	72.6	72.7	72.5	72.3	72.3	72.3	72.3	72.3	72.4	72.3	72.3	72.3	72.3	72.3	72.3
NMS 10																					
	Construction	49.8	49.4	50.9	49.4	0.0	58.3	59.0	55.8	0.0	0.0	44.7	44.7	0.0	51.2	47.9	0.0	0.0	52.8	52.5	0.0
	Ambient	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
	Total	63.9	63.8	63.9	63.8	63.7	64.8	64.9	64.3	63.7	63.7	63.7	63.7	63.7	63.9	63.8	63.7	63.7	64.0	64.0	63.7
NMS 12																					
	Construction	51.2	50.8	52.3	50.8	0.0	59.4	60.2	56.9	0.0	0.0	46.3	46.3	0.0	51.8	48.6	0.0	0.0	55.9	55.6	0.0
	Ambient	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
	Total	67.7	67.7	67.7	67.7	67.6	68.2	68.3	67.9	67.6	67.6	67.6	67.6	67.6	67.7	67.6	67.6	67.6	67.9	67.9	67.6
POS C																					
	Construction	51.4	51.0	52.5	51.0	0.0	58.4	59.0	55.8	0.0	0.0	46.7	46.7	0.0	51.7	48.4	0.0	0.0	55.6	55.3	0.0
	Ambient	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
	Total	66.7	66.6	66.7	66.6	66.5	67.1	67.2	66.9	66.5	66.5	66.6	66.6	66.5	66.7	66.6	66.5	66.5	66.9	66.8	66.5
POS A																					
	Construction	55.9	55.5	57.0	55.5	0.0	53.1	53.8	50.6	0.0	0.0	46.2	46.2	0.0	47.7	44.9	0.0	0.0	46.6	46.4	0.0
	Ambient	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
	Total	60.9	60.7	61.2	60.7	59.2	60.1	60.3	59.7	59.2	59.2	59.4	59.4	59.2	59.5	59.3	59.2	59.2	59.4	59.4	59.2
NMS 14																					
	Construction	57.9	57.4	58.9	57.5	0.0	53.2	53.8	50.6	0.0	0.0	44.0	44.0	0.0	43.2	43.1	0.0	0.0	45.5	45.2	0.0
	Ambient	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
	Total	62.9	62.7	63.2	62.7	61.2	61.8	61.9	61.6	61.2	61.2	61.3	61.3	61.2	61.3	61.3	61.2	61.2	61.3	61.3	61.2
POS E																					
	Construction	54.7	54.3	55.8	54.3	0.0	51.5	52.2	48.9	0.0	0.0	45.7	45.7	0.0	49.5	46.5	0.0	0.0	44.1	43.8	0.0
	Ambient	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
	Total	61.0	60.9	61.3	60.9	59.9	60.5	60.6	60.2	59.9	59.9	60.0	60.0	59.9	60.3	60.1	59.9	59.9	60.0	60.0	59.9

Annual Construction-Related Air Emissions, 2002-2006

Annual Construction-related Air Emissions – 2002

Construction Equipment	Usage (hrs)	Emissions (lbs) VOCs	CO	NOx	PM
Air Compressors <50 hp	2,860.0	942.86	21,313.72	25.74	6.99
Bore/Drill Rigs	1,092.0	150.95	377.37	2,577.80	150.95
Concrete/Industrial Saws	1,664.0	842.17	13,994.08	71.42	8.18
Cranes	520.0	38.25	95.63	653.27	38.25
Crushing/Processing Equipment	1,326.0	115.83	289.59	1,978.16	115.83
Excavators	5,408.0	497.46	1,243.65	8,495.35	497.46
Generator Sets <50 hp	3,744.0	1,826.29	41,409.51	222.39	13.58
Graders	2,236.0	206.88	517.21	3,533.04	206.88
Paving Equipment	2,808.0	608.24	9,618.34	49.09	5.62
Plate Compactors	12,636.0	1,832.47	28,820.10	147.09	16.85
Rubber Tired Dozer	8,632.0	1,199.14	3,997.13	17,807.19	1,598.85
Signal Boards & Light Plants	2,808.0	48.73	170.56	179.70	22.84
Sweepers/Scrubbers	10,764.0	1,095.69	1,565.27	10,692.34	1,126.99
Tractor/Loader/Backhoe	18,252.0	1,192.88	1,704.11	11,640.79	1,226.96
Trenchers	1,144.0	79.45	113.49	775.28	81.72
Concrete & Dump Trucks	24,856.0	2,186.44	12,050.10	8,219.71	704.43
Delivery/Haul Trucks	2,860.0	251.58	1,386.52	945.78	81.05
Water Trucks	3,120.0	343.58	3,205.69	393.10	0.00
Pick-up Trucks	6,500.0	335.32	3,172.67	277.29	10.10
Paving Emissions	0	26,174.21	0	0	0
Fugitive Dust Emissions[1]	0	0	0	0	19,282.70
Total	**(lbstyr):**	**39,968.43**	**145,044.73**	**68,684.53**	**25,196.26**
	(tonslyr): [2]	**19.98**	**72.52**	**34.34**	**12.60**
	(kg/day):	**49.67**	**180.25**	**85.36**	**31.31**

[1] This total represents fugitive dust emissions with no control measures. Control measures such as application of water and use of silt fences will reduce this total substantially.

[2] The *de minimis* values are 50 tons per year (tpy) for VOCs and NOx and 100 tpy for CO.

Annual Construction-related Air Emissions – 2003

Construction Equipment	Usage (hrs)	Emissions (lbs) VOCs	CO	NOx	PM
Air Compressors <50 hp	1,508.0	497.15	11,238.14	13.57	3.69
Bore/Drill Rigs	936.0	129.38	323.46	2,209.54	129.38
Concrete/Industrial Saws	624.0	315.82	5,247.78	26.78	3.07
Cranes	624.0	45.90	114.76	783.92	45.90
Crushing/Processing Equipment	1,040.0	90.85	227.13	1,551.49	90.85
Excavators	5,148.0	473.54	1,183.86	8,086.92	473.54
Generator Sets <50 hp	2,704.0	1,318.99	29,906.87	160.62	9.81
Graders	3,354.0	310.32	775.81	5,299.56	310.32
Paving Equipment	2,080.0	450.55	7,124.70	36.36	4.17
Plate Compactors	9,256.0	1,342.31	21,111.02	107.74	12.35
Rubber Tired Dozer	5,044.0	700.70	2,335.67	10,405.41	934.27
Signal Boards & Light Plants	2,808.0	48.73	170.56	179.70	22.84
Sweepers/Scrubbers	7,488.0	762.22	1,088.88	7,438.15	784.00
Tractor/Loader/Backhoe	6,240.0	407.82	582.60	3,979.76	419.47
Trenchers	494.0	34.31	49.01	334.78	35.29
Concrete & Dump Trucks	30,628	2,643.53	14,787.58	9,672.70	795.09
Delivery/Haul Trucks	936	80.79	451.91	295.60	24.30
Water Trucks	2,392	251.54	2,319.27	290.30	0.00
Pick-up Trucks	4,420	220.71	2,129.65	182.71	6.87
Paving Emissions	0	48,683.66	0	0	0
Fugitive Dust Emissions[1]	0	0	0	0	35,865.58
Total	**(lbstyr):**	**58,808.82**	**101,168.64**	**51,055.62**	**39,970.78**
	(tonslyr): [2]	**29.40**	**50.58**	**25.53**	**19.99**
	(kg/day):	**73.08**	**125.72**	**63.45**	**49.67**

[1] This total represents fugitive dust emissions with no control measures. Control measures such as application of water and use of silt fences will reduce this total substantially.

[2] The *de minimis* values are 50 tons per year (tpy) for VOCs and NOx and 100 tpy for CO.

Annual Construction-related Air Emissions – 2004

Construction Equipment	Usage (hrs)	Emissions (lbs) VOCs	CO	NOx	PM
Air Compressors <50 hp	1,352.0	445.72	10,075.58	12.17	3.30
Bore/Drill Rigs	468.0	64.69	161.73	720.50	64.69
Concrete/Industrial Saws	624.0	315.82	5,247.78	26.78	3.07
Cranes	676.0	49.73	124.32	553.86	49.73
Crushing/Processing Equipment	780.0	68.14	170.34	758.88	68.14
Excavators	1,872.0	172.20	430.49	1,917.85	172.20
Generator Sets <50 hp	2,600.0	1,268.26	28,756.60	154.44	9.43
Graders	1,092.0	101.04	252.59	1,125.29	101.04
Paving Equipment	1,248.0	270.33	4,274.82	21.82	2.50
Plate Compactors	5,460.0	791.81	12,453.13	63.56	7.28
Rubber Tired Dozer	780.0	108.36	361.19	1,609.08	144.47
Signal Boards & Light Plants	8,424.0	146.20	511.69	539.10	68.53
Sweepers/Scrubbers	7,020.0	714.58	1,020.83	6,973.27	735.00
Tractor/Loader/Backhoe	3,588.0	234.50	335.00	2,288.36	241.20
Trenchers	676.0	46.95	67.06	458.12	48.29
Concrete & Dump Trucks	5,460	464.04	2,628.93	1,661.14	131.63
Delivery/Haul Trucks	1,040	88.39	500.75	316.41	25.07
Water Trucks	2,028	205.22	1,801.36	236.07	0.00
Pick-up Trucks	5,148	251.96	2,451.47	207.69	7.83
Paving Emissions	0	54,965.90	0	0	0
Fugitive Dust Emissions[1]	0	0	0	0	40,493.76
	(lbstyr):	**58,808.82**	**101,168.64**	**51,055.62**	**39,970.78**
Total	**(tonslyr):** [2]	**29.40**	**50.58**	**25.53**	**19.99**
	(kg/day):	**73.08**	**125.72**	**63.45**	**49.67**

[1] This total represents fugitive dust emissions with no control measures. Control measures such as application of water and use of silt fences will reduce this total substantially.

[2] The *de minimis* values are 50 tons per year (tpy) for VOCs and NOx and 100 tpy for CO.

Annual Construction-related Air Emissions – 2005

Construction Equipment	Usage (hrs)	Emissions (lbs) VOCs	CO	NOx	PM
Air Compressors <50 hp	364.0	120.00	2,712.65	3.28	0.89
Bore/Drill Rigs	208.0	28.75	71.88	320.22	28.75
Concrete/Industrial Saws	728.0	368.45	6,122.41	31.25	3.58
Cranes	156.0	11.48	28.69	127.81	11.48
Crushing/Processing Equipment	208.0	18.17	45.43	202.37	18.17
Generator Sets <50 hp	832.0	405.84	9,202.11	49.42	3.02
Graders	364.0	33.68	84.20	375.10	33.68
Paving Equipment	1,092.0	236.54	3,740.47	19.09	2.19
Plate Compactors	4,888.0	708.86	11,148.51	56.90	6.52
Rubber Tired Dozer	884.0	122.80	409.34	1,823.63	163.74
Signal Boards & Light Plants	2,808.0	48.73	170.56	179.70	22.84
Sweepers/Scrubbers	4,212.0	428.75	612.50	4,183.96	441.00
Tractor/Loader/Backhoe	1,326.0	86.66	123.80	845.70	89.14
Trenchers	52.0	3.61	5.16	35.24	3.71
Concrete & Dump Trucks	10,088	854.02	4,830.58	2,975.74	224.52
Delivery/Haul Trucks	364	30.82	174.30	107.37	8.10
Water Trucks	1,092	107.97	934.57	122.42	0.00
Pick-up Trucks	2,808	135.57	1,351.09	112.36	4.27
Paving Emissions	0	10,469.95	0	0	0
Fugitive Dust Emissions[1]	0	0	0	0	7,713.29
Total	**(lbstyr):**	**14,220.66**	**41,768.26**	**11,571.55**	**8,778.88**
	(tonslyr): [2]	**7.11**	**20.88**	**5.79**	**4.39**
	(kg/day):	**17.67**	**51.91**	**14.38**	**10.91**

[1] This total represents fugitive dust emissions with no control measures. Control measures such as application of water and use of silt fences will reduce this total substantially.

[2] The *de minimis* values are 50 tons per year (tpy) for VOCs and NOx and 100 tpy for CO.

Annual Construction-related Air Emissions – 2006

Construction Equipment	Usage (hrs)	Emissions (lbs) VOCs	CO	NOx	PM
Air Compressors <50 hp	572.0	188.57	4,262.74	5.15	1.40
Bore/Drill Rigs	364.0	50.32	125.79	560.39	50.32
Concrete/Industrial Saws	364.0	184.23	3,061.21	15.62	1.79
Cranes	364.0	26.78	66.94	298.23	26.78
Crush ing/Processing Equipment	208.0	18.17	45.43	202.37	18.17
Excavators	520.0	47.83	119.58	532.74	47.83
Generator Sets <50 hp	1,144.0	558.03	12,652.91	67.95	4.15
Graders	624.0	57.73	144.34	643.02	57.73
Paving Equipment	572.0	123.90	1,959.29	10.00	1.15
Plate Compactors	4,030.0	584.43	9,191.59	46.91	5.38
Rubber Tired Dozer	988.0	137.25	457.50	2,038.17	183.00
Signal Boards & Light Plants	5,616.0	97.46	341.13	359.40	45.69
Sweepers/Scrubbers	5,616.0	571.66	816.66	5,578.61	588.00
Tractor/Loader/Backhoe	2,808.0	183.52	262.17	1,790.89	188.76
Trenchers	104.0	7.22	10.32	70.48	7.43
Concrete & Dump Trucks	11,440	964.70	5,466.63	3,261.06	233.42
Delivery/Haul Trucks	520	43.85	248.48	148.23	10.61
Water Trucks	1,196	117.07	996.29	130.91	0.00
Pick-up Trucks	3,536	173.06	1,737.63	143.83	5.38
Paving Emissions	0	11,516.54	0	0	0
Fugitive Dust Emissions[1]	0	0	0	0	8,484.31
Total	**(lbstyr):**	**15,652.34**	**41,966.62**	**15,903.97**	**9,961.29**
	(tonslyr): [2]	**7.83**	**20.98**	**7.95**	**4.98**
	(kg/day):	**19.45**	**52.15**	**19.76**	**12.38**

[1] This total represents fugitive dust emissions with no control measures. Control measures such as application of water and use of silt fences will reduce this total substantially.

[2] The *de minimis* values are 50 tons per year (tpy) for VOCs and NOx and 100 tpy for CO.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

Responses to Comments **Volume 4**

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

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CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS

May 7, 1999

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Logan Airside Improvements Planning Project
PROJECT MUNICIPALITY : Boston/Winthrop
PROJECT WATERSHED : Boston Harbor
EOEA NUMBER : 10458
PROJECT PROPONENT : Massachusetts Port Authority (Massport)
DATE NOTICED IN MONITOR : February 23, 1999

The Secretary of Environmental Affairs hereby determines that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 C.M.R. 11.00).

MEPA review is an informal process, which does not itself result in any formal adjudicative decision approving or disapproving a project. Section 11.08(8) of the MEPA Regulations requires me to find a DEIR adequate even if certain aspects of the project require additional description or analysis, so long as the DEIR is generally responsive to the requirements of Section 11.07 and the scope. As described in more detail in this Certificate, after examining the document and the written and oral comments, I have found that the DEIR presents enough information on alternatives, impacts, and mitigation to meet that standard and proceed to the stage of a Final EIR. This determination does not mean that I am satisfied with every aspect of the analysis in the DEIR. The Final EIR must address outstanding issues, including additional mitigation measures, and respond to the substantive comments received.

The Federal Aviation Administration (FAA) is reviewing the project as a Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA). This certificate applies to the review of the project under MEPA only, and does not restrict the ability of the federal government to act on those aspects of the project subject to NEPA.

PROJECT DESCRIPTION

As described in the DEIR, the proponent's preferred alternative includes a 5,000 foot unidirectional runway (Runway 14/32); a 9,300 foot taxiway between Runways 4L/22R and 4R/22L (the Centerfield Taxiway); other taxiway improvements; and reduction of runway approach minima. The DEIR evaluates implementation of Peak Period Pricing, but does not include this measure as part of the preferred alternative. Each of the alternatives was studied for its impacts at different projected future passenger levels: a year 1999 estimate of 29 million, and year 2010 estimates of 37.5 and 45 million. Each level was studied for a "high fleet" with relatively more operations and a "low fleet" with fewer operations.

EXECUTIVE SUMMARY

The proposed project (and especially Runway 14/32) has generated an enormous amount of commentary and controversy, both in the MEPA review of the project and in a much broader political context. This review has brought to a head many long standing concerns about the management of growth at Logan Airport, the environmental and community impacts of that growth, and the mitigation of those impacts.

Within this debate, three principal issues have emerged that will shape the preparation and review of the Final EIR for this project. The first is Logan's role within the regional transportation network. Many commenters have argued that the decision on the DEIR should be deferred until there has been further study of the possible diversion of passenger traffic to other facilities -- notably the regional airports at Providence, Manchester, and Worcester, and Amtrak's new high-speed rail link to New York -- as a solution to problems of congestion and delay at Logan. Some commenters have argued that the only solution to Logan's delay problem is the creation of a new second major airport.

Although I strongly agree on the importance of the regional transportation network, I disagree with the contention that Massport's treatment of this subject in the DEIR has been insufficient. The scope issued by then-Secretary Coxe in 1995 did not require the study of a new second airport, and I am not reopening that issue in the context of this review. The DEIR suggests that the existing airports at Worcester, Manchester, and Providence, seen together, may serve as Boston's "second airport." In the Final EIR, Massport must study the planned improvements at those airports in greater detail, to show the effects upon passenger traffic at Logan. The DEIR already estimates a potential diversion of 7.3 million passengers/year from Logan to regional alternatives by the year 2010, suggesting that future passenger levels at Logan are likely to remain at or below the lower projected level of 37.5 million. If true, this could help allay fears about the impacts of "worst case" projections, and it could support Massport's contention that the runway will have long-term benefits in reducing delays. Potential commitments or mitigations relating to regional transportation include: C.1 C.2

- improved ground access to Worcester Airport;
- widening Route 3 to the New Hampshire border, to improve access to Manchester Airport;
- unding construction of a rail station at Providence Airport; and
- implementation of the Urban Ring to improve transit access to Logan.

Delay reductions and environmental benefits at airports can arise out of operational changes, as well as physical improvements. Many commenters have focused on Peak Period Pricing (PPP) as a viable alternative to the runway in reducing delays. The analysis in the DEIR suggests that PPP has independent value in reducing delay, which increases long-term as passenger levels increase. In the

FEIR, I am requiring Massport to enhance its PPP study, including a tightly crafted exemption that will protect greatly affected communities from losing connections to the national air network. C.3

- In the FEIR, I am requiring Massport to seek FAA approval for a PPP program as soon as it begins to yield real benefits. C.4

- In the Generic EIR (see below), I am requiring Massport to develop a system of market-based, revenue-neutral landing fees that would reward cleaner planes with lower charges, on the principle that "the polluter pays." C.5

The third major theme that has sounded in this debate is the cumulative impacts of Logan in its entirety. In previous MEPA filings, Massport has made the commitment "to reduce or minimize, wherever practical, the environmental impacts of the operation of Logan Airport as annual passenger volumes rise in the future." The comment letters and the testimony at the public hearings have demonstrated the burden of noise, air pollution, and traffic impacts that neighboring communities will continue to bear as air traffic increases (whether or not Runway 14/32 is built). I believe that the principle of "environmental justice," which so many comments have raised, is largely an expression of this concern.

Massport has argued that the impacts of the airside improvements project are limited because it does not increase the capacity of the airport, or stimulate future demand. I do not fully accept that contention. In the FEIR, I am specifying a series of enforceable short-term and long-term mitigation measures, all intended to make the neighboring communities quieter, cleaner, and less congested. In addition, Massport must address Logan's cumulative impacts in the Generic EIR (GEIR), a separate MEPA document that is fully revised on a five-year cycle, with annual updates. This fall, Massport must submit its latest Annual Update and a proposed scope for the full GEIR revision, to be submitted next summer. I am requiring Massport to treat all comments received on the DEIR as potentially applicable to the GEIR as well. In the FEIR and/or the GEIR, I have required Massport to:

- work with the MBTA to improve transit access to Logan via the Blue Line and the Airport Intermodal Transit Connection (AITC), C.6

- work with the Federal Aviation Administration (FAA) to limit the use of noisier "hush-kitted" aircraft; C.7

- set numerical targets for converting ground service equipment to clean fuels; C.8

- provide more accountability for FAA compliance with the Preferential Runway Advisory System (PRAS) goals, which are intended to distribute aircraft noise more equitably among affected communities; and C.9

- continue to implement and extend its residential soundproofing program, to ensure full access for all residents who are entitled to its benefits. C.10

PURPOSE AND NEED

According to the DEIR, in 1998 Logan ranked 17th in total passengers (26.5 million) and 11th in operations (507,000), but sixth in total delays (143,000 hours). Approximately 47,000 hours of delay were directly attributable to taxiway congestion or northwest wind conditions. Massport has argued that the preferred alternative is intended solely to alleviate those two categories of delays and maximize operational efficiency as passenger levels increase. In other words, the airside projects will accommodate existing and projected demand, not generate additional demand. On the other hand, many commenters clearly see the preferred alternative as an expansion of Logan Airport ("if you build it, they will come" has appeared in numerous letters).

After reviewing the DEIR, I am not convinced that the preferred alternative is purely a capacity neutral airfield enhancement, as stated by Massport. While the maximum "capacity" of the airport will remain at 120 operations per hour with or without the airside improvements, the construction of Runway 14/32 will allow Logan to operate at or near 120 operations per hour for a greater proportion of the year than it currently does. In addition, if delays represent a problem as critical as that presented in the DEIR, there may well be some latent demand generated by the airside project.

I do not, however, believe that developing airport infrastructure automatically creates demand for air service. As noted in previous certificates, the most productive focus of MEPA reviews for Logan projects is not a discussion of whether a project is accommodating or generating demand per se, but rather whether Massport is operating the airport in a manner which minimizes overall environmental impacts in light of its obligations under MEPA.

There are, however, two major issues relating to delays that need further examination. First, the Final EIR should thoroughly explain and justify Massport's delay modeling, as a response to a number of substantive comments. The Final EIR should explain the differences among Massport, the Federal Aviation Administration, and the federal Department of Transportation methods of calculating delays, and discuss any implication for the environmental analysis. Information on delays should be presented in quantitative terms (e.g., average minutes of delay per flight), and compared over time at least since 1993 for Logan and other major U.S. airports. C.11

Secondly, several commenters have questioned Massport's apparent use of 1993, a very delay prone year at Logan, as a base case year. The Final EIR should clarify the base case year used in the delay analysis (and other areas, such as noise and air emissions). If 1993 was indeed the base year, the FEIR should include a "sensitivity analysis" using a more recent year (or average of several recent years) as a baseline, and evaluate the effect on the report's conclusions. C.12

REGIONAL TRANSPORTATION ISSUES

Regional transportation issues have been a focus of many, if not most, of the comment letters. The scope required Massport to study off-site alternatives: specifically, increased use of existing airports and high speed rail. In response, the DEIR includes a detailed discussion of Logan's role in the regional transportation network, which also includes the rapidly growing regional airports in Providence (4.6 million passengers in 1998, up 11%) and Manchester, NH (1.9 million passengers in 1998, up 44%), the currently underused facility at Worcester (only 77,000 passengers in 1998), (footnote 1) and the three-hour high speed rail service to New York slated to begin later this year. It estimates a potential diversion of 7.3 million passengers/year from Logan to regional alternatives (which also include teleconferencing) by the year 2010, based solely on market forces without any additional intervention by Massport or other state transportation agencies. The DEIR diversion analysis suggests that future passenger levels at Logan in the design year 2010 are likely to remain at or below the lower projected level of 37.5 million, rather than attaining the "worst case" 45 million level.

But if the regional airports at Manchester, Worcester, and Providence, taken together, are to play the role of a second major airport for Boston, then Massport and the other state transportation agencies must show that they are doing all they can to ensure the integration of these facilities with Logan as a regional airport system. Massport has recently agreed to operate Worcester Airport, and the Massachusetts Highway Department (MHD) has committed to studying and constructing better roadway access to the airport. EOTC has committed to help fund the construction of a rail station at T.F. Green Airport at Providence, which could provide a fast and convenient link to the new Route 128 Station, currently under construction (EOEA #11099), and to downtown Boston. The planned widening of Route 3 from Route 128 to the New Hampshire border by MHD (EOEA #5668), coupled with the potential for

improved roadway and rail access in New Hampshire, could increase the accessibility and use of Manchester Airport. Finally, the Massachusetts Bay Transportation Authority (MBTA) has planned a series of improvements in transit access to Logan, including the AITC (EOEA #10235), the Blue Line modernization (EOEA #8772), and the Urban Ring.

In response to the high level of public interest and concern over regional transportation issues, the analysis in the FEIR must significantly expand upon that in the DEIR. First, the FEIR must report on the current status of ground access improvements to all four airports proposed by state transportation agencies in Massachusetts or other states (including but not limited to the projects mentioned above), including projected dates for completion of studies and/or construction. Second, the FEIR must quantify the effects of these measures upon projected passenger levels at each of the airports, including Logan. (footnote 2) The projections for ridership on Amtrak's high speed rail, and potential diversions from Logan, should also be updated to reflect the best current information. (footnote 3) C.13 C.14

The DEIR suggests that the 45 million annual passenger level used by Massport in its planning will not occur by the design year 2010. I believe that it is appropriate to continue to study the 45 million passenger scenario, both to assure consistency with previous planning and to analyze a true "worst case" scenario. However, I caution both Massport and reviewers not to focus on the impacts associated with the 45 million passenger scenario, but rather on the impacts of the 37.5 million passenger scenario (assuming that figure is supported by the FEIR analysis). C.15

With renewed focus on diverting passengers from Logan, it is more important than ever that we understand the environmental impacts of increased use of regional airports. DEP has commented that a regional environmental assessment of airport infrastructure would prove useful in determining whether increased use of the regional airports actually minimizes impacts, and the letter from the Conservation Law Foundation lays out a potential framework for a project-specific regional analysis of transportation alternatives in the context of the airside project review. (My predecessor as Secretary also suggested such a regional study in the Certificate on the last GEIR.) The FEIR must try to evaluate the environmental impacts of these improvements on a regional, as well as a local basis.

C.16

I acknowledge certain difficulties in presenting the cumulative environmental impacts of physically unrelated projects. Because Manchester and Providence airports are in other states, and because the proposed ground access improvements at Worcester are at such a preliminary stage, I am not requiring Massport to perform independent EIR level review of local impacts at those facilities. Rather, Massport should rely upon existing reports to summarize information on the predicted levels of environmental impacts (such as noise contours, air emissions, vehicle miles traveled, and impacts on wetlands and other critical resources) caused by the physical improvements and predicted passenger levels. I also acknowledge that the inclusion of any project as part of this analysis, regardless of its apparent benefits, will not remove the necessity of independent MEPA review if required by statute and regulation.

Many commenters have urged the study of a new second major airport as an alternative to this project. The scope did not require this analysis, and I am not reopening that issue in the context of the airside project review. Many comments have also suggested that commercial service at Hanscom Field in Bedford should be considered as a project alternative. Massport argues that commercial service at Hanscom is not likely to constitute a feasible alternative to Logan in the foreseeable future, and that Hanscom is better suited to remain the region's principal general aviation (GA) airport. (In 1998, there were approximately 183,000 GA operations at Hanscom, compared with 31,000 at Logan.) To back up Massport's contention, the Final EIR should address in qualitative terms the environmental impacts of commercial service at Hanscom; opportunities to divert an even higher share of Logan's GA operations to Hanscom and other regional airports; and any legal impediments to such measures. Finally, New Bedford Airport has been suggested as a reliever airport for cargo traffic. Massport should report upon the status of MEPA review for the proposed expansion of New Bedford Airport (EOEA #10316), which had previously involved the filling of an unprecedented area (over 40 acres) of protected wetlands. C.17 C.18 C.19

The Proposed Section 61 Findings must detail specific steps to be taken by Massport and other state transportation agencies, to ensure that Worcester, Manchester, and Providence airports, together with Logan, will operate jointly as the key elements in an efficient and environmentally balanced regional air network. C.20

PEAK PERIOD PRICING

Of all the elements under consideration as part of the airside program, the only one not contained in the preferred alternative is Peak Period Pricing (PPP): the imposition of a landing fee surcharge, irrespective of aircraft weight, during the peak hours of 2 PM to 8 PM. This kind of financial disincentive can reduce delays by modifying airline scheduling behavior. The PPP proposal derives indirectly from the PACE program, Massport's 1988 imposition of landing fee incentives to prevent delays, which was ultimately overturned in a court decision as contravening Federal laws protecting interstate commerce. I have received many comments from the airline industry and from groups in small markets (notably the Cape and Islands, and northern New England) voicing strong opposition to Peak Period Pricing, even as most of these letters have supported the other airside projects. Conversely, I have received many comments arguing that PPP alone, without Runway 14/32, should be the preferred alternative for solving the delay problems.

The analysis in the DEIR appears to show that under slower growth scenarios (37.5 million passengers, low fleet), Runway 14/32 yields the greatest delay benefits, with a smaller benefit accruing to PPP. As annual operations increase further (37.5 million, high fleet, and 45 million), implementing PPP leads to greater delay reduction benefits equaling or exceeding those of Runway 14/32. The DEIR analysis also shows that at all levels of growth, the combination of Runway 14/32 and PPP produce the greatest delay benefits. I also note that by reducing taxiway delays, PPP helps reduce air pollution and noise.

I understand the concern of small and relatively remote areas regarding the effects of PPP on access to Logan and points beyond. The DEIR appendices document the negative economic impacts of the proposed PPP program on certain areas. However, I find that the DEIR has not provided enough information to discount PPP as a legitimate (and perhaps even necessary) part of the environmental mitigation associated with any airside improvements.

The Final EIR must include a much more refined analysis of Peak Period Pricing, including a full evaluation of positive and negative (footnote 4) environmental impacts. I am concerned that the DEIR analysis applies only a single price formula to operations, and that it assumes that the response to PPP will be either a cancellation of flights or moving "shoulder" flights out of the time period subject to PPP. The analysis should account for potential alterations in flight mix resulting from PPP (i.e., the possibility of flight consolidation to Logan or diversion to other airports), and it should draw upon past PPP analysis, such as the PACE program and the 1993 Strategic Assessment Report. Most importantly, the Final EIR should re-analyze the delay effects of a PPP program that contains a tightly crafted exemption for greatly affected communities, to ensure that they do not lose access, through Logan or other regional airports, to the national air network. C.21

In the Final EIR and the Proposed Section 61 Finding, Massport should commit to regular monitoring of peak-period airline schedules and delays, to be reported in the Generic EIR and its Annual Updates. The Final EIR must also define appropriate conditions at which Massport will begin seeking the necessary federal and state regulatory processes, in order to implement a properly structured PPP program. C.22 C.23

CUMULATIVE IMPACTS AND THE GEIR

I have received numerous comments suggesting that the review of the airside projects has been improperly segmented under MEPA (and NEPA) from the review of airport operations as a whole. The issue of cumulative impacts and segmentation is not new to the review of projects at Logan Airport. As stated in past Certificates, the Generic EIR (EOEA #3247/5146) is expected to provide a "big picture" cumulative analysis of Logan operations, impacts, and mitigation. It complements the project-specific EIR for the airside projects, helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport.

The 1998 Annual Update to the GEIR will undergo MEPA review later this year. The Annual Update will include a Proposed Scope for the 1999 Logan Airport GEIR. The issues that Massport will address in the 1999 GEIR will overlap to a considerable extent with many of the issues highlighted in this Certificate. As a result, I do not see the need to duplicate the GEIR within the context of the airside EIR review. (I note that the federal review process does not include the formal equivalent of the GEIR, so my comments regarding segmentation are necessarily limited only to the state review process.)

Nonetheless, I emphatically agree that the airside DEIR cannot be viewed in isolation from airport operations and impacts as a whole. The GEIR does not replace the project-specific EIR, nor does it relieve Massport of its obligations under MEPA for project specific analysis of impacts and mitigation. Massport's fundamental environmental commitment, as expressed in the 1994/95 GEIR, is to "reduce or minimize, wherever practical, the environmental impacts of the operation of Logan Airport as annual passenger volumes rise in the future." The requirements laid out in this Certificate will require Massport to address certain cumulative impacts within the context of the project-specific airside Final EIR and in the Section 61 Findings, as detailed below.

ENVIRONMENTAL JUSTICE

Many of the comments received have raised the issue of "environmental justice," as defined under Federal Executive Order 12898 and associated guidance materials. Because in the past the legitimate environmental interests of low income and minority areas too often have "flown under the radar" of the environmental review process, application of the principles of environmental justice is intended to ensure that low income and minority populations are accorded the same standard that applies to those in other areas. Under E.O. 12898, Massport must fully analyze the environmental impacts of its proposed actions on low income and minority populations; show that it has avoided, minimized, or mitigated these impacts to the greatest feasible extent; and ensure that its proposed actions do not unduly burden low income or minority areas. To assess whether Massport has adequately analyzed the issue for purposes of MEPA review, the Final EIR should include more detailed demographic data on the affected populations in both tabular and graphic form, analysis of the full range of impacts (including noise impacts within the 60 dB contour), a comparison of the affected population with that of Boston and the other affected municipalities, and a discussion of the community participation process used in preparing the Draft and Final EIRs. C.24

Many of the comments have used the term "environmental justice" more broadly. Rather than focusing on the legal definition of disproportionate impacts to low income or minority populations, such comments question whether neighborhoods in Boston and adjacent communities should bear the brunt of impacts from the region's air travel when many of the people using Logan live outside of Route 128. The comment letters and the testimony at the public hearings have demonstrated the burden of cumulative noise, air pollution, and traffic impacts that neighboring communities will continue to bear as air traffic increases (whether or not Runway 14/32 is built). This broader principle of fairness, and a concern with the cumulative impacts of airport operations, has informed my decisions throughout this Certificate. Therefore, in addition to requiring the further analysis that will satisfy the Executive Order, I have focused on concrete mitigation measures in the FEIR and the GEIR that will maintain or reduce the existing envelope of cumulative environmental impacts from airport operations.

NOISE

No other single issue so dominates the comment letters as the issue of aircraft noise, which has united a diverse cross section of the metropolitan area. The impassioned oral testimony at the public hearings drove home the point that aircraft noise profoundly affects the lives of the people who live underneath flight paths. Article 49 of the Massachusetts Constitution enshrines a right to freedom from "excessive and unnecessary noise." The time has come to address the issue of airport noise clearly and definitively. I am convinced that simply soundproofing the most affected residences and completing the phase-in of quieter Stage 3 aircraft, which is required under Federal law by the end of 1999, cannot be the final answers to the issue of noise mitigation. C.25

The DEIR includes a detailed assessment of the noise impacts of the proposed Runway 14/32 and the other airside projects. The net result of Massport's preferred alternative is to reduce dramatically the number of people modeled to be exposed to the highest (>70 dB DNL) levels of noise. At the same time, the project is projected to produce a relatively small increase in the number of people exposed to noise in the 65-70 dB DNL range, and a somewhat larger increase in the 60-65 dB DNL range. Although not expressly quantified in the DEIR, the implementation of the preferred alternative also redistributes the exposed population. It appears that up to 40% of the people within the 65-70 dB contour will be newly included, while an equal number of people will fall into lower contours. A similar pattern exists for the 60-65 dB contour. The Final EIR should quantify the number of "new" people within each noise contour under the preferred alternative. It should also present information on the 60-65 dB noise contour within the text, and not just in the appendices. C.26

Previous certificates on the GEIR have dwelled at length about the issues of noise impacts and mitigation. At the core of the noise abatement policy stands the commitment in the 1994/95 GEIR to "minimizing nighttime noise and to addressing and responding to noise issues and complaints." Given the extremely high level of concern expressed with noise impacts from Logan in general and from Massport's preferred alternative in particular, it is time to turn these general policy goals into specific noise mitigation commitments. C.27

Soundproofing.

Many comments have pointed out the limitations of residential acoustical treatment (the "soundproofing" program), which only works indoors with closed windows. While I recognize these limitations, the program is and will continue to be an important part of Massport's noise mitigation commitments. The Final EIR and the Proposed Section 61 Finding should contain feasible implementation measures to ensure full access to the soundproofing program for all residents who are entitled to its benefits. C.28

Massport uses the federal criteria of residing within a 65 dB DNL contour for determining soundproofing eligibility. As EPA points out, the modeled noise contours do not exactly match the measured field values, and they appear to somewhat underestimate Day-Night Levels (DNL) of sound. Moreover, as anyone who has ever lived under a flight path can attest, noise from aircraft overflights can create significant environmental impacts even for those who reside outside the 65 dB contour. From the data in the technical appendix, it is clear that thousands of residents are and will be exposed to noise just below 65 dB DNL as a result of airport operations. (A primary purpose of requiring information on the 60 dB noise contour was to document which areas might fall within a zone defined by an appropriate "margin of error" for noise modeling.) Given the number of people who are potentially ineligible for soundproofing because of modeling limitations, in the Final EIR Massport should examine further refinements to its contours that would ensure full access to soundproofing for all affected residents. Also in the Final EIR, Massport must commit to providing soundproofing for all residents currently within the C.29

65 dB contour, even if they would otherwise lose their eligibility as a result of this project.

C.30

The soundproofing program requires that structures within the 65 dB DNL contour meet certain code requirements prior to receiving acoustical treatments. I am concerned that the residences most in need of soundproofing will be in low income areas with relatively high proportions of sub-standard housing. The Final EIR should explain how often such circumstances have occurred in the past. If some (presumably low income) residents are likely to be denied noise mitigation on this grounds, the FEIR and the Proposed Section 61 Finding should consider financial or other programs to ensure equal access to noise mitigation.

Compliance with PRAS Goals

C.31

The Preferential Runway Advisory System (PRAS) goals, initially developed in the 1970s, is a set of voluntary targets for FAA runway assignments, aimed at ensuring a more equitable regional distribution of aircraft noise among all affected communities. The DEIR demonstrates that the implementation of the preferred alternative will significantly improve compliance with PRAS goals. From the discussion it is not clear, however, if compliance with the PRAS goals represent maximum feasible mitigation under MEPA. I note that the PRAS program predates MEPA review of Logan Airport, and the modern focus on environmental justice issues. I am also concerned that changes in land use patterns and residential densities may have altered the validity of the assumptions under which the PRAS program was developed. Although I am not convinced that a wholesale revamping of the PRAS program is appropriate (nor has the CAC suggested that step), the Final EIR should discuss whether any updates of the PRAS goals are contemplated, and detail any mechanisms for ensuring that the program fulfills its objective of creating an equitable noise distribution.

C.32

Several commenters have questioned the level of FAA's adherence to PRAS goals in the past. Massport must show in the FEIR that its prediction of the future effects of the PRAS goals do not over-estimate FAA's ability and willingness to implement them, as based on past experience. In addition, the FEIR and the Proposed Section 61 Finding must include protocols for monitoring adherence to the PRAS goals, and periodic disclosure of the monitoring results (I suggest quarterly reports to the CAC, plus annual statements in the GEIR update).

C.33

C.34

Upon implementation of the preferred alternative, Runway 27 is projected to see an increase in use, potentially leading to further increases in aircraft overflights over portions of Roxbury, Jamaica Plain, and Brookline. From the comments received, it appears that the compliance with the new flight procedures has been incomplete. It also appears that the new Runway 27 corridor tends to narrow the geographical area of overflights, thus concentrating noise in certain areas. The Final EIR should discuss the relationship between the airside program and the recently-completed Runway 27 EIS, (footnote 5) describe any cumulative impacts on the corridor, and analyze the consistency of the noise impacts with the PRAS goals.

Restricting Night-time Flights and Hush-kitted Aircraft.

In the near term, the phasing out of stage 2 aircraft by the end of 1999 will produce a decline in the total annual noise produced by Logan aircraft. In the longer term, however, both total annual noise and night-time noise are projected to increase as the number of flights in an all Stage 3 fleet rises. Moreover, many of the aircraft currently operating at Logan are actually stage 2 aircraft that have received mechanical alterations ("hush-kits") to meet the minimum requirements for stage 3 aircraft. These planes are significantly noisier than new aircraft specifically designed to meet stage 3 requirements.

As an initial step, I note that the PRAS goals seek to route all night-time flights over the water between 12 PM and 6 AM. In the FEIR, Massport should report on the feasibility of extending this preferential night-time period to the hours of 10 PM to 7 AM, and the effect of this change on noise levels and contours. C.35

Federal law allows the Federal Aviation Administration (FAA) to grant a waiver (under FAR Part 161) to an airport operator to restrict the number or schedule of Stage 3 aircraft. Massport should begin discussions now with FAA, with the goal of instituting restrictions, either locally or nationally, on hush-kitted stage 3 aircraft. The GEIR should report on the status of those consultations and discuss the specific types of information needed to pursue a Part 161 waiver. Since developing limitations on Stage 3 operations will necessarily involve the federal government, I urge the members of the Congressional delegation to help pursue this issue further with FAA. C.36

AIR QUALITY

The DEIR argues that the preferred alternative will lead to air quality improvements by increasing the operating efficiency of the airport, thereby better accommodating existing demand. (footnote 6) As stated above, I am not convinced that Massport's preferred alternative is capacity neutral, although I disagree with those commenters who have suggested that the addition of a sixth runway will be the primary factor in drawing additional air traffic to Logan Airport.

Even accepting Massport's arguments about the air quality benefits of its preferred alternative, the airside project raises issues of cumulative air quality that Massport must address. Logan Airport currently ranks as the sixth largest source of NO_x emissions in the Commonwealth, and by 2010 it is likely to become one of the three largest such sources. Currently, aircraft emissions are the only mobile air pollution sources included in the State Implementation Plan (SIP) emissions inventory that are not slated for meaningful near- or long-term emissions reductions. Nationally, pollution emissions from aircraft and airports represent the largest uncontrolled sources of air pollution. NO_x is an ozone precursor. Although Eastern Massachusetts has fared well in meeting one-hour standards for ozone over the past few years, recently there were 65 exceedences of the more stringent 8-hour standard adopted by the federal Environmental Protection Agency (EPA), over 12 days, at 14 different monitoring stations. It is quite likely that additional emissions reduction beyond those already in the SIP will prove necessary for Massachusetts to meet the 8-hour standard.

As previous certificates have stressed, it is the total air pollution from the airport -- whether from planes, the ground fleet servicing these aircraft, or the vehicles carrying passengers and employees -- which requires mitigation. Previous GEIRs have done a thorough job of documenting emissions from Logan Airport and in predicting trends based on various passenger level forecasts. Now it is time to implement the broad goal of maintaining or reducing Logan's overall environmental impacts, even as annual passenger volumes rise in the future. C.37

To make this commitment more effective, in the GEIR Massport must examine the feasibility of a system of market-based, revenue-neutral landing fees that reward cleaner planes with lower charges, on the principle that "the polluter pays." Airports in Europe, notably Zurich, are beginning to institute programs of this kind. In the GEIR, I am directing Massport to develop and model a system of emissions-based landing fees. If it is effective, practicable, and consistent with Federal law, then Massport will begin the necessary regulatory process for implementing the program by a date certain, to be defined in the GEIR scope. As an initial step toward reducing emissions, Massport should set numerical annual targets in the GEIR for the conversion of its tenants' ground service equipment to clean fuels, and for providing electric power to aircraft at all gates. C.38

GROUND TRANSPORTATION

Numerous comments argue that the DEIR should have included a detailed analysis of ground transportation issues, because of the cumulative impacts of landside and airside operations at Logan Airport. The issue of ground transportation is clearly relevant to any discussion of cumulative impacts, and is an important component of any cumulative air quality analysis. However, the GEIR includes a substantial body of analysis on ground transportation issues, and the Section 61 Finding for the West Garage project includes enforceable commitments for ground transportation mitigation. Because Massport is dealing with this issue in other documents, I will not require a detailed analysis of Massport's ground transportation strategy within the Final EIR, but rather focus on the following issues.

One of the cornerstones of Massport's ground access strategy is a commitment to a 35.2% mode share for High Occupancy Vehicles (HOV) when passenger volumes reach 37.5 million annually. As previous certificates have pointed out on numerous occasions, although this goal translates into an increase in HOV mode shares from the present, it also represents a substantial increase in the absolute number of non-HOV trips to the airport, due to the large increase in total number of passengers. Massport has not shown how these non-HOV trips will be accommodated under the parking freeze. C.39

Massport should consider a higher target percentage for HOV at 37.5 million annual passengers, and discuss the issue in the GEIR. Massport should also consider enforcement mechanisms for whatever HOV percentage emerges (for example, committing to set aside a sliding scale of funding for HOV/transit promotion and improvements if HOV goals do not reach the levels to which Massport has committed). In the GEIR, Massport should also consider the consolidation of rental car lots and the courtesy vehicles serving them. I understand that this form of air quality mitigation is in practice at other airports in the United States. C.40 C.41

Finally, the Final EIR and the analysis in the next GEIR should reflect proposed MBTA improvements in transit access to Logan, including the AITC, the Blue Line modernization, and the Urban Ring. In particular, the Urban Ring project, shortly scheduled to conclude its major investment study and begin MEPA review, promises not only to improve transit access to Logan, but also to enhance mobility, economic development, and the quality of life in many of the communities most affected by the airport -- East Boston, South Boston, Roxbury, Cambridge, Somerville, Everett, and Chelsea. C.42

UNIDIRECTIONALITY OF RUNWAY 14/32

C.43

The DEIR analyzes only the environmental impacts of a unidirectional Runway 14/32, with both take offs and landings following an easterly flight path largely over water. Any proposal to use the runway in a bidirectional manner would need additional MEPA review, including the scoping, preparation, and review of an entirely new EIR document. Ever since the Airside Improvements project was first proposed, Massport has publicly committed to keeping Runway 14/32 as a unidirectional runway. The Proposed Section 61 Findings in the Final EIR should include this enforceable commitment to unidirectionality. The Final EIR should also document any other legal or administrative processes, or any operational or environmental constraints, that can assure unidirectionality. In particular, Massport should detail how the modified court injunction can assure unidirectional use of Runway 14/32, how any FAA regulations may affect use of the runway, and whether any physical constraints (e.g., the Hyatt Hotel) would preclude or restrict the possible bidirectional use of Runway 14/32. C.44

CONSTRUCTION PERIOD

C.45

The Final EIR should include a detailed construction management plan that quantifies the number of daily and total truck trips. The Final EIR should also address the cumulative impacts of those

C.46

construction activities for the airside projects occurring simultaneously with Central Artery/Tunnel construction in East Boston, other projects at Logan Airport, and any other major construction activities planned to occur in East Boston. The Final EIR should also disclose the full impacts of any nighttime construction, and include an analysis of nighttime construction noise in residential areas potentially affected. C.47

The Final EIR and the GEIR should also discuss the feasibility of Massport's participation in the Clean Air Construction Initiative, both with respect to this project and other construction projects at the airport. This program involves retrofitting existing heavy construction equipment with emissions control technology. (The Central Artery/Tunnel project is already participating in this program, and the Department of Environmental Protection is actively discussing an expansion of the program with several other public agencies.) The Proposed Section 61 Findings should include appropriate commitments for construction period mitigation, in particular for the traffic, air quality, and noise impacts discussed above. C.48

Massport's preferred alternative involves a substantial amount of soil excavation. The Department of Environmental Protection has raised several issues regarding excavate classification and management, to which the Final EIR should respond in detail. C.49

OPEN SPACE/PARKLAND

The Boston area is fortunate to have large areas of open space, such as the Emerald Necklace, Arnold Arboretum, Franklin Park, and the Harbor Islands, that provide a refuge from busy urban life. Noise from passing aircraft can clearly impact the quality of these open spaces, and reduce their value for recreation or quiet contemplation. Although the legislation that created the Harbor Islands National Recreation Area relieved Massport and the FAA of Federal section 4(f) requirements for this project, it did not exempt impacts on the Harbor Islands from environmental review under MEPA. The Final EIR should analyze the environmental impacts of the airside projects (including cumulative impacts with other airport operations) on the Harbor Islands, Arnold Arboretum, Franklin Park, and the Emerald Necklace. I understand the desire to direct flight corridors over the least densely populated areas, and recognize that in the final analysis, such policies may be justifiable. However, that analysis must take place, to fully evaluate impacts and develop maximum feasible mitigation. C.50

RARE SPECIES

Massport's preferred alternative will impact the nesting and feeding habitat of the state endangered Upland Sandpiper (*Bartramia longicauda*) and will constitute the "taking" of a state-protected species under the Massachusetts Endangered Species Act. The DEIR commits to both on-site and off-site mitigation for rare species impacts. The discussion of on-site mitigation in the DEIR is generally adequate. However, the Final EIR should provide greater detail on the proposed off-site mitigation, including the specifics of the habitat restoration proposed at the Massachusetts Military Reservation. The Final EIR should also include sufficient information for the Natural Heritage Program to evaluate the merits of a Conservation Permit. The Proposed Section 61 Finding should include all on-site and off-site mitigation for impacts to rare species. C.51

NOTICE OF PROJECT CHANGE

At the time the DEIR was filed, Massport also filed a Notice of Project Change, based upon the three-year lapse in time since the filing of the ENF, and it requested a determination that no further review was required for the change. I deferred a decision on this request until the conclusion of the DEIR review period. Several commenters have argued that a Supplemental DEIR should be required based solely upon the lapse of time. I find, however, after considering the documents and the comments in light of the factors set forth in Section 11.10(6) of the MEPA Regulations, that any issues arising out

of the lapse of time can be adequately addressed in the FEIR or the GEIR, as the case may be.

SECTION 61 FINDINGS

C.52

The Final EIR should include Proposed Section 61 Findings for each area of impact associated with Massport's preferred alternative. I remind Massport of the importance of the Section 61 Findings as a mechanism for formalizing the mitigation commitments that emerge from the EIR process, and I expect that the Section 61 Findings will commit to appropriate mitigation.

COMMENTS

C.53

The Final EIR should include a copy of this Certificate and copies of all comments received, and it should respond to all substantive comments received. In particular, I wish to highlight the comments received from the United States Environmental Protection Agency, the Massachusetts Department of Environmental Protection, the Community Advisory Committee to Massport (and individual CAC members), the Conservation Law Foundation, the various New England state transportation agencies, the City of Boston Environmental Services Division, the La Salle Partnership, and the letters received from elected public officials. Together, these comment letters summarize most of the major substantive environmental issues raised by opponents, proponents, and neutral reviewers.

CIRCULATION

C.54

For those who submitted form letters for which addresses are available, Massport should send a Notice of Availability of the Final EIR and include information on comment deadlines and the time-sensitive nature of the review process. For those who submitted individual comment letters, Massport should circulate an Executive Summary of the Final EIR. The Executive Summary should include a cover letter with information on comment deadlines (including the time-sensitive nature of the documents under review), and information on where to obtain a full copy of the Final EIR. Massport should circulate the full Final EIR to its standard distribution list of agencies and community groups, as well as any additional parties specified in Section 11.16 of the MEPA regulations. Massport should Circulate a full copy of the Final EIR to the municipal libraries (including branch libraries) of Boston, Winthrop, Everett, Revere, Nahant, Malden, Medford, Melrose, Somerville, Cambridge, Chelsea, Brookline, Dedham, Milton, Quincy, Braintree, Weymouth, Hingham, Hull, Provincetown, Edgartown, and Nantucket. Massport should promptly furnish a full copy of the EIR to any party who requests a copy.

FOOTNOTES

- **Footnote 1.** The DEIR reports passenger emplanements in Table 2 4-1. These are only 50% of total passengers.
- **Footnote 2.** I suggest that the estimated impacts of teleconferencing should be discounted in this analysis, unless Massport can make a compelling case why this would affect Logan differently from other regional airports.
- **Footnote 3.** I also note the importance of maintaining South Station as the gateway to Amtrak's high speed rail link to New York, while the City of Boston pursues air rights development over the tracks. The EIR currently being prepared for that project (EOEA #9131) must contain a detailed construction mitigation program to ensure the smooth functioning of the station.
- **Footnote 4.** I note the potential for increased reliance on early morning and late evening flights as one potentially negative impact from PPP.
- **Footnote 5.** The review of the Runway 27 flight path was conducted at the federal level only.
- **Footnote 6.** The comment from the Environmental Protection Agency (among others) has raised several concerns with the assumptions used in the air quality analysis. The Final EIR should address these fully, to justify the conclusion that Massport's preferred alternative is associated with the lowest level of air quality impacts.

Dated: May 7, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs

Comments received :

2/26/99 David Bartol
3/2/99 David Prusky
3/3/99 Ann Hershfang
3/5/99 Mary Dreitlein
3/11/99 Joseph Kowalczyk
3/12/99 Charlie Ferguson
3/15/99 Eagle Hill Civic Association
3/15/99 Regina Marchi
3/18/99 Christopher Blackler
3/18/99 Myra Love
3/18/99 Martha Merson
3/18/99 Charles and Anna Dulcetta
3/19/99 Ellen Winkler
3/19/99 Barbara Bishop
3/22/99 Monika Corneille
3/22/99 Elizabeth Mazzarini
3/25/99 Brian Gallagher
3/26/99 Mark and Cathryn Stettler
3/29/99 William Falcetano (2)
3/29/99 Danielle Toth
3/29/99 Sal Lopes
3/29/99 Natalie Diffloth
3/30/99 Richard Lynds Esq.
3/30/99 Daniel and Jacqueline Llewellyn
3/31/99 Vincent Tino
3/31/99 Sean Shanahan
3/31/99 Corrine Case
4/2/99 Marjorie Rilleau Kallman
4/2/99 Aircraft Owners and Pilots Association
4/2/99 Greater Gardner Chamber of Commerce
4/2/99 Geraldine Townsend
4/2/99 William Townsend
4/2/99 David Banta and Caroline Coggeshall
4/4/99 Swissotel
4/6/99 Manchester Airport Director
4/6/99 Mary Quinn
4/6/99 Marriott Copley Place
4/6/99 Nantucket Island Chamber of Commerce
4/7/99 Richard Jordan
4/7/99 Laura Orlando
4/7/99 Community Advisory Committee to Massport
4/7/99 Frank and Eileen Furey
4/7/99 Krolman Corporation
4/7/99 William Falcetano
4/7/99 Quincy Representative to the Community Advisory Committee to Massport
4/7/99 Cape Air
4/7/99 Logan Airlines Management Council Cargo Subcommittee

4/7/99 Logan Airlines Management Council
4/7/99 Massachusetts Business Roundtable
4/7/99 Thomas Kershaw
4/7/99 City of Quincy City Council
4/7/99 Maryann Mahony
4/7/99 Squantum Community Association
4/7/99 Paul Guzzi
4/7/99 Ron Wayland
4/7/99 City of Boston Mayor Thomas Menino
4/7/99 PRI Automation
4/7/99 Representative Robert DeLeo
4/7/99 Senator Henri Rauschenbach
4/7/99 transcripts of oral testimony at 4/7 FAA/MEPA meeting
4/7/99 video of 4/7 FAA/MEPA meeting
4/8/99 transcripts of oral testimony at 4/8 FAA/MEPA meeting
4/8/99 video of 4/8 FAA/MEPA meeting
4/8/99 Mary Quinn
4/8/99 Nantucket Board of Selectmen
4/8/99 Marriott Long Wharf
4/8/99 William Manning
4/8/99 Nancy Crombie
4/8/99 Eleanora Olivolo
4/8/99 Winthrop Noise Air Pollution and Airport Hazards Committee
4/8/99 Jim McBride
4/8/99 City of Chelsea City Councillor Preston Galarneau
4/8/99 U.S. Representative Edward Markey
4/8/99 Ron Wayland
4/8/99 British Airways
4/8/99 Mary Furlong
4/8/99 Robert Hazel
4/8/99 Scott Godfrey, Air Transport Association
4/8/99 Mike Furlong
4/8/99 Craig and Linda Jolliffe
4/9/99 anonymous
4/9/99 Fitcorp
4/9/99 Richard Gill
4/9/99 Gregory DePatto
4/12/99 anonymous
4/12/99 New England Guatemalan Alliance
4/12/99 Krolman Presentations
4/12/99 National Association of Industrial and Office Properties
4/12/99 Tufts Associates
4/12/99 Mariott Peabody
4/12/99 Representative Eric Turkington
4/12/99 Eagle Hill Civic Association
4/13/99 Patricia Grasso
4/13/99 Mary Dreitlein
4/13/99 Nancy Brayton
4/13/99 Diana Goode
4/13/99 Anne Rogers
4/13/99 Charles Cann
4/13/99 Judith and John Silck
4/13/99 British Airways
4/13/99 City of Cambridge City Council
4/13/99 Emily Peckham
4/14/99 Daniel Toner
4/14/99 Paul Puzzanghero

4/14/99 Gil and Bonnie Lavoie
4/14/99 Lynn Mazzarulla
4/14/99 Vincent Ferne
4/14/99 Sherburne, Powers, Holland, & Knight
4/14/99 Greater Boston Convention & Visitors Bureau
4/14/99 City of Revere Planning and Community Development Department
4/14/99 David Foss
4/14/99 Madeleine Carlson
4/14/99 Olympia Mastrocola
4/14/99 John and Barbara Tomenico
4/14/99 Carmen Domenico
4/14/99 Town of Winthrop Noise Air Pollution and Airport Hazards Committee
4/15/99 U.S. Representative Edward Markey
4/15/99 Barbara Kaplan
4/15/99 John Archibald
4/16/99 National Association of State Aviation Officials
4/16/99 Sandra Kunz (Braintree Representative to CAC)
4/16/99 James Sliker
4/16/99 Lynn Thornton
4/16/99 Gerard Finch
4/16/99 Christine Toole
4/16/99 Will Lyman
4/16/99 Marty Epp
4/16/99 Daniel Barnett
4/16/99 Thomas Finnigan
4/16/99 Danielle Toth
4/16/99 Jacqueline Gambarini
4/16/99 Mike Lew
4/16/99 Peter Clarke
4/16/99 Sal Lopes
4/16/99 Todd Payton
4/16/99 Senator Michael Morrissey
4/16/99 Jacques Weissgerber
4/16/99 EMC Corporation
4/16/99 Andrea Taaffe
4/16/99 Suzan Kelly
4/16/99 Marie and James Stamos
4/16/99 Alan Wright
4/16/99 Slade Gorton & Co, Inc.
4/19/99 Jack Dolan
4/19/99 Derek Dyer
4/19/99 Nancy Doherty
4/20/99 M. Grazia Marzot
4/20/99 Michael Mercadante
4/20/99 Mo Lotman
4/20/99 Barbara White
4/20/99 Cape Cod Commission
4/20/99 William Weiser
4/20/99 Irving Fischman PhD
4/20/99 Hispanic-American Chamber of Commerce
4/20/99 Pauline DePari
4/20/99 Carolyn and Brent Banulis
4/20/99 Alice Granahan
4/20/99 Michael County
4/20/99 Adrienne Richardson
4/20/99 James McCaffery
4/20/99 James Conroy

4/20/99 Catherine Goldhammer
4/20/99 Dr. and Mrs. Robert Belknap
4/20/99 John Richardson
4/20/99 Edward Lowney
4/20/99 Cape Cod Economic Development Council
4/20/99 Carmela D'Amore
4/20/99 City of Revere City Council
4/20/99 Robert Green
4/20/99 JD Russell
4/20/99 David Weinstein (2)
4/20/99 Mark Warren
4/20/99 Pilot Block Neighborhood Association
4/20/99 Angela Healy
4/20/99 Marty Epp and Judy Mencher
4/20/99 Representative Patricia Jehlen
4/20/99 William Reid
4/20/99 Elliott Schiffman
4/20/99 Sterling Giles
4/20/99 Marine Cotton
4/20/99 Arthur Johnson
4/20/99 Robert Wynne
4/20/99 John Kilroy
4/20/99 John Archibald
4/20/99 Cape Cod Chamber of Commerce
4/20/99 Don Eunson
4/20/99 Susan Horn
4/20/99 Michael County
4/20/99 Lynn Palmer
4/20/99 Lawrence Paoella
4/20/99 Continental Airlines
4/20/99 Ellen Band
4/20/99 Jill Richard
4/20/99 Robert Fleming
4/20/99 Lawrence Yager
4/20/99 Beverly Sky
4/20/99 Barbara Kaplan
4/20/99 AIR, Inc (McGowan et al)
4/21/99 City of Cambridge City Manager
4/21/99 Michele LaMura
4/21/99 Elaine McGrath
4/21/99 Natural Heritage and Endangered Species Program
4/21/99 State of Maine Department of Transportation
4/21/99 Anastasia Lyman
4/21/99 Claudia Brede (2)
4/21/99 Kurt Walter (Cambridge Representative to CAC)
4/21/99 Town of Hingham Board of Selectmen
4/21/99 Al Fisher
4/21/99 Tilghman Evans
4/21/99 LaSalle Hotel Operating Partnership (by Goulston & Storrs)
4/21/99 Sandra Gibbs
4/21/99 Catherine Brayden
4/21/99 Panamai Manadee
4/21/99 Debra Biba and Rob Everts
4/21/99 Deirdre Smith
4/21/99 Beth Manaster
4/21/99 Sheryl White
4/21/99 Carol Rego

4/21/99 Anthony Espy
4/21/99 Mrs. Regina Marchi
4/21/99 Barbara McDonough
4/21/99 Allison Stieber
4/21/99 Martha Gjesteby
4/21/99 Dovi Abbey (Roxbury Representative to CAC)
4/21/99 M. Blossom Hoag
4/21/99 Ethan Hoag
4/21/99 Mr. and Mrs. Joseph Nucci
4/21/99 Nantucket Planning and Economic Development Commission
4/21/99 Cheryl Balukonis
4/21/99 Mary Berninger
4/21/99 Peter Alachi
4/21/99 Noise Pollution Clearinghouse
4/21/99 Richard Salini
4/21/99 anonymous
4/22/99 S. Kay Gibbs
4/22/99 William Manning
4/22/99 Town of Provincetown Town Manager
4/22/99 Cape Air
4/22/99 Dorchester Allied Neighborhood Associations
4/22/99 City of Chelsea City Councilor Marilyn Portnoy
4/22/99 Senate President Thomas Birmingham
4/22/99 Representative Timothy Toomey
4/22/99 City of Somerville Board of Alderman
4/22/99 Chester Atkins for Save Our Heritage
4/22/99 City of Boston City Councillor Paul Scapicchio
4/22/99 Friends of Belle Isle Marsh
4/22/99 Representative Christopher Fallon
4/22/99 Representative Liz Malia
4/22/99 Representative Paul Demakis
4/22/99 Acting Mayor of Somerville William Roche
4/22/99 Massachusetts Audubon Society
4/22/99 Michael Dukakis, former Governor
4/22/99 Fred Salvucci
4/22/99 United States Environmental Protection Agency
4/22/99 Senator Robert Travaglini
4/22/99 City of Somerville Alderman William White
4/22/99 State of Vermont Agency of Transportation
4/22/99 The Franklin Park Coalition
4/22/99 Constance Cecil
4/22/99 Robert and Kathleen Hathaway
4/22/99 City of Malden Representative to the Community Advisory Committee to Massport
4/22/99 Margaret Sanfilippo
4/22/99 Ellis Neighborhood Association, Inc.
4/22/99 Susan Strauss
4/22/99 Town of Winthrop Noise Air Pollution and Airport Hazards Committee Environmental Health Facts Subcommittee
4/22/99 Marguerite Scott
4/22/99 Brian Culver
4/22/99 Thomas McNiff
4/22/99 Jerry Shine
4/22/99 Margaret Webster
4/22/99 Jane Sauer
4/22/99 Barbara Kaplan
4/22/99 Stephen Muench, Executive Director MAC
4/22/99 Darryl Pomicter

4/22/99 American Airlines
4/22/99 Ramon Bueno and Debra Weisberg
4/22/99 Dick Bauer
4/22/99 Lauri Webster
4/22/99 Tad Flynn
4/22/99 Ann Hershfang
4/22/99 Provincetown Municipal Airport Commission
4/22/99 Beacon Hill Civic Association, Inc.
4/22/99 John Mahony
4/22/99 Catherine Goldhammer
4/22/99 Claudia Brede
4/22/99 Peter Alachi
4/22/99 Kimberly Iris Mills
4/22/99 Elizabeth Aberg
4/22/99 Anita Martin
4/22/99 Barnstable Municipal Airport Commission
4/22/99 Stephen Thress
4/22/99 Dr. Jo Loughnane
4/22/99 Deborah Santiano-McHatton
4/22/99 Edwina Yezierski
4/22/99 Brian Merrick
4/22/99 Alicia Stoddard
4/22/99 Duane Andrews RN
4/22/99 Ron Morgese
4/22/99 Robert Ridolfi
4/22/99 Mary Jane Quinn (with photos)
4/22/99 Richard Goldhammer (Hingham Representative to CAC)
4/22/99 Lynn Conroy
4/22/99 Jeannette MacDonald
4/22/99 Robert Carney
4/22/99 The New England Council
4/22/99 Robert Billings
4/22/99 Doris Hogan
4/22/99 T. Brown
4/22/99 anonymous
4/22/99 Jacques Weissgerber
4/22/99 Franklyn and Barbara Schafer
4/22/99 Nina Garfinkle
4/22/99 Christopher Morton
4/22/99 Stephanie Moura and Kate Keeler
4/22/99 The South Boston Environmental Health Watch
4/22/99 East Boston Land Use Advisory Council
4/22/99 Gerard Sperry
4/22/99 John O'Connor
4/22/99 Robert and Katherine Strojny
4/22/99 Lisa Scannell
4/22/99 Jeffries Point Neighborhood Association (with petition signed by 304 people opposed to project and 19 form letters opposed to project)
4/22/99 E. Vincent Sullivan
4/22/99 Mark Ingaciola
4/22/99 Bradford and Jane Tripp
4/22/99 Harold and Lorraine Lincoln
4/22/99 Charles and Susan Berry
4/22/99 Alice Granahan
4/22/99 Provincetown AIDS Support
4/22/99 Carla Wilbur
4/22/99 Mary Jane Quinn (with video from Mary Jane Quinn and Elaine McGrath)

4/23/99 Representative Byron Rushing
4/23/99 Beachmont Neighborhood Association, Inc.
4/23/99 Town of Hull Board of Selectmen (by Town Manager)
4/23/99 Building and Construction Trades Council of the Metropolitan District
4/23/99 Jean Riesman
4/23/99 The Seaport Alliance for a Neighborhood Design
4/23/99 Karen Rucker
4/23/99 Jeffries Point Neighborhood Association (with petition signed by 17 people opposed to project)
4/23/99 Barbara Bishop
4/23/99 Boston Harbor Islands Advisory Council
4/23/99 International Union of OPerating Engineers
4/23/99 Anthony Petruccelli
4/23/99 City of Chelsea City Manager Guy Santagate
4/23/99 Town of Winthrop Board of Selectmen
4/23/99 Mary Ellen Welch
4/23/99 U.S. Representative John Joseph Moakley
4/23/99 U.S. Department of the Interior
4/23/99 Carol Kiley
4/23/99 Roberta Horn
4/23/99 Bernice Mader
4/23/99 City of Chelsea City Councillor Rochelle Bennett
4/23/99 Jack Christin, Jr.
4/23/99 Amanda Sawires
4/23/99 Jon Burk
4/23/99 Albert Engelhart
4/23/99 Mary Moynihan
4/23/99 John McKennan
4/23/99 Alice Mahoney
4/23/99 Alliance of Boston Neighborhoods
4/23/99 Ronald Fama
4/23/99 Iron Workers District Council of New England
4/23/99 Provincetown Business Guild (with petition with 87 signatures in support of project)
4/23/99 Masspirg
4/23/99 Irv Englander
4/23/99 Senator Stephen Lynch
4/23/99 Charlestown Business Association
4/23/99 MJ Research, Inc.
4/23/99 Chelsea Waterfront Association
4/23/99 N.E.E.D. Logan
4/23/99 Representative Eugene O'Flaherty
4/23/99 Representative Kevin Fitzgerald
4/23/99 Joseph Gulino (Melrose Representative to the CAC)
4/23/99 GreenWorks (John O'Connor)
4/23/99 Conservation Law Foundation
4/23/99 Bear Stearns Co.
4/23/99 Greater Boston Chamber of Commerce
4/23/99 Mona Thaler
4/23/99 AIR, Inc. (by McGowan et al)
4/23/99 Massachusetts Sierra Club
4/23/99 Matthew Baronas
4/23/99 100 Captain's Row Condominium Trust
4/23/99 Admiral's Way Condominium Trust
4/23/99 Leeward Heights Condominium Trust
4/23/99 100 Commandant's Way Condominium Trust
4/23/99 Clipper Condominium Trust
4/23/99 Breakwater Condominium Trust

4/23/99 City of Boston Mayor Thomas Menino
4/23/99 City of Boston Environmental Services
4/23/99 Metropolitan Area Planning Council
4/23/99 Neighborhood Association of the Back Bay, Inc.
4/23/99 Edith De Angelis
4/23/99 Massachusetts Department of Environmental Protection
4/26/99 Fidelity Investments
4/26/99 City of Boston City Councillor Charles Yancey
4/26/99 Lory Newmeyer and Steve Cooper
4/26/99 Stephen Lathrop
4/26/99 Lauri Webster
4/26/99 Teamsters Union Local 379
4/26/99 Edward D'Alelio
4/26/99 Town of Hull Planning Board
4/26/99 International Union of Operating Engineers Local 4
4/26/99 Robert De Mayo
4/26/99 Back Bay Photo Imaging
4/26/99 Mark and Cathryn Stettler
4/26/99 Sarah Buermann
4/26/99 Ivan and Nancy Blecher
4/26/99 Barry Corden
4/26/99 Provincetown Municipal Airport Commission
4/26/99 Representative Joseph Sullivan
4/26/99 Winthrop Chamber of Commerce
4/26/99 Charlestown Business Association
4/26/99 Francis McHugh
4/26/99 Air Transport Association
4/26/99 Sharon Fisher
4/27/99 City of Somerville Board of Alderman (with video)
4/27/99 Charlie Ferguson
4/27/99 Melissa Sciter
4/27/99 Fuld and Company
4/28/99 Heather Hughes
4/28/99 Charlie Ferguson
4/28/99 McCarthy, Allegretto & McCarthy
4/28/99 Construction and General Laborers' Union Local 22
4/28/99 Arthur Hartnett
4/28/99 Frances Keyes
4/29/99 National Association of Railroad Passengers
4/30/99 Cape Cod Legislative Delegation
4/30/99 Edwina Yezierski
4/30/99 Alex Geourntas (Roslindale/Hyde Park Representative to the CAC)
4/30/99 Louis DiSano
various dates 697 form letters in opposition to the project
various dates 57 phone calls in opposition to the project and 1 phone call in support

BAD/ASP/asp

Certificate of the Secretary of Environmental Affairs on the Logan Airside Improvements Planning Project Draft EIR

Code	Topic 1	Topic 2	Comment	Response
C.1	Regional Transportation	Regional Airports	Although I strongly agree on the importance of the regional transportation network, I disagree with the contention that Massport's treatment of this subject in the DEIR has been insufficient. The scope issued by then-Secretary Coxe in 1995 did not require the study of a new second airport, and I am not reopening that issue in the context of this review.	Comment noted.
C.2	Regional Transportation	Regional Airports	The DEIR suggests that the existing airports at Worcester, Manchester, and Providence, seen together, may serve as Boston's "second airport." In the Final EIR, Massport must study the planned improvements at those airports in greater detail, to show the effects upon passenger traffic at Logan...Potential commitments or mitigation relating to regional transportation include: ■ improved ground access to Worcester Airport; ■ widening Route 3 to the New Hampshire border, to improve access to Manchester Airport; ■ funding construction of a rail station at Providence Airport; and ■ implementation of the Urban Ring to improve transit access to Logan.	An expanded and updated discussion of the regional alternatives is presented in Chapter 2 of the Supplemental DEIS/FEIR. Massport supports all the planned improvement projects that will enhance the attractiveness of the regional airports as alternatives to Logan Airport. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a description of the upcoming New England Airports System Study.
C.3	Alternatives	Peak Period Pricing	...I am requiring Massport to enhance its PPP study, including a tightly crafted exemption that will protect greatly affected communities from losing connections to the national air network.	Refer to Section 4.5 of the Supplemental DEIS/FEIR for an expanded discussion of PPP. An exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5.3 of the Supplemental DEIS/FEIR. The section provides an illustrative exemption program and its impact on the delay reduction potential of PPP.
C.4	Alternatives	Peak Period Pricing	I am requiring Massport to seek FAA approval for a PPP program as soon as it begins to yield real benefits.	Massport will take all steps necessary to implement PPP with an appropriate exemption program when such a program is appropriate. No formall FAA approval of PPP is required. Also, refer to response to Comment C.21.
C.5	Air Quality	Emission-Based Landing Fees	In the Generic EIR (see below), I am requiring Massport to develop a system of market-based, revenue-neutral landing fees that would reward cleaner planes with lower charges on the principle that "the polluter pays."	The EOEA May 7, 1999 Certificate on the Airside Project Draft EIS/EIR requested that Massport undertake a feasibility study of implementing measures to reduce Nox emissions at Logan. This study is currently underway and will be presented to MEPA by the end of March 2001.
C.6	Ground Transportation	Access To Logan	In the FEIR and/or the GEIR, I have required Massport to work with the MBTA to improve transit access to Logan via the Blue Line and the Airport Intermodal Transit Connection (AITC);	Massport is working with the MBTA to improve transit access to Logan Airport via the Blue Line and the Airport Intermodal Transit Connector (AITC). Section 2.7 of the Supplemental DEIS/FEIR discusses the proposed MBTA improvements in transit access to Logan Airport. The *Logan Airport 1999 ESPR* (previously GEIR), reports on the status of these ground transit improvement projects.

Code	Topic 1	Topic 2	Comment	Response
C.7	Noise	Hushkitted Aircraft	In the FEIR and/or the GEIR, I have required Massport to work with the Federal Aviation Administration (FAA) to limit the use of noisier "hush-kitted" aircraft;	Massport's initial efforts have been to focus discussion with Logan Airport carriers to encourage substitution of full Stage 3 certified aircraft for hushkitted aircraft where feasible. Both the Supplemental DEIS/FEIR and the *Logan Airport 1999 ESPR* (previously GEIR) discuss the status of and potential for reducing the use of hushkitted Stage 3 aircraft. Refer to Section 8.4 of the Supplemental DEIS/FEIR.
C.8	Air Quality	Alternative Fuels	In the FEIR and/or the GEIR, I have required Massport to set numerical targets for converting ground service equipment to clean fuels;	The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's Alternative Fuels Vehicle program and on Massport's efforts to encourage the use of alternative fuel vehicles.
C.9	Noise	PRAS	In the FEIR and/or the GEIR, I have required Massport to provide more accountability for FAA compliance with the Preferential Runway Advisory System (PRAS) goals, which are intended to distribute aircraft noise more equitably among affected communities.	Massport has developed PRAS goals to which the FAA attempts to achieve given weather and safety conditions. Section 4.3 of the Supplemental DEIS/FEIR provides an evaluation of existing measures for monitoring PRAS achievement and demonstrates that the FAA has improved its performance relative to the PRAS goals. The Preferred Alternative mitigation program includes additional reporting requirements recommended to enhance the Massport monitoring effort.
C.10	Noise	Soundproofing	In the FEIR and/or the GEIR, I have required Massport to continue to implement and extend its residential soundproofing program, to ensure full access for all residents who are entitled to its benefits.	Section 8.5 of the Supplemental DEIS/FEIR describes the sound insulation proposed for the affected residences that fall within the 65 dB DNL contour for the Preferred Alternative as defined by the 29M Low Fleet scenario. Massport reported on progress on its existing sound insulation program in the *Logan Airport 1999 ESPR* (previously GEIR). In addition sound insulation will be provided for affected residences impacted by the Preferred Alternative as discussed in Section 6.8 of the Supplemental DEIS/FEIR.
C.11	Delay	Model	...[T]he Final EIR should thoroughly explain and justify Massport's delay modeling, as a response to a number of substantive comments. The Final EIR should explain the differences among Massport, the Federal Aviation Administration, and the Federal Department of Transportation methods of calculating delays, and discuss any implication for the environmental analysis. Information on delays should be presented in quantitative terms (e.g., average minutes of delay per flight), and compared over time at least since 1993 for Logan and other major U.S. airports.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports.
C.12	Delay	Model	...The Final EIR should clarify the base case year used in the delay analysis (and other areas, such as noise and air emissions). If 1993 was indeed the base year, the FEIR should include a "sensitivity analysis" using a more recent year (or average of several recent years) as a baseline, and evaluate the effect on the report's conclusions.	Using 1993 had the benefit of representing a worst case scenario for both noise impacts and delays due to over-scheduling. The Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. The No Action Alternative is the appropriate "base" comparison for assessing future year conditions and the effectiveness of the Airside Project. The Supplemental DEIS/FEIR expands upon the discussion between current and historical conditions and can be found in Section 4.2 of the Supplemental DEIS/FEIR.
C.13	Regional Transportation	Regional Airports	...[T]he FEIR must report on the current status of ground access improvements to all four airports proposed by state transportation agencies in Massachusetts or other states ... including projected dates for completion of studies and/or construction.	Chapter 2 of the Supplemental DEIS/FEIR discusses the impact of planned ground access improvement projects at Logan Airport and the regional airports on passenger traffic levels and high-speed rail passenger diversion estimates.

Code	Topic 1	Topic 2	Comment	Response
C.14	Regional Transportation	Regional Airports	...[T]he FEIR must quantify the effects of these measures upon projected passenger levels at each of the airports, including Logan. The projections for ridership on Amtrak's high-speed rail, and potential diversions from Logan, should also be updated to reflect the best current information.	Section 2.8 of the Supplemental DEIS/FEIR discusses passenger and activity growth at the regional airports and their effect on Logan Airport's projected passenger and activity levels. With regard to ridership projections on Amtrak's high-speed rail, the Airside Project Draft EIS/EIR described in detail the best current information. No updated projections are available. Refer to Appendix B of the Supplemental DEIS/FEIR for Amtrak's letter stating that no revised ridership estimates are available.
C.15	Regional Transportation	Regional Airports	...I caution both Massport and reviewers not to focus on the impacts associated with the 45 million passenger scenario, but rather on the impacts of the 37.5 million passenger scenario	Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR.
C.16	Regional Transportation	Regional Airports	...[I]t is more important than ever that we understand the environmental impacts of increased use of regional airports...The FEIR must try to evaluate the environmental impacts of these improvements on a regional, as well as a local basis...Because Manchester and Providence airports are in other states, and because the proposed ground access improvements at Worcester are at such a preliminary stage, I am not requiring Massport to perform independent EIR level review of local impacts at those facilities. Rather, Massport should rely upon existing reports to summarize information on the predicted levels of environmental impacts (such as noise contours, air emissions, vehicle miles traveled, and impacts on wetlands and other critical resources) caused by the physical improvements and predicted passenger levels...	Appendix B of the Supplemental DEIS/FEIR describes available environmental documents for the regional airports (T.F. Green/Providence, Manchester, Worcester Regional and Hanscom Field airports) and summarizes predicted levels of environmental impacts of proposed improvement projects and forecast activity levels.
C.17	Regional Transportation	Regional Airports	Many commenters have urged the study of a new second major airport as an alternative to this project. The scope did not require this analysis, and I am not reopening that issue in the context of the airside project review.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
C.18	Regional Transportation	Regional Airports	Many comments have also suggested that commercial service at Hanscom Field in Bedford should be considered as a project alternative. Massport argues that commercial service at Hanscom is not likely to constitute a feasible alternative to Logan in the foreseeable future...[T]o back up Massport's contention, the Final EIR should address in qualitative terms the environmental impacts of commercial service at Hanscom; opportunities to divert an even higher share of Logan's GA operations to Hanscom and other regional airports and any legal impediments to such measures.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
C.19	Regional Transportation	Regional Airports	New Bedford Airport has been suggested as a reliever airport for cargo traffic. Massport should report upon the status of MEPA review for the proposed expansion of New Bedford Airport (EOEA #10316), which had previously involved the filling of an unprecedented area (over 40 acres) of protected wetlands.	Massport reports on the status of the New Bedford Airport Project in Section 2.6 of the Supplemental DEIS/FEIR.
C.20	Regional Transportation	Regional Airports	The Proposed Section 61 Findings must detail specific steps to be taken by Massport and other state transportation agencies, to ensure that Worcester, Manchester, and Providence airports, together with Logan, will operate jointly as the key elements in an efficient and environmentally balanced regional air network.	Refer to Chapter 2 of the Supplemental DEIS/FEIR. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.21	Alternatives	Peak Period Pricing	I find that the DEIR has not provided enough information to discount PPP as a legitimate (and perhaps even necessary) part of the environmental mitigation associated with any airside improvements. The Final EIR must include a much more refined analysis of Peak Period Pricing, including a full evaluation of positive and negative environmental impacts... The analysis should account for potential alterations in flight mix resulting from PPP (*i.e.*, the possibility of flight consolidation to Logan or diversion to other airports), and it should draw upon past PPP analysis, such as the PACE program and the 1993 Strategic Assessment Report. Most importantly, the Final EIR should re-analyze the delay effects of a PPP program that contains a tightly crafted exemption for greatly affected communities, to ensure that they do not lose access, through Logan or other regional airports, to the national air network.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. In the current environment, airline over-scheduling is not a significant contributor to Logan Airport delays and, therefore, PPP was not recommended for immediate implementation. In addition, PPP imposes significant costs on regional airlines and is expected to restrict access to certain markets. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.

Code	Topic 1	Topic 2	Comment	Response
C.22	Alternatives	Peak Period Pricing	In the Final EIR and the Proposed Section 61 Findings, Massport should commit to regular monitoring of peak-period airline schedules and delays, to be reported in the Generic EIR and its Annual Updates.	Refer to Section 4.5.4 of the Supplemental DEIS/FEIR for a discussion of the proposed PPP Monitoring Program, which is designed to identify the conditions when airline overscheduling will become a significant contributor of delay. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.23	Alternatives	Peak Period Pricing	The Final EIR must also define appropriate conditions at which Massport will begin seeking the necessary federal and state regulatory processes, in order to implement a properly structured PPP program.	Refer to Section 4.5.4 of the Supplemental DEIS/FEIR.
C.24	Environmental Review Process	Public Process	...the Final EIR should include more detailed demographic data on the affected populations in both tabular and graphic form, analysis of the full range of impacts (including noise impacts within the 60 dB contour), a comparison of the affected population with that of Boston and the other affected municipalities, and a discussion of the community participation process used in preparing the Draft and Final EIRs.	More detailed graphics showing affected population and land uses are set out in Chapters 5 and 6 of the Supplemental DEIS/FEIR. Also, data on noise-affected population have been added or made clearer in tables in the Supplemental DEIS/FEIR. There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
C.25	Noise	Mitigation	I am convinced that simply soundproofing the most affected residences and completing the phase-in of quieter Stage 3 aircraft, which is required under Federal law by the end of 1999, cannot be the final answers to the issue of noise mitigation.	Massport's Noise Rules and FAA-approved sound insulation program have been only two elements of its overall noise abatement program. An expanded discussion of Massport's Noise Abatement Program is included in Chapter 8 of the Supplemental DEIS/FEIR. Massport is currently supporting FAA's effort to improve conformance to the new Runway 27 flight corridor and explored means of extending its sound insulation program through innovative investigation of hill effects on sound propagation as discussed in the *Logan Airport 1999 ESPR*. Massport is also actively involved in encouraging growth at Worcester Regional Airport and other alternative airports, and is committed to monitoring and improving the PRAS.
C.26	Noise	Impacts	... The Final EIR should quantify the number of "new" people within each noise contour under the preferred alternative. It should also present information on the 60-65 dB noise contour within the text, and not just in the appendices.	Refer to Tables 5.2-3 and 6.2-3 through 6.2-5 of the Supplemental DEIS/FEIR for population data down to DNL values of 60 dB. Also, refer to newly included and newly excluded populations attributable to the Preferred Alternative in Tables 6.2-6 through 6.2-7 of the Supplemental DEIS/FEIR.
C.27	Noise	Nighttime Noise	At the core of the noise abatement policy stands the commitment in the 1994/95 GEIR to "minimizing nighttime noise and to addressing and responding to noise issues and complaints." ...it is time to turn these general policy goals into specific noise mitigation commitments.	Refer to response to Comment C.7. Massport is committed to a comprehensive noise abatement program, including addressing nighttime noise, as set out in response to Comment C.25.
C.28	Noise	Soundproofing	The Final EIR and the Proposed Section 61 Finding should contain feasible implementation measures to ensure full access to the soundproofing program for all residents who are entitled to its benefits.	Massport is committed to ensuring access to sound insulation for all eligible dwelling units. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.29	Noise	Mitigation	Given the number of people who are potentially ineligible for soundproofing because of modeling limitations, in the Final EIR Massport should examine further refinements to its contours that would ensure full access to soundproofing for all affected residents. Also in the Final EIR, Massport must commit to providing soundproofing for all residents currently within the 65 dB contour, even if they would otherwise lose their eligibility as a result of this project.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update)*. In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.

Code	Topic 1	Topic 2	Comment	Response
C.30	Noise	Soundproofing	I am concerned that the residences most in need of soundproofing will be in low income areas with relatively high proportions of sub-standard housing. The Final EIR should explain how often such circumstances have occurred in the past. If some (presumably low income) residents are likely to be denied noise mitigation on this grounds, the FEIR and the Proposed Section 61 Finding should consider financial or other programs to ensure equal access to noise mitigation.	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport sponsored sound insulation program. However, to address impacts in particular projects such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of the mitigation program to the extent such improvements are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes. For the eligible residences, the FAA will fund building code improvements, to the extent necessary, to implement effective sound insulation treatment. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.31	Noise	PRAS	...the Final EIR should discuss whether any updates of the PRAS goals are contemplated, and detail any mechanisms for ensuring that the program fulfills its objective of creating an equitable noise distribution.	Section 4.3 of the Supplemental DEIS/FEIR demonstrates that there have been no significant demographic changes to warrant an update of the PRAS goals. The Preferred Alternative mitigation program includes additional reporting requirements recommended to enhance the PRAS monitoring effort. Section 6.2 of the Supplemental DEIS/FEIR addresses the reductions in numbers of most highly exposed people that benefit from improved PRAS achievement under the Preferred Alternative. These reductions are consistent with the PRAS goals.
C.32	Noise	PRAS	Massport must show in the FEIR that its prediction of the future effects of the PRAS goals do not over-estimate FAA's ability and willingness to implement them, as based on past experience.	Section 4.3 of the Supplemental DEIS/FEIR demonstrates that the FAA has improved its performance in achieving the PRAS goals since the enhanced PRAS was installed. The Preferred Alternative mitigation program includes several new elements for an expanded PRAS monitoring and reporting system to encourage FAA controllers. The unidirectional Runway 14/32 would enable FAA controllers to significantly improve achievement of PRAS goals.
C.33	Noise	PRAS	...the FEIR and the Proposed Section 61 Finding must include protocols for monitoring adherence to the PRAS goals, and periodic disclosure of the monitoring results...	Refer to Section 4.3.5 on PRAS monitoring and Section 8.5 of the Supplemental DEIS/FEIR regarding Massport's continued commitment to improve PRAS monitoring and periodic disclosure. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.34	Noise	PRAS	The Final EIR should discuss the relationship between the airside program and the recently completed Runway 27 EIS, describe any cumulative impacts on the corridor, and analyze the consistency of the noise impacts with the PRAS goals.	Section 5.2.3 of the Supplemental DEIS/FEIR addresses differences in flight tracks between the Supplemental DEIS/FEIR, the Runway 27 EIS, and the *Logan Airport 1997 and 1998 Annual Updates.* Updates of the noise contours from operations on all runways, including for Runway 27, is discussed in Section 6.2 of the Supplemental DEIS/FEIR.
C.35	Noise	Nighttime Noise	...the PRAS goals seek to route all nighttime flights over the water between 12PM and 6AM. In the FEIR, Massport should report on the feasibility of extending this preferential nighttime period to the hours of 10 PM to 7 AM, and the effect of this change on noise levels and contours.	Section 4.3.6 of the Supplemental DEIS/FEIR provides an analysis of extending the preferential nighttime period from 10 PM to 7 AM.

Code	Topic 1	Topic 2	Comment	Response
C.36	Noise	Hushkitted Aircraft	Massport should begin discussions now with FAA, with the goal of instituting restrictions, either locally or nationally, on hushkitted Stage 3 aircraft.	Massport commits to continue discussions with airlines with the goal of reducing use of hushkitted Stage 3 aircraft at Logan Airport.
C.37	Air Quality	Emissions-Based Landing Fees	Now is the time to implement the broad goal of maintaining or reducing Logan's overall environmental impacts, even as annual passenger volumes rise in the future. To make this commitment more effective, in the GEIR Massport must examine the feasibility of a system of market-based, revenue-neutral landing fees that reward cleaner planes with lower charges, on the principle that "the polluter pays." ... In the GEIR, I am directing Massport to develop and model a system of emissions-based landing fees.	Refer to response to Comment C.5.
C.38	Air Quality	Alternative Fuels	As an initial step toward reducing emissions, Massport should set numerical annual targets in the GEIR for the conversion of its tenants' ground service equipment to clean fuels, and for providing electric power to aircraft at all gates.	As specified in the *Logan Airport 1999 ESPR*, Massport will use the results of its alternative fuel survey to evaluate the feasibility of setting alternative fuel targets for tenant ground service equipment and vehicles.
C.39	Ground Transportation	Access To Logan	One of the cornerstones of Massport's ground access strategy is a commitment to a 35.2% mode share for High Occupancy Vehicles (HOV) when passenger volumes reach 37.5 million annually. ...[A]lthough this goal translates into an increase in HOV mode shares from the present, it also represents a substantial increase in the absolute number of non-HOV trips to the airport, due to the large increase in total number of passengers. Massport has not shown how these non-HOV trips will be accommodated under the parking freeze. Massport should consider a higher target percentage for HOV at 37.5 million annual passengers, and discuss the issue in the GEIR.	The *Logan Airport 1999 ESPR* (formerly the GEIR) which was filed on December 15, 2000, examines the feasibility of a higher target percentage for air passenger HOV ridership than 35.2 percent and discusses parking demand and management.
C.40	Ground Transportation	Access To Logan	Massport should also consider enforcement mechanisms for whatever HOV percentage emerges...	Refer to response to Comment C.39.
C.41	Ground Transportation	Mitigation	In the GEIR, Massport should also consider the consolidation of rental car lots and the courtesy vehicles serving them.	The *Logan Airport 1999 ESPR* (previously GEIR), which was filed on December 15, 2000, discusses the benefits of consolidating rental car lots and the courtesy vehicles serving them.
C.42	Ground Transportation	Access To Logan	...[T]he Final EIR and the analysis in the next GEIR should reflect proposed MBTA improvements in transit access to Logan, including the AITC, the Blue Line modernization, and the Urban Ring.	Refer to response to Comment C.6.
C.43	Alternatives	Runway 14/32	Any proposal to use Runway 14/32 in a bidirectional manner would need additional MEPA review, including the scoping, preparation, and review of an entirely new EIR document.	Massport agrees with this comment. The projected unidirectional use of Runway 14/32 is based upon operational, efficiency and safety concerns, as well as environmental considerations. Moreover, the environmental analyses developed for the Supplemental DEIS/FEIR are based upon the proposed runway being used in a unidirectional manner (*i.e.*, it will be available only for arrivals and departures conducted over Boston Harbor). The unidirectional limitation is inherent to the Runway 14/32 concept that is the subject of the Federal and state environmental review processes.
C.44	Environmental Review Process	MEPA	The Proposed Section 61 Findings in the Final EIR should include this enforceable commitment to unidirectionality. The Final EIR should also document any other legal or administrative processes, or any operational or environmental constraints that can assure unidirectionality.	Draft Section 61 Findings are in Section 8.7 of the Supplemental DEIS/FEIR. Refer to the discussion of unidirectionality in Section 8.5 of the Supplemental DEIS/FEIR.
C.45	Construction	Mitigation	The Final EIR should include a detailed construction management plan that quantifies the number of daily and total truck trips.	A discussion of the construction phasing, truck trips, and mitigation measures to be employed during construction of the Preferred Alternative is presented in Section 6.9 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
C.46	Construction	Impacts	The Final EIR should also address the cumulative impacts of those construction activities for the airside projects occurring simultaneously with Central Artery/Tunnel construction in East Boston, other projects at Logan Airport, and any other major construction activities planned to occur in East Boston.	The cumulative construction impacts associated with the airside projects occurring simultaneously with the Central Artery/Tunnel (CA/T) construction and other projects at Logan Airport and in East Boston are not anticipated to be significant because of project coordination and mitigation programs that will reduce construction period impacts. The peak cumulative construction traffic would occur in 2003, mostly as a result of concurrent CA/T construction on the airport. Truck traffic associated with construction decreases significantly after 2003 as CA/T construction on the airport is completed. Refer to Section 7.5 of the Supplemental DEIS/FEIR for a discussion of cumulative construction impacts.
C.47	Construction	Impacts	The Final EIR should also disclose the full impacts of any nighttime construction, and include an analysis of nighttime construction noise in residential areas potentially affected.	Section 6.9 of the Supplemental DEIS/FEIR includes an analysis of nighttime construction noise in potentially affected residential areas. There is no significant impact.
C.48	Construction	Air Quality	The Final EIR and the GEIR should also discuss the feasibility of Massport's participation in the Clean Air Construction Initiative, both with respect to this project and other construction projects at the airport. The Proposed Section 61 Findings should include appropriate commitments for construction period mitigation, in particular for the traffic, air quality, and noise impacts discussed above.	As stated in Section 6.9 of the Supplemental DEIS/FEIR, Massport is committed to implementing the Clean Air Construction Initiative in cooperation with MADEP and Northeast States for Coordinated Air Use Management (NESCAUM). Furthermore, construction will conform to FAA AC 150/5370-10A, *Standards for Specifying Construction of Airports*. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
C.49	Soil/Sediment	Reuse/Disposal	Massport's preferred alternative involves a substantial amount of soil excavation. The Department of Environmental Protection has raised several issues regarding excavate classification and management, to which the Final EIR should respond in detail.	The Airside Project Draft EIS/EIR presented language to provide context for Governors Island soil classification that was initially conducted before the current Massachusetts Contingency Plan (MCP) was implemented. The volume of excavate has been reduced as a result of the on-going removal of stockpiled Central Artery/Tunnel soil material from Governors Island, and the findings of a subsurface investigation program show that much of the existing soil material on the airport is suitable for construction and therefore does not have to be removed. The Supplemental DEIS/FEIR has been revised to incorporate DEP comments and to minimize confusion between the two classification terminologies.
C.50	Noise	Open Space/ Parkland	The Final EIR should analyze the environmental impacts of the airside projects (including cumulative impacts with other airport operations) on the Harbor Islands, Arnold Arboretum, Franklin Park, and the Emerald Necklace.	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands. See also 49 U.S.C. Section 47101 (h) (2) which provides that Logan Airport operations are not deemed to constitute use of the Boston Harbor Islands.

Code	Topic 1	Topic 2	Comment	Response
C.51	Ecosystem	Rare Species	The discussion of on-site mitigation [for rare species impacts] in the DEIR is generally adequate. The Final EIR should provide greater detail on the proposed off-site mitigation, including the specifics of the habitat restoration proposed at the Massachusetts Military Reservation. The Final EIR should also include sufficient information for the Natural Heritage Program to evaluate the merits of a Conservation Permit. The Proposed Section 61 Finding should include all on-site and off-site mitigation for impacts to rare species.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
C.52	Environmental Review Process	MEPA	The Final EIR should include Proposed Section 61 Findings for each area of impact associated with Massport's preferred alternative. I remind Massport of the importance of the Section 61 Findings as a mechanism for formalizing the mitigation commitments that emerge from the EIR process, and I expect that the Section 61 Findings will commit to appropriate mitigation.	Draft Section 61 Findings are in Section 8.7 of the Supplemental DEIS/FEIR.
C.53	Environmental Review Process	MEPA	The Final EIR should include a copy of this Certificate and copies of all comments received, and it should respond to all substantive comments received.	The Final EIR includes a copy of the MEPA Certificate and copies of all comments received. The Final EIR also includes responses to all substantive comments.
C.54	Environmental Review Process	FAA/NEPA	For those who submitted form letters for which addresses are available, Massport should send a Notice of Availability of the Final EIR and include information on comment deadlines and the time-sensitive nature of the review process. For those who submitted individual comment letters, Massport should circulate an Executive Summary of the Final EIR. ... Massport should circulate the full Final EIR to its standard distribution list of agencies and community groups, as well as to any additional parties specified in Section 11.16 of the MEPA regulations....[Massport should] furnish a full copy of the EIR to any party who requests a copy.	A Notice of Availability of the Supplemental DEIS/FEIR has been sent to those who submitted form letters for which addresses are available. The Notice includes information on comment deadlines. An Executive Summary of the Supplemental DEIS/FEIR has been circulated to those who submitted individual comment letters. A Supplemental DEIS/FEIR has been sent to Massport's standard distribution list of agencies and community groups as well as to additional parties specified in Section 11.16 of the MEPA regulations. A Supplemental DEIS/FEIR will be furnished to any party who requests a copy.

MICHAEL E. CAPUANO
8TH DISTRICT, MASSACHUSETTS

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May 13, 1999

LETTER 1

Ms. Jane Garvey
Administrator
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591

Dear Administrator Garvey,

I write to express my deep and continuing concern regarding the Massachusetts Port Authority's proposal to construct Runway 14/32 at Logan International Airport and to urge that you advise against further action to develop the runway.

Logan has reached capacity. Though the airport may technically have the physical capability to accommodate further increases in traffic, the human and social costs are prohibitively high. Moreover, expansion of the airport is at this time, absent a more thorough and comprehensive plan and firm timetable to implement such plan, an insufficent response to Logan's traffic problems. With or without construction of a new runway, estimates of the increase in Logan's air traffic over the next ten years alone are as high as seventy percent – and some projections indicate more than double today's air traffic by the middle of the next century. 1.1

For more than twenty years, state officials, in cooperation with other agencies, community groups, and businesses, have advocated a regional approach. Unfortunately, no clear mission has been developed and little action has been taken to address the problem in a thoughtful and forward-looking way. Today, the state is making great progress toward improving the terminals and other land-side facilities at Logan, but it has promoted Runway 14/32 as its *only* proposal to improve the region's air traffic configuration. A more comprehensive, regional approach has gone unaddressed. 1.2

A full consideration of alternatives is needed before a piecemeal response is approved. Some proposals not yet thoroughly considered include immediate implementation of incentive "peak-pricing," diversion of small aircraft to alternate airports, and more effective use of underutilized regional airports such as Hanscom Airfield (only a few minutes drive from Boston's downtown), the Municipal Airport in Worcester, Massachusetts, Weymouth Airport in Weymouth, Massachusetts, T. F. Green Airport in Providence, Rhode Island, Manchester Airport in Manchester, New Hampshire, and Pease Airport in Portsmouth, New Hampshire. 1.3 1.4

I urge the FAA to demand full consideration of a comprehensive plan for air traffic in Eastern Massachusetts *before* proceeding with patchwork projects that only provide short-term solutions for a long-term problem. Before any major action is taken, a comprehensive plan and a definitive schedule for implementation must be in place, and adequate funding must be secured.

Thank you for your attention to this matter of great importance to our regional economy, and to the health and welfare of the people of Eastern Massachusetts.

Sincerely,

Michael E. Capuano

Michael Capuano
Member of Congress

Letter 1
US Congressman Michael Capuano

Code	Topic 1	Topic 2	Comment	Response
1.1	Purpose and Need	Economic Costs	Though the airport may technically have the physical capability to accommodate further increases in traffic, the human and social costs are prohibitively high.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
1.2	Regional Transportation	Regional Airports	For more than twenty years, state officials, in cooperation with other agencies, community groups, and businesses, have advocated a regional approach. Unfortunately, no clear mission has been developed and little action has been taken to address the problem in a thoughtful and forward-looking way. ... A more comprehensive, regional approach has gone unaddressed.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
1.3	Alternatives	Peak Period Pricing	Some proposals not yet thoroughly considered include immediate implementation of incentive "peak-pricing"	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
1.4	Regional Transportation	Regional Airports	Some proposals not yet thoroughly considered include diversion of small aircraft to alternate airports, and more effective use of underutilized regional airports such as Hanscom Airfield, the Municipal Airport in Worcester, Weymouth Airport, T.F. Green Airport, Manchester Airport, and Pease Airport.	Although prioritizing takeoffs based on aircraft size might reduce delays, the air traffic control system of the United States, which the FAA operates, is based on a first-come, first-serve policy under most circumstances. Any change in this policy would require a major federal decision and would involve a massive overhaul of the entire air traffic control system, including procedures, manuals, software, controller/pilot training, etc. Changing the policy for a single airport would be nearly impossible for administrative reasons and would create serious safety issues with non-standard procedures. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

7TH DISTRICT, MASSACHUSETTS

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April 7, 1999

LETTER 2

John P. DeVillars, Regional Administrator
United States Environmental Protection Agency
Region One
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Dear Mr. DeVillars:

I am writing to express my opposition to the proposed expansion of Logan International Airport, including the planned construction of Runway 14/32. The construction of this new runway would expand Logan's capacity for operations and increase its current potential for future growth. But there are several reasons why the Environmental Protection Agency should advise the Federal Aviation Administration against the implementation of Runway 14/32. These include the resulting increase in noise pollution and other adverse environmental impacts, Runway 14/32's ineffectiveness in alleviating delays, and the lack of a comprehensive, progressive regional plan to best utilize New England's regional airports. 2.1

Alternative 1A, the state proposal described by the Massachusetts Port Authority in its Draft Environmental Impact Statement/Report (DEIS/DEIR), details the agency's plan to expand and improve Logan. This alternative consists of the construction of Runway 14/32, as well as the construction of a new Centerfield Taxiway and the reduction of the approach minimums on Runways 22L, 27, 15R, and 33L. I am urging you to join me in opposition to the implementation of this alternative.

According to the aforementioned document, the primary reason for implementation of Runway 14/32 is to alleviate delays caused by the use of a less-than-three runway configuration when Logan is burdened by winds coming from the northwest. The operation of Runway 14/32 may alleviate some of these pressures of delay. However, this will only be true in Low Fleet conditions, when commuter aircraft represent a smaller share of the fleet serving Logan. In High Fleet scenarios, in which more planes are used and overscheduling becomes a factor in delays during peak times, Runway 14/32 becomes more of a hindrance than an assistance. 2.2

Massport projects that in a 37.5 million High Fleet passenger scenario, there will be approximately 250,000 annual hours of delay with the implementation of Alternative 1A. If Alternative 2 were implemented, which omits the construction of 14/32 but includes Peak Period Pricing, delays would amount to approximately 205,000 hours. The execution of Alternative 3, which consists of no infrastructure changes but requires the implementation of Peak Period Pricing and the reduction in the approach minimums on Runways 22L, 27, 15R, and 33L, results in 210,000 hours of delay. Under the 45 Million High Fleet scenario, similar percentages in the total annual hours of delay are present. As you can understand by these projections, if a High Fleet develops at Logan and overscheduling becomes a factor, Runway 14/32 is no longer effective without additional mitigating measures.

For decades, communities surrounding Logan International Airport have been adversely affected by hostile environmental conditions, including noise pollution, air pollution and ground traffic. Noise pollution has steadily increased over the years in Logan's neighboring communities such as Revere, Winthrop, and East Boston. Residents of these areas have battled consistently without much success in attempting to decrease existing levels of air traffic

over their communities. The operation of Runway 14/32 will cause a shift in the flight tracks over the Greater Boston Area and the volume of flights traveling over specific communities. The DEIR claims those communities that have experienced the heaviest volume of overflights, like Winthrop and East Boston, will endure less air traffic while other fringe communities, such as Everett, will bear a much greater number of overflights.

Although the runway will assist in lessening the intensity of noise in some affected areas, the implementation of 14/32 will widen the overall scope of communities exposed to noise levels greater or equal to 65 dB by 2%. Based on testing for Alternative 1A, Massport estimates that in a 29 Million Passenger Low Fleet scenario for 1999, the total population exposed to noise levels greater or equal to 65 dB is 17,909. However, the totals for Alternative 2 and 3 (16,892) and Alternative 4 (17,531), representing the continuation of present conditions at the airport, affect a smaller amount of residents in the Greater Boston area. This pattern is also apparent in the 1999 High Fleet and the 2010 noise levels for both the 37.5 Million Low and High Fleets.

I am firmly convinced that we must examine closely the status of our regional aviation transportation system before we implement any new structural changes at Logan International Airport. It is projected that the Route 128 and I-495 corridors will experience this commonwealth's greatest population increases as we approach the new millennium. It is the responsibility of both the federal and state governments to devise a strategy that ensures that some of the burden at Logan is relieved by those regional commercial airports that would welcome increases in regularly-scheduled passenger service. I agree with Boston Mayor Tom Menino that a "blue ribbon panel" should be established to devise such a regional aviation transportation strategy. 2.3 2.4

We must consider the adverse environmental impacts on those communities surrounding this airport. The primary goal for its construction is to alleviate delays caused when Logan is burdened by heavy Northwest winds. In some future scenarios, this short-term solution will serve its intended purpose. However, without a plan for the optimal use of our regional airports to alleviate these pressures from Logan, I cannot support the implementation of a new runway or any additional expansion of Logan Airport.

Thank you in advance for your consideration. I look forward to reviewing the EPA's response to these concerns. If you have any questions or would like to further discuss this matter, please feel free to reach me by contacting my Medford District Office at (781)396-2900.

Sincerely,

Edward J. Markey

Edward J. Markey

cc: Jane F. Garvey, Administrator
Federal Aviation Administration

Letter 2
US Congressman Edward J. Markey

Code	Topic 1	Topic 2	Comment	Response
2.1	Alternatives	Runway 14/32	The construction of this new runway would expand Logan's capacity for operations and increase its current potential for future growth.	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Logan Airport Airside analysis and GEIRs.
2.2	Alternatives	Runway 14/32	In High Fleet scenarios, in which more planes are used and over scheduling becomes a factor in delays during peak times, Runway 14/32 becomes more of a hindrance [in reducing delays] than an assistance.	In the current environment, airline overscheduling is not a significant contributor to Logan Airport delays. Proposed Runway 14/32 and all other proposed projects would reduce current and future delays and enhance safety. The sooner that these improvements are implemented, the more long-term delay benefits will be realized.

Code	Topic 1	Topic 2	Comment	Response
2.3	Regional Transportation	Regional Airports	We must examine closely the status of our regional aviation transportation system before we implement any new structural changes at Logan International Airport. It is the responsibility of both the federal and state governments to devise a strategy that ensures that some of the burden at Logan is relieved by those regional commercial airports that would welcome increases in regularly scheduled passenger service.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of regional alternatives to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of regional alternatives to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
2.4	Environmental Review Process	Blue Ribbon Panel	A "blue ribbon panel" should be established to devise such a regional aviation transportation strategy.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies have concluded that The Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high-speed rail are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of regional transportation alternatives to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999, attendance at a second summit in December 2000, and its assumption of operating responsibility for the Worcester Regional Airport in January 2000.

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LETTER 3

April 22, 1999

The Honorable Robert Durand
Secretary of Environmental Affairs
Executive Office of Environmental Affairs
Commonwealth of Massachusetts
Attention MEPA Office, EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Secretary Durand:

As United States Representative for the 9th Congressional District, I am submitting the attached letter to be included as part of the official public comment on the Draft Environmental Impact Statement and Draft Environmental Impact Report ("Draft EIS/EIR") for the Logan Airside Improvements Planning Project.

Please find attached a letter that I wrote to Federal Aviation Administrator Jane Garvey on March 29, 1999, which outlines my concerns with the Draft EIS/EIR in detail. It is my belief that the Draft EIS/EIR contains such serious deficiencies that the proposal should be withdrawn immediately.

The unfair negative environmental impact of proposed Runway 14/32 is simply too severe given the very limited and short term nature of its delay reduction benefits. Under no circumstances, should this proposal be approved. Instead, it is critical that this deeply flawed Draft EIS/EIR be replaced with a comprehensive, long term solution that fairly and effectively addresses our region's air transportation needs.

Thank you for your attention to this critical issue.

Sincerely,

John Joseph Moakley
Member of Congress

COMMITTEE ON RULES
RANKING DEMOCRATIC MEMBER

KEVIN RYAN
CHIEF OF STAFF
WASHINGTON

FREDERICK W. CLARK
DISTRICT DIRECTOR
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March 29, 1999

Mrs. Jane Garvey
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Administrator Garvey:

I am writing to express my serious concern with deficiencies in the Draft Environmental Impact Statement (EIS) on the Logan Airside Project, particularly as they pertain to the new proposed Runway 14/32. This document proposes to substantially expand Logan International Airport without adequately examining the significant environmental impact on communities surrounding the airport or the alternatives to Logan's expansion. These deficiencies are so substantial that the Federal Aviation Administration should withdraw support from the current document and re-evaluate solutions to Logan's delay issue.

Specifically, the EIS does not adequately comply with President Clinton's Executive Order on Environmental Justice of February 11, 1994. This order directs all federal agencies to identify and address all disproportionately high and adverse environmental effects of its programs, policies and activities on low-income and minority populations. This document ignores the basic requirement of identifying minority and low-income populations affected by proposals contained within the EIS, despite the fact that the document predicts substantial increases in air traffic over portions of the Boston neighborhoods of Jamaica Plain, Roxbury, South Boston, East Boston, the South End and the City of Chelsea. While these communities contain significant minority and low income populations, no effort is made within the EIS to identify these populations or to adequately address the disproportionately high environmental impact that Logan's expansion will have on these residents. 3.1

What is even more disturbing is that the EIS proposes this disproportionate environmental impact on the low income and minority residents in communities surrounding Logan Airport without fully examining a reasonable range of alternatives to Logan's expansion. At no point does the EIS analysis address the potential of increased utilization of Hanscom Field, a facility owned and operated by the Massachusetts Port Authority (Massport) that is in close proximity to the Boston. With a potential capacity of 320,000 operations annually and ready access to Boston via Route 128, Hanscom Field must be explored as should the prospect of building a second major airport. The EIS is also deficient in not treating increased utilization of existing regional airports including Manchester, T.F. Green (Providence) and Worcester as alternatives to Logan 3.2

expansion.

The EIS also fails in addressing a badly needed peak period management program for Logan Airport. Peak Period Pricing has been identified by analysts as an administrative option that offers significant delay reduction benefits. By only exploring the impact of Peak Period Pricing during favorable weather conditions based upon 110 operations per hour, the EIS fails to accurately reflect the benefits of this option during adverse weather conditions when delays are most problematic. The scope of analysis must be expanded to show the impact of this option when a variety of conditions dictate that Logan operate at 75, 85, 95, 105 and up to 115 movements per hour. 3.3

The EIS further fails to identify any reasonable maximum limit on activity that Logan Airport can accommodate. While the stated purpose of the proposed Runway 14/32 is to reduce delays at Logan Airport, Massport forecasts such a significant increase in the number of aircraft operations that delays will reach current levels within five years after the proposed runway is built. The negative environmental impact of proposed Runway 14/32 is simply too severe given the limited and short term nature of its delay reduction benefits. A clear and reasonable ceiling on operations at Logan must be established before any environmentally sound proposal to alleviate delay can be considered. 3.4

For these reasons, the current Draft Environmental Impact Statement for the Logan Airside Project is deficient and should be replaced with a study that is much broader in scope. This study must fully explore all possible alternatives to Logan expansion and place particular emphasis on environmental justice for the communities impacted by the airport. The Federal Aviation Administration should withdraw support for the proposal containing Runway 14/32 and work to replace it with a comprehensive, long term solution that effectively and fairly addresses our region's air transportation needs.

I greatly appreciate your outstanding leadership in planning and developing a safe and efficient national airports system and I look forward to working with you on this important issue.

Sincerely,

John Joseph Moakley
Member of Congress

Letter 3
US Congressman J. Joseph Moakley

Code	Topic 1	Topic 2	Comment	Response
3.1	Environmental Justice	Demographic Data	Specifically, the EIS does not adequately comply with President Clinton's Executive Order on Environmental Justice of February 11, 1994. This document ignores the basic requirement of identifying minority and low income populations affected by proposals contained within the EIS, despite the fact that the document predicts substantial increases in air traffic over portions of the Boston neighborhoods of Jamaica Plain, Roxbury, South Boston, East Boston, the South End and the City of Chelsea. While these communities contain significant minority and low income populations, no effort is made within the EIS to identify these populations or to adequately address the disproportionately high environmental impact that Logan's expansion will have on these residents.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
3.2	Regional Transportation	Regional Airports	The EIS proposes this disproportionate environmental impact without fully examining a reasonable range of alternatives to Logan's expansion. At no point does the EIS analysis address the potential of increased utilization of Hanscom Field. The EIS is also deficient in not treating increased utilization of existing regional airports including Manchester, T.F. Green (Providence) and Worcester as alternatives to Logan expansion.	The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis on an appropriate range of alternatives as required by Federal and state scoping directives issued under NEPA and MEPA irrespectively. Further analysis in these environmental review documents indicates that there is no disproportionate environmental impact associated with the Preferred Alternative. The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR provide an evaluation of the regional airports at T. F. Green/Providence, Manchester, and Worcester and their potential impacts on Logan Airport. Hanscom Field is the region's premier general aviation facility and accommodated over 180,000 aircraft operations in 1998. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport. Nevertheless, the proposed Logan Airport Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. The FAA will be an active participant in the upcoming New England Airports System Study which will evaluate the impact of recent regional airport developments on Logan Airport, identify constraints to regional airports growth and highlight strategies for optimizing New England's regional aviation system. Refer to Section 2.9 of the Supplemental DEIS/FEIR.
3.3	Alternatives	Peak Period Pricing	The EIS also fails in addressing a badly needed peak period management program for Logan. The scope of analysis must be expanded to show the impact of this option....	The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
3.4	Alternatives	Operational Restrictions	The EIS further fails to identify any reasonable maximum limit on activity that Logan Airport can accommodate. A clear and reasonable ceiling on operations at Logan must be established before any environmentally sound proposal to alleviate delay can be considered.	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

March 23, 1999

LETTER 4

Mr. John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, Massachusetts 01803

Dear Mr. Silva:

Enclosed are comments on the Draft Environmental Impact Statement for Logan Airside Improvements Planning Project Boston, Massachusetts. We hope our comments will assist you. Thank you for giving us an opportunity to review this document.

Sincerely,

Susan Fruchter

Susan B. Fruchter
Acting NEPA Coordinator

Enclosure

MEMORANDUM FOR: Susan B. Fruchter
Acting NEPA Coordinator

FROM: Charles W. Challstrom
Acting Director, National Geodetic Survey

SUBJECT: DEIS-9902-04-Logan Airside Improvements Planning Project
Boston, Massachusetts

The subject statement has been reviewed within the areas of the National Geodetic Survey's (NGS) responsibility and expertise and in terms of the impact of the proposed actions on NGS activities and projects.

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the NGS home page at the following Internet World Wide Web address: http://www.ngs.noaa.gov. After entering the NGS home page, please access the topic "Products and Services" and then access the menu item "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the NGS data base for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

If there are any planned activities which will disturb or destroy these monuments, NGS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any relocation(s) required. 4.1

For further information about these monuments, please contact Rick Yorczyk; SSMC3, NOAA, N/NGS; 1315 East West Highway; Silver Spring, Maryland 20910; telephone: 301-713-3230 x142; fax: 301-713-4175.

Letter 4
Department of Commerce, Susan B. Fruchter

Code	Topic 1	Topic 2	Comment	Response
4.1	Construction	Mitigation	If there are any planned activities which will disturb or destroy [horizontal and vertical geodetic control monuments] NGS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any relocation(s) required.	The Preferred Alternative will not result in any disruption, destruction, or relocation of any horizontal or vertical geodetic control monuments. NGS will be notified prior to construction if any NGS monuments are identified.

LETTER 5

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

ER-99/193

Mr. Robert S. Bartanowicz
Regional Administrator
New England Region
Federal Aviation Administration
12 New England Executive Park
Burlington, Massachusetts 01803

Dear Mr. Bartanowicz:

This is in response to the request for the Department of the Interior's comments on the Draft Environmental Impact Statement/Section 4(f) Evaluation for the Logan Airside Improvements Planning Project, Logan International Airport, Boston, Suffolk County, Massachusetts.

We concur that there is no prudent and feasible alternative to the proposed project, if project objectives are to be met. We also concur with the proposed measures to minimize harm to Section 4(f) resources. However, we recommend continued cooperation and coordination with the State Historic Preservation Officer in order to determine whether a Memorandum of Agreement (MOA) is needed to avoid and/or minimize harm to cultural resources which may be affected by the proposed project, in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. A signed copy of the MOA should be included in the Final Section 4(f) Evaluation, if one is prepared. 5.1 5.2

The Department of the Interior has no objection to Section 4(f) approval of this project by the Department of Transportation.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc: Ms. Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Letter 5
US Department of the Interior
Willie R. Taylor, Director
Office of Environmental Policy and Compliance

Code	Topic 1	Topic 2	Comment	Response
5.1	Alternatives	Preferred Alter native	We concur that there is no prudent and feasible alternative to the proposed project, if project objectives are to be met.	Comment noted.
5.2	Open Space/ Parkland	Section 4 (f)	We recommend continued cooperation and coordination with the State Historic Preservation Officer in order to determine whether a Memorandum of Agreement (MOA) is needed to avoid and/or minimize harm to cultural resources which may be affected by the proposed project, in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. A signed copy of the MOA should be included in the Final Section 4(f) Evaluation, if one is prepared.	The FAA and Massport have consulted with the Massachusetts Historical Commission (MHC). The MHC has concurred with the FAA's determination that the Preferred Alternative will have no adverse effect on significant historic properties. Refer to Section 6.3.2 of the Supplemental DEIS/FEIR for a description of historic properties, project impacts and mitigation.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

LETTER 6

OFFICE OF THE
GIONAL ADMINISTRATOR

April 22, 1999

John Silva
Manager, Environmental Programs
Airports Division, ANE-600
Federal Aviation Administration
New England Regional
12 New England Executive Park
Burlington, Massachusetts 01803

RE: Draft Environmental Impact Statement/Report Logan Airside Improvements Planning Project dated February, 1999 (EPA ERP Number D-FAA-B51017-MA)

Dear Mr. Silva:

In accordance with EPA's responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) prepared by the Federal Aviation Administration (FAA) and the Massachusetts Port Authority (Massport) for proposed airside improvements at Logan Airport in Boston, Massachusetts.

The project includes construction of a new runway (runway 14/32), new taxiways and taxiway alignments, and reductions in approach minimums on runways 22L, 27, 15R and 33L. In addition to the no-build alternative, the DEIS analyzes four sets of alternatives and evaluates the relative effectiveness of each in enhancing operational safety and reducing current and future aircraft delay at Logan caused by northwest wind and weather conditions. Airport delays are presented in the context of forecasts for the year 2010 that predict between 37.5 to 45 million passengers a year using Logan, a number substantially greater than Logan's 26.5 million passengers in 1998. The range of alternatives in the DEIS focuses solely on "airside" improvements as a means of eliminating delay.

EPA has long opposed efforts to expand the capacity of Logan Airport without first (1) adequately mitigating noise and pollution impacts to surrounding communities and the region from existing operations, and (2) adopting a comprehensive, multi-modal regional transportation strategy. EPA has raised these concerns each time Massport has proposed improvements to Logan, including in our scoping comments for this EIS in November, 1995. Regrettably, the

proposed project and the EIS fail to adequately address either of these concerns. Therefore, when considered in the context of the already significant burden on surrounding communities from existing airport operations and the absence of an underlying regional transportation strategy, I believe the project cannot be justified.

Specifically, my objections are as follows:

- **The significant community impacts of current Logan operations must be fully addressed and mitigated before any expansion of operations is considered.** The burden borne by the communities near Logan is already enormous, and the efforts to mitigate this burden currently fall short of the mark. The soundproofing of homes now exposed to high levels of aircraft noise, while of limited value (given that it only reduces noise exposure for people when they are inside buildings with shut windows and is not effective in homes exposed to higher than 70 dBA), is nevertheless an essential commitment whose implementation is as yet not completed. Valid concerns have been raised about the computer model used to identify homes eligible for soundproofing. Thus, while the DEIS promises as mitigation the soundproofing of all homes newly exposed to high levels of aircraft noise as a result of the proposed project, there remains uncertainty as to whether the mitigation covers enough homes, and whether Massport and FAA will have adequate funding to carry out this commitment. EPA is especially concerned that FAA has historically not fully funded its share of the soundproofing program for Logan. 6.1

  In addition, commitments for improvements to the Blue Line Station at Logan, which were to provide same-level platform connections between the subway and shuttle buses and thereby improve transit access and reduce traffic, have not been kept. Given the impacts currently felt by affected communities and the inadequacy of previously promised relief, it is not reasonable to ask these communities to accept the impacts of further expansion at Logan unless and until current impacts are fully mitigated. 6.2

- **The DEIS fails to consider adequately environmental justice issues, specifically whether there are disproportionate environmental impacts to low-income and minority populations.** The environmental justice analysis in the DEIS does not meet federal obligations concerning environmental justice. This is especially problematic in light of the fact that the proposed project will result in a threefold increase in aircraft overflights in East Boston, Chelsea, Roxbury, and other communities with large populations of low-income and minority people. The brief and narrowly focused discussion of this important subject falls short in several ways. First, FAA's and Massport's conclusion that minority and low-income communities do not experience disproportionately high impacts does not appear to be credible. The analytic basis for the conclusion is insufficient since critical demographic and other relevant health data are missing. Moreover, the DEIS does not compare the demographics of communities served by this project to the demographics of communities bearing the burden of the project's impacts. Second, the environmental justice analysis in the DEIS focuses solely on noise and ignores credible public comments identifying air quality, odor, traffic and other 6.3 6.4 6.5

impacts that cumulatively burden surrounding communities with high percentages of low-income and minority populations. For all of the above reasons, the cursory attention to environmental justice issues in the DEIS is not acceptable.

- **The DEIS does not reflect a regional, long-term strategy for New England's transportation infrastructure.** Massport and the FAA cannot look solely to airside improvements to address its flight delay problems. The DEIS thoroughly describes the positive steps that Massport and the FAA have taken to contribute to regional transportation planning, including their support for use of regional airports. But the core of the analysis nevertheless simply assumes that Logan's flight operations will grow unchecked over the next decade regardless of successful development of alternatives, and does not include in its analysis broader options to manage Logan's growth and the resulting delays. In order to manage growth so that it reduces rather than increases environmental impacts on nearby communities, Massport and the FAA must pursue even more aggressively a long-term, multi-modal regional transportation strategy.

  Our challenge is a transportation challenge, not simply an aviation challenge, and thus requires the full and active investment of time and resources by not only Massport and the FAA but also other state and federal transportation agencies such as the Executive Office of Transportation and Construction, Amtrak, and the U. S. Department of Transportation. The goals should be 1) to increase alternatives to air travel through Logan, not only through use of T. F. Green in Rhode Island, Worcester Airport in Massachusetts, Manchester Airport in New Hampshire and other regional airports, but also through intercity high-speed rail connections supported by a North-South Station link; 2) to establish efficient mass transit access to and between the regional airports; and 3) to reduce Logan's traffic impacts on surrounding communities by such measures as a free shuttle service between South Station and Logan, an intermodal terminal at Route 128, and the Urban Ring. 6.6 6.7 6.8 6.9

  In addition, Massport should reduce the small plane mix from Logan's peak traffic hours through a peak period pricing strategy, implemented with appropriate sensitivity to the needs of communities served exclusively by smaller aircraft. Additional analysis is critical to determine whether the imposition of peak period pricing now would help send the necessary market signals to ensure that airlines' plans result in the most efficient use of Logan Airport (including smarter use of other regional airports, and, for smaller carriers, the use of planes capable of handling more passengers). Absent a comprehensive plan, the DEIS projects that within five years of project completion, delays at Logan will exceed current levels. This forecast suggests that unchecked growth cannot be a responsible planning assumption for this airport. The efforts of Massport and other regional transportation officials should be aimed first at developing a comprehensive plan, not a narrowly-focused airside improvement project with only short-term effects on delays at Logan. 6.10 6.11

- **The DEIS's analysis of noise impacts rests on questionable model inputs and precepts.** The affected communities have raised serious and credible concerns about the

ability of the computer modeling relied upon in the DEIS to accurately reflect noise levels associated with Logan operations and to select homes eligible for soundproofing. These concerns are based on in situ noise monitoring which appears to demonstrate that computer modeling underestimates actual noise levels, at least in some neighborhoods. The DEIS does not properly address this deficiency and thus does not adequately represent the likely actual noise impacts. Furthermore, the noise increases to neighborhoods that fall outside the FAA's 65-dBA contour remain inadequately acknowledged and addressed, as do the very high noise levels that occur each time aircraft fly over or by neighborhoods. The DEIS does not fully disclose the sleep disruption and other impacts that occur in these instances, nor does it address cumulative noise impacts to account for all noise, not just modeled aircraft noise, as is required under NEPA. In addition, the use of 1993 is not appropriate as the base year for analysis as it does not represent existing conditions and may minimize the relative noise impacts from the preferred alternative when compared with what appears to have been an especially noisy base year.

6.12

6.13

6.14

6.15

- **The DEIS analyses ignore the critical question of whether the improvements will spur additional growth at the airport.** In comparing the alternatives, both the noise and air quality analyses assume that the future passenger/flight operations growth at Logan will remain constant regardless of whether or not the runway 14/32 is constructed. The analysis thereby avoids any serious consideration of what appears to be one of the most critical questions posed by this project-- whether the proposed improvements, especially when combined with landside improvements, cumulatively facilitate future growth in flight operations and passenger traffic with corresponding increases in noise, traffic, and air pollution impacts.

6.16

Efficient operations at Logan are clearly important to the New England economy. However, efficiency gains through proposed infrastructure improvements should only be advanced if they can be achieved without sacrificing the well-being of the communities around the airport and the region at large. Smart growth requires efficient transportation, but it also requires that we preserve and enhance the livability of established, urban communities. A comprehensive transportation strategy that looks beyond quick fixes at Logan can meet both goals. As discussed in this letter and in the attachment, the current DEIS presents a project with serious impacts in an analysis that lacks adequate consideration of alternate strategies to achieve project goals. I request that Massport and FAA withdraw the DEIS and instead focus on developing a more comprehensive regional approach to transportation in New England. I would be pleased to work with Massport, the FAA, and the affected communities in the region to that end.

Despite the concerns expressed in this letter and the attached analysis, I want to acknowledge the professional and fully cooperative spirit of Massport and the FAA in their work with us since the DEIS was published. Peter Blute, Betty Desrosiers, and their team have demonstrated a total commitment to honest, open dialogue with EPA. They have advanced their arguments professionally and forcefully and without fail have responded thoughtfully to our questions. For this we owe them our appreciation and respect.

Please feel free to contact me or Elizabeth Higgins of my staff at 617/918-1051 if you wish to discuss these comments further.

Sincerely,

John P. DeVillars
Regional Administrator

Attachment

cc:

Governor Paul Cellucci
Peter Blute, Massport
Robert Durand, EOEA

Attachment to EPA's Comment Letter on Logan Airside Improvements Planning Project

The Draft Environmental Impact Statement (DEIS) for the proposed airside improvements at Logan Airport fails to provide an adequate review of the environmental impacts and the full range of alternatives to the project. The preceding cover letter summarizes the primary conclusions from EPA's review of the DEIS. This attachment provides support for those conclusions and raises some additional technical concerns.

Narrow Scope of DEIS Analysis and Alternatives

Failure to Address EPA's EIS Scoping Comments: The DEIS fails to address fundamental issues raised in EPA's 1995 scoping letter. Most importantly, the scope of the DEIS, with its focus on construction of proposed runway 14/32 and the taxiway improvements, is too limited and fails to seriously consider regional improvements as alternatives to the Logan runway project. The limited scope of analysis represents a missed opportunity for a comprehensive analysis and merely compounds difficult decision making surrounding changes to Logan's operations. As EPA indicated in its previous comments, the DEIS should have identified a targeted regional strategy including both existing and potential capacity, as well as regional pricing and marketing to enhance the capacity and efficiency of, and access to, all New England airports. The FAA, as the federal agency responsible for our nation's air travel, has a responsibility to maximize the regional efficiency of the airport network in New England. In this case, EPA would expect the FAA to coordinate the efforts of Massport and the other regional airports, but also to actively involve other federal counterparts at the Federal Transit Administration and the U. S. DOT to explore regional strategies to increase the availability of other airports as an alternative to Logan. Further, Massport has a responsibility to work closely with the appropriate state and federal agencies to develop such a regional strategy. 6.17

As EPA indicated in comments on the DEIS scope, the airside and landside projects are functionally linked, and as such, they should be evaluated together in a comprehensive EIS. The current analysis focuses entirely in airside issues with no real analysis of opportunities for Massport to integrate landside and airside planning to enable Logan to improve operations and handle the substantially greater numbers of passengers anticipated for the coming decades. In response to our scoping comments, the DEIS explains that the analysis is based on background planning information provided in the state Generic Environmental Impact Report (GEIR) and that the DEIS is based on the FAA scope which was developed through a public comment process. Unfortunately, our comments on the appropriate scope of analysis for the EIS were largely discounted, and the GEIR, a document prepared under the rules of state law, does not meet the requirements of NEPA. Thus, reliance on the GEIR to satisfy NEPA's requirements for a cumulative impact analysis is not appropriate. 6.18

Need to Focus on Regional, Multi-Modal Transportation Plan: EPA recommends that, rather than proceeding with the environmental review of the taxiway and runway improvements, Massport and FAA focus instead on establishing a strategy to make Logan Airport a more efficient transportation center with less impact on surrounding communities, by improving mass transit access to the Airport and preventing growth in the number of flight operations. 6.19

One means to reduce the growth pressures on Logan Airport is to enhance the current intercity transportation options. The DEIS does reflect the fine and successful work by both private enterprise and regional transportation officials to encourage greater use of Green and Manchester Airports and to complete the high-speed rail link with New York. Without question, these efforts will improve travel options for New Englanders and better manage growth at Logan Airport. However, Massport, in cooperation with EOTC, U. S. DOT, Amtrak, and other transportation agencies, should take active measures to promote high speed rail as one of the best alternatives to air travel that could help to reduce demands on Logan. These efforts should not be limited to high speed rail but should also encourage and market the use of other regional airports to the benefit of Logan and surrounding communities. Moreover, we believe the EIS should clearly identify mitigation commitments by Massport to improve mass transit to those airports and to solidify transit links among the regional airports similar to the bus links available between Dulles and National or LaGuardia and JFK. 6.20 6.21

In addition, the implementation of peak period pricing should be a piece of the regional transportation strategy. Peak period pricing, implemented with sensitivity to the needs of New England communities served by smaller airports that rely principally on smaller aircraft, could serve to reduce flight operations during peak hours and increase the proportional share of larger aircraft, thereby making the airport more efficient in handling a large volume of passengers with fewer aircraft operations. The DEIS clearly demonstrates that peak period pricing would serve to lessen delays substantially in the high growth future scenarios (e.g., 45 million passengers/high fleet, 45 million passengers/low fleet or 37.5 million passengers/high fleet). However, the DEIS concludes that peak period pricing is not warranted because current flight operations do not exceed 120 operations per hour. Under current conditions approximately 40 percent of the operations at Logan serve approximately 10 percent of the passengers in regional aircraft. If 22 percent of the operations were to handle the same number of passengers, Logan could operate comfortably at 95-100 movements an hour. Additional analysis is critical to determine whether the imposition of peak period pricing now would help send the necessary market signals to ensure that airlines' plans result in the most efficient use of Logan Airport (including smarter use of other regional airports and, for smaller carriers, the use of planes capable of handling more passengers). Massport shares this responsibility with the airlines. Such an evaluation should include an appropriate sensitivity analysis to help determine the operations/hour level where peak period pricing becomes effective. 6.22

According to the DEIS, Massport appears willing to consider peak period pricing only when Logan actually experiences over scheduling. For this measure, Massport is prepared to wait and see if peak period pricing is necessary. On the other hand, the DEIS details Massport's argument that it needs a new runway now, despite the exponential growth in passenger traffic through Green and Manchester. Following such logic, EPA questions why Massport doesn't wait on its 6.23

decision to construct a new runway until it is clear whether the region really needs an expanded Logan, thereby giving the regional airports a chance to capture more traffic, consistent with the impressive gains made at Manchester and Green.

Additional delay reduction benefits may be obtained from managing/prioritizing takeoffs so that large planes with more passengers are given preference over smaller planes during peak periods of delay. Such a change may help to shift the market to fewer larger planes making fewer flights or scheduling changes by smaller planes to avoid periods of peak operation prone to delay. 6.24

Finally, the proposed project offers only short term relief (five years) for delay problems it is intended to resolve. Massport should extend the planning horizon for the analysis (currently only at ten years) as part of supplemental efforts to investigate longer term solutions. The solutions should actively integrate Logan operations with regional transportation planning (airside and landside integration). 6.25

Air Quality Analysis

General: Because of the substantial growth in operations at Logan Airport, the DEIS generally reflects no significant improvements in air quality attributable to the Airport. Under the future scenarios for the year 2010 evaluated in the DEIS, the number of passengers are forecast to increase from 1998's 26.5 million passengers to 37.5 or 45 million passengers. More significantly, aircraft operations are forecasted to increase from 1998's 507,000 to between 543,000 and 656,000 operations. Increases in aircraft operations projected in the DEIS will result in additional air pollution, offsetting the anticipated benefits of lower-emitting aircraft and other airport-related vehicles. Despite reductions in emissions from individual aircraft, ground vehicles, and passenger cars as a result of tighter emission standards and fleet turnover, the DEIS finds that emissions of nitrogen oxides (NO_X), volatile organic compounds (VOC) and carbon monoxide (CO) will remain roughly the same or increase slightly by 2010. Because of the increase in aircraft operations, the affected communities will not share in the full benefits of lower emission levels from many of the individual sources of pollution.

The DEIS's conclusion that the preferred alternative will have the least negative air quality impacts is a result of certain questionable assumptions. The DEIS finds that the preferred alternative (taxiway improvements and Runway 14/32) will result in lower emissions of the pollutants CO, VOCs, and NO_X than any of the other alternatives, including the no action alternative. The air quality analysis assumes that the airport-related motor vehicle emissions and the number of flight operations will be identical for all the alternatives. The only variables among the alternatives are emissions attributable to airside delays. Consequently, the preferred alternative, which results in the least delays, inevitably has fewer emissions. 6.26

Unfortunately, these assumptions underlying the air quality analysis ignore the possibility that certain alternatives may result in more passengers or more flight operations. If the airport increases its airside efficiency and reduces delays, it is plausible that airlines will choose to increase flights to Logan (as opposed to regional airports such as Manchester, Green or Worcester). Without an analysis of whether an additional runway will affect future growth of

flight operations, the validity of the air quality conclusions (that Runway 14/32 and taxiway improvements will result in fewer emissions than the alternatives) are questionable. The DEIS should have analyzed whether increased airside efficiency affects the number of flight operations in the future. If the answer is yes, the air quality analysis should be structured in a way to discern the true comparative impacts of each alternative.

Additional Technical Air Analysis Comments:

National Ambient Air Quality Standard (NAAQS) for Fine Particulate Matter: Table 5.3-1 reflects the current NAAQS for criteria pollutants. However, the table contains the incorrect 24-hour NAAQS for fine particulate matter. Rather than 50 ug/m, the standard is 65 ug/m. (Note: While EPA proposed a 24-hour standard of 50, the final standard was set at 65 ug/m.) 6.27

Use of Revised Ozone Standard: In Section 5.3.1.2 (page 5-41 and 42), the Draft EIS/R reflects ambient levels of criteria air pollutants measured at the three closest Massachusetts DEP monitoring stations. These levels are reflected in Table 5.3-2. The Draft EIS/R compares these ambient levels with the one-hour ground-level ozone standard of 0.12 part per million (ppm). In July 1997, EPA revised its ozone standard to an eight-hour standard of 0.08 ppm. The DEIS should use this more stringent standard as the point of comparison. 6.28

Environmental Justice

Federal Environmental Justice Policy

The DEIS does not satisfy either the stated intent or the specific directives of the federal environmental justice policy. The obligations of the FAA to address environmental justice issues are grounded in at least three separate mandates: 1. Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations; 2. Department of Transportation Order on Actions to Address Environmental Justice in Minority Populations and Low-income Populations; and 3. Environmental Justice Guidance under the National Environmental Policy Act issued by the Council on Environmental Quality. In developing a DEIS, these documents direct FAA to

- collect and analyze data relevant to environmental justice issues,
- analyze adverse impacts,
- explore issues of cumulative exposure,
- examine public health issues,
- look broadly at interrelated social, cultural, and economic effects, and
- develop strategies for meaningful public participation.

The Executive Order: Under the Executive Order, Federal agencies should identify and address disproportionately high and adverse human health or environmental effects of their activities on minority and low-income populations, and provide meaningful public participation in meeting that objective. The Executive Order articulates two requirements regarding the need to develop data that can be used to perform relevant analysis in the NEPA context. First, each federal

agency should collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. An agency then should use that information to determine whether its programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority and low-income populations. Second, each federal agency should collect, maintain, and analyze information on the race, national origin, and income level for areas surrounding facilities expected to have substantial environmental, human health, or economic effects on the surrounding populations.

The DOT Order: Under the DOT Order, activities – including planning activities – with the *potential* to have disproportionately high and adverse effects[1] on human health or the environment are sufficient to trigger the need to consider effects on minority and low-income populations.

Further, the DOT Order explicitly addresses the issue of preventing disproportional and high adverse impacts. In that context, it directs DOT to administer its programs in a manner consistent with requirements under NEPA so as to identify the risk of discrimination early in the program or policy development process. In implementing the requirements under NEPA, the Agency is directed to obtain the following information:

- population served and/or affected by race, color or national origin, and income level;
- proposed steps to guard against disproportionately high and adverse effects on the basis of race, color, or national origin; and
- present and proposed membership by race, color, or national origin in any

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[1]The DOT Order defines adverse effects very broadly. Adverse effects are the totality of significant individual or cumulative human health or environmental effects including interrelated social and economic effects which may include but are not limited to

- bodily impairment, infirmity, illness or death
- air, noise, and water pollution and soil contamination
- destruction or disruption of man-made or natural resources
- destruction or diminution of aesthetic values
- destruction or disruption of community cohesion or a community's economic vitality
- destruction or disruption of the availability of public and private facilities and services
- vibration
- adverse employment effects
- displacement of persons, businesses, farms, or nonprofit organizations
- increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community
- denial of, reduction in, or significant delay in the receipt of benefits of DOT programs, policies, or activities

planning or advisory body.

In addition, the DOT Order identifies actions to address disproportionately high and adverse effects. DOT agencies are directed to ensure that programs and policies having disproportionately high and adverse effects on minority or low-income populations will only be carried out if further mitigation measures or alternatives avoiding or reducing those effects are not practicable. In determining practicability, the social, economic, and environmental effects of the mitigation will be taken into account.

Finally, the DOT Order contemplates meaningful opportunities for public involvement by minority and low-income communities during the planning and development of DOT activities. Specifically, the agency is to provide the public information addressing the concerns of minority and low-income populations regarding health and environmental impacts.

CEQ Guidance: The CEQ guidance defines key terms in Executive Order 12898.[2] CEQ recommends that the additional guidance be applied with flexibility and that its defined terms be considered "a point of departure rather than conclusive direction in applying the terms of the Executive Order."

The CEQ guidance clearly states that environmental justice principles are "wholly consistent with the purposes and policies of NEPA." Although there is no standard formula for identifying environmental justice issues in NEPA reviews, agencies are expected to address the issues in a clear, concise, and comprehensible manner. In particular, agencies should consider

- public health data and industry data concerning the *potential for multiple or cumulative exposure* to health or environmental hazards in the affected population *even if the effects of such exposure are not within the control or subject to the discretion of the agency proposing the action*,
- historical patterns of exposure to environmental hazards, and
- interrelated cultural, social, occupational, historical, or economic factors that may amplify natural and physical environmental effects (such factors should include the physical sensitivity of the community to particular impacts, the effect of any disruption on community structure, and the nature and degree of the impact on the physical and social structure of the community).

Because environmental justice issues may arise at any point in the NEPA process, CEQ encourages agencies to consider those issues "at each and every step of the process."

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[2]The defined terms include: low-income population, minority, minority population, disproportionately high and adverse human health effects, disproportionately high and adverse environmental effects.

At the outset, in the scoping phase of the NEPA process, agencies should determine the demographics of the affected area.

In the alternatives phase, if the agency has concluded that a disproportionately high and adverse health or environmental impact on minority or low-income populations will result from the proposed action or alternatives, CEQ directs the agency to consider the distribution as well as the magnitude of the disproportionate impacts. In weighing that factor, the agency should consider input from the affected community as well as the magnitude of the impacts associated with alternatives having less disproportionate adverse effects on minority or low-income populations.

In the analysis phase, after identifying a disproportionately high and adverse health or environmental effect on a minority or low-income population, CEQ directs agencies to analyze how such effects are distributed within the affected community. CEQ recommends that any available data be displayed spatially so that the public can see the distribution of health and environmental impacts among the demographic population groups. The display should be modified to reflect any additional qualitative or quantitative information obtained through the public participation process.

If an agency has identified potential environmental justice issues, the agency is directed to state clearly and concisely in the DEIS whether a disproportionately high and adverse health or environmental impact on minority and low-income populations is likely to result from the proposed action. The Agency should cite specific information so that the public can understand the rationale for the agency's conclusion.

Agencies also are directed to develop effective public participation strategies including active outreach to affected groups and to assure meaningful community representation as early as possible at all stages of the process.

FAA Compliance with Federal Environmental Justice Policy

As stated previously, the DEIS does not satisfy either the intent or the specific directives of the federal government's environmental justice policy as expressed in the Executive Order, the DOT Order, and the CEQ Guidance. The DEIS does not demonstrate an effort to implement that policy proactively. Despite CEQ's statement that its guidance should be applied with flexibility, the DEIS uses extremely narrow definitions of low-income and minority populations. Use of such narrow definitions allows the FAA to conclude that there are no environmental justice issues because so few people fall within the narrowly defined categories. Major deficiencies in the DEIS are identified below. 6.29

<u>Data Collection and Analysis</u>: The DEIS presents no detailed demographic data for the communities surrounding Logan Airport nor does it identify the impacted community with any geographic precision . The impacted community is only identified by noise contours presented on a very small-scale map. There is no expianation regarding the issues considered in identifying the study area. There is no map clearly indicating the location of the study area. 6.30

Although required by the DOT Final Order, the DEIS does not define the populations served or affected by race, color, national origin, and income level. Table 8.7-1 is the only table presented in the environmental justice analysis. That table does not clearly indicate where the noise-exposed population is located, nor does it provide any detail in describing the demographics of that population. It is impossible for any individual citizen to tell from the table whether he or she is in the noise exposed population. In addition, none of the information is mapped so that the public can see the distribution of health and environmental impacts across population groups. 6.31

Adverse Impacts: Contrary to the requirements of the Executive Order and the DOT Order, the DEIS presents little data and analysis on a broad range of potential adverse impacts. Because the environmental justice analysis in the report is brief and provides little basis for its conclusion that noise is the only adverse impact, especially in the context of cumulative impacts, it is impossible to review the rationale or data used in reaching that conclusion. Ironically, that is just the circumstance that federal environmental justice policy is intended to remedy. 6.32

Cumulative Exposure: The CEQ Guidance directs agencies to consider the potential for multiple or cumulative exposure to health and environmental hazards even if the effects of the cumulative exposure are not within the control of the agency action. The DEIS offers no information regarding the health of the communities surrounding Logan. There is no mention of historical patterns of exposure to environmental hazards. There is no meaningful discussion of multiple or cumulative exposure. And there is no opportunity to review the conclusions regarding cumulative exposure in the DEIS since there is no detailed description of other sources to which low-income and minority communities surrounding Logan are exposed. EPA understands that, for purposes of determining eligibility of homes for soundproofing, FAA may only rely on noise generated by aircraft operations. However, in preparing the environmental justice portion of the DEIS, the cumulative noise impacts from all sources in affected neighborhoods is a critical consideration. 6.33

Health Issues: Despite the requirement in the Executive Order, the DOT Order, and the CEQ Guidance that public health issues be examined, there is no discussion of the public health issues often raised by minority and low-income communities, such as asthma, respiratory distress, or attention deficit disorder. Most remarkably, there is no discussion of hearing loss, an obvious health concern to any population exposed to excessive noise. Without any discussion of baseline health conditions, it is impossible to evaluate the incremental impacts or risk associated with the proposed agency action. 6.34

Social, Cultural, and Economic Factors: Although it is required by the CEQ Guidance, there is no discussion of interrelated social, cultural, occupational, historical, and economic factors that may increase the environmental effects of the proposed action. The DEIS does not address factors seemingly relevant at Logan Airport, including the physical sensitivity of the community to specific impacts, the effect of any disruption on community structure, and the nature of the impact on the physical and social structure of the community. For example, the DEIS appears to assume that soundproofing completely addresses noise impacts in a neighborhood. There is no mention that over-flights impair residents' use of their porches or yards. Double-pane windows cannot protect the conversations on the street and front stoop that bind a community together. 6.35

Public Participation: Rather than responding directly to community concerns, the FAA instead often focuses on its compliance with process requirements. Many substantive issues were raised in comments on the scoping document. Often the response to those comments merely noted the public participation process without responding substantively in a manner indicating that the comment was considered carefully. EPA understands that Massport did have a series of meetings several years ago on these airside improvements. However, several community groups and members of Logan's Citizens Advisory Council complained to EPA that Massport and FAA failed to respond to specific requests made from October 1997 to late 1998 to engage in a concrete discussion with the community about plans for air side improvements at Logan, and that when the consultation did resume, it was just before release of the DEIS. Community input during this final decision-making period would have been particularly appropriate. 6.36

Noise Analysis

General Comments: It remains unclear how Massport and the FAA will be able to comprehensively "guarantee" unidirectional use (over the harbor only) of Runway 14/32. Without such a guarantee, it is uncertain whether assumptions about noise impacts from runway 14/32 accurately characterize future conditions. The EIS argues that the proposed new runway will help Logan to attain PRAS goals. There are two problems with this premise. First, based on the recent public debate concerning PRAS goals, it is not evident that these goals reflect current community interests. Second, the focus on PRAS goals as a benefit of the proposed runway inappropriately shifts the focus away from consideration of alternatives to reduce use of Logan (or air travel for that matter) as a means to eliminate delay. Asserting that the FAA will be able to distribute noise impacts more flexibly across impacted communities does nothing to address the question of whether those noise impacts are necessary or adequately mitigated. 6.37 6.38

Technical Comments

1. Use of 1993 as Base Year: The use of 1993 as the base year is not appropriate. In general, the normal airport analysis starts with a base year that represents the current situation. Clearly, the use of 1993 data does not provide the reader with the current situation, particularly as it relates to aircraft type, aircraft operations, population and residences. While it maybe true that the1993 noise impacts were a "worst case" due to the large number of stage 2 aircraft, we do not believe that it represents the current situation. Moreover, the comparison of the alternatives with a particularly high noise year may serve to minimize what might otherwise be significant changes from the current 1999 level of noise experienced by nearby community residents. For historic purposes it may be of some use, but it should not replace the current (base) situation. Since the EIS references the fact that newer information exists (see page 5-32, "1997 Annual Update for 1997 contours"), it is unclear why at the very least 1997 was not used as the base/current year. 6.39

In addition, the EIS indicates that the noise model used 1990 Census Tiger Files to predict the populations levels in the noise contours for the 1993 noise contours. We recommend that the document provide appropriate justification that 1990 population data is appropriate for use in 6.40

1993 without the use of any adjustment. It is also not clear what census data was used for modeling 1999 and 2010 years.

2. **Use of 1999 as Operational Year:** The use of 1999 as the runway operational year is not appropriate since the new runway will not be operational this year. Therefore, we recommend that FAA provide additional new runway operational year modeling. 6.41

3. **Noise Contour Maps:** Various maps in the noise analysis need to be supplemented. Specifically:

- While the "satellite view" contour maps are useful, there is a need for contour maps that have far greater detail. The contour maps in appendix L are better, but even those are not of the scale that we expect to see in FAA NEPA documents. It is likely that these maps will need to be of the fold out variety in order to show the appropriate scale; 6.42
- Detailed land use maps in color with noise contour overlays should also be provided. The actual land use as it relates to local zoning should be discussed in the appropriate sections of the document. These maps should be of the same scale as the as the new contour map requested above;
- To enhance the discussion related to reduction of the 70 and 75 dBA contour areas and the slight increase the 65 dBA contour, we recommend supplemental maps be provided (with possible use of color) that clearly highlight were these changes occur.

4. **Airport Layout Map:** Since the basic FAA action is the approval of the modified Airport Layout Plan, the document should contain a copy of both the existing and proposed Airport Layout Plan (an appropriate scale will probably require the use of a fold out maps). 6.43

5. **Greater Detail in Operation and Fleet Mix Information:** Detailed operation and fleet mix tables need to be provided for all modeled years. These tables should show: aircraft type, average daily operations, arrivals day, arrivals night, departure day and departure night. These data should match the input data used in the INN. The new tables should be sub-classed by commercial, commuter/air taxi, military and general aviation operations. 6.44

6. **Discussion of 60 dBA Contours:** Although the 60 dBA contours in the technical appendices do provide additional information, this information should be provided in the main volume of the EIS. We recommend that FAA show and discuss any areas within the 60 dBA contour that would experience a 3 dBA increase in accordance with the 1992 FICON guidance. 6.45

7. **Detailed Grid Point SEL Data:** While the noise analysis does provide some Lmax data, we recommend that this information be supplemented with detailed grid point SEL data for selected representative sites. 6.46

Construction Mitigation

The DEIS identifies several construction period mitigation measures, including the suppression of fugitive dust. Massport should commit to mitigative measures to control emissions from the heavy-duty engine construction equipment involved in any airport improvements. An excellent model for such mitigation is the Central Artery/Tunnel's Clean Air Construction project, a project spearheaded jointly by EPA-New England, several Massachusetts state offices, the Northeast States for Coordinated Air Use Management (NESCAUM) and the Manufacturers of Emission Control Association. Under the Clean Air Construction project, seventy construction machines (including front end loaders, backhoes, excavators, cranes and air compressors) have been retrofitted with pollution control devices (oxidation catalysts or particulate filters) in order to reduce particulate matter, hydrocarbons, carbon monoxide and toxics. In its construction contracts, Massport should require contractors to participate in this program of retrofitting construction equipment. More information on this construction initiative can be found at NESCAUM's website www.nescaum.org. 6.47

Rating

For the reasons discussed above, EPA has rated this EIS "Environmental Objections; Insufficient Information" in accordance with EPA's national rating system, a description of which is attached.

DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes that draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Letter 6
US Environmental Protection Agency, Region 1
John P. DeVillars, Regional Administrator

Code	Topic 1	Topic 2	Comment	Response
6.1	Noise	Soundproofing	...while the DEIS promises as mitigation the soundproofing of all homes newly exposed to high levels of aircraft noise as a result of the proposed project, there remains uncertainty as to whether the mitigation covers enough homes, and whether Massport and FAA will have adequate funding to carry out this commitment.	The mitigation program will include all residences impacted through implementation of the Preferred Alternative. Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country that received FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.
6.2	Ground Transportation	Mitigation	...commitments for improvements to the Blue Line Station at Logan...have not been kept.	The MBTA is developing a new Logan Airport Station to be located about 400 feet north of the existing Logan Airport Station. Massport is consulting with the MBTA on the project's design and operational elements. The new Logan Airport Station will include modern passenger amenities such as wide escalators, oversized elevators, and real-time flight information displays in the station lobby. It will also provide a convenient at-grade connection to the neighborhood, AITC Blue Route and Logan Airport, and may become a stop on the MBTA's proposed Circumferential Transit (Urban Ring) service. The Airport Station project has been the subject of EIS review and is proceeding as approved in the FHWA-CA/T review process.

Code	Topic 1	Topic 2	Comment	Response
6.3	Environmental Justice	Demographic Data	The analytic basis for...[FAA's and Massport's conclusion that minority and low-income communities do not experience disproportionately high impacts] is insufficient since critical demographic and other relevant health data are missing.	The Supplemental DEIS/FEIR provides detailed analysis of environmental justice requirements. Refer to Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population in the 65 dB DNL and above contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.
6.4	Environmental Justice	Demographic Data	...the DEIS does not compare the demographics of communities served by this project to the demographics of communities bearing the burden of the project's impacts.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a detailed discussion of the Environmental Justice analysis. The analysis provides for an appropriate comparison of the alternatives. The analysis covers all the requirements of Executive Order 12898, U.S. DOT implementing regulations, and FAA policy. The Environmental Justice analyzes the demographics of those that bear the impact within the 65 DNL contour to the population that gets the benefit of the project, which is Suffolk County.
6.5	Environmental Justice	Impacts	...the environmental justice analysis in the DEIS focuses solely on noise and ignore credible public comments identifying air quality, odor, traffic and other impacts that cumulatively burden surrounding communities with high percentage of low-income and minority populations.	Noise was identified as the only off-airport impact associated with the Preferred Alternative with the potential for impacts to environmental justice populations. Because of improved airfield efficiency and shorter delay periods, the Preferred Alternative is projected to slightly reduce emissions of air pollutants when compared to the No Action Alternative. Construction will be managed to minimize air, noise and other impacts to the adjacent communities. All construction vehicles will be required to use designated truck routes and to avoid local streets. Because of the perceived importance of cumulative impacts, Chapter 7 of the Supplemental DEIS/FEIR addresses cumulative impacts.

Code	Topic 1	Topic 2	Comment	Response
6.6	Regional Transportation	Regional Airports	...[T]o increase alternatives to air travel through Logan...[a regional, long-term transportation goal should be to use] T.F. Green in Rhode Island, Worcester Airport in Massachusetts, Manchester Airport in New Hampshire and other regional airports....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. In addition, FAA AIP funds have been provided since the early 1990s to initiate development of these regional airports. Massport has actively encouraged the development of regional airports and full use of other regional alternatives, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a description of the upcoming New England Airports System Study.
6.7	Regional Transportation	Passenger Rail	[Another regional, long-term transportation goal should be to provide] through intercity high-speed rail connections supported by a North-South Station link.	Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.
6.8	Ground Transportation	Regional Airports	[Massport, FAA, and other federal and state transportation agencies should] establish efficient mass transit access to and between the regional airports....	Massport supports improved ground access to Worcester Regional, T.F. Green/Providence, Manchester and Logan airports. These projects are discussed in Section 2.9 of the Supplemental DEIS/FEIR.
6.9	Ground Transportation	Access to Logan Airport	[Massport, FAA, and other federal and state transportation agencies should] reduce Logan's traffic impacts on surrounding communities by such measures as a free shuttle service between South Station and Logan, an intermodal terminal at Route 128, and the Urban Ring.	Massport has a comprehensive ground access strategy in place including consideration of promoting HOV use and alternative modes of transportation to Logan Airport. The status of the South Station and Logan Airport link (the Airport Intermodal Transit Connector), an intermodal terminal at Route 128, and the Urban Ring were documented in the *Logan Airport 1999 ESPR* (previously GEIR).

Code	Topic 1	Topic 2	Comment	Response
6.10	Alternatives	Peak Period Pricing	In addition, Massport should reduce the small plane mix from Logan's peak traffic hours through a peak period pricing strategy, implemented with appropriate sensitivity to the needs of communities served exclusively by smaller aircraft.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
6.11	Alternatives	Peak Period Pricing	Additional analysis is critical to determine whether the imposition of peak period pricing now would help send the necessary market signals to ensure that airlines' plans result in the most efficient use of Logan Airport (including smarter use of other regional airports, and, for smaller carriers, the use of planes capable of handling more passengers.	Elements of the PPP monitoring system include periodic review of advance airline schedules, comparisons of projected activity levels to airfield capacity, analysis of resultant levels of delay, discussions with major Logan Airport carriers to allow for voluntary schedule adjustments, and development of an action plan, as described in Section 4.5 of the Supplemental DEIS/FEIR, which would be put into place if overscheduling conditions are not corrected. Results of the monitoring system were reported in filings on an ongoing basis. The Peak Period Monitoring System is described in Section 4.5.4 of the Supplemental DEIS/FEIR.
6.12	Noise	Soundproofing	The affected communities have raised serious and credible concerns about the ability of the computer modeling relied upon in the DEIS to accurately reflect noise levels associated with Logan operations and to select homes eligible for soundproofing. These concerns are based on *in situ* noise monitoring which appears to demonstrate that computer modeling underestimates actual noise levels, at least in some neighborhoods. The DEIS does not properly address this deficiency and thus does not adequately represent the likely actual noise impacts.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights.
6.13	Noise	Impacts	Furthermore, the noise increases to neighborhoods that fall outside the FAA's 65-dBA contour remain inadequately acknowledged and addressed, as do the very high noise levels that occur each time aircraft fly over or by neighborhoods.	Noise exposure is now reported down to DNL values of 60 dB, and expected changes in exposure are reported for several new communities outside the 60 dB DNL contour. For example, refer to Tables 6.2-8 and 6.2-9 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
6.14	Noise	Impacts	The DEIS does not fully disclose the sleep disruption and other impacts that occur in these instances, nor does it address cumulative noise impacts to account for all noise, not just modeled aircraft noise, as is required under NEPA.	The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.17 and 6.2.18 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4.1 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
6.15	Analysis Assumptions/ Methodologies	Base Year	In addition, the use of 1993 is not appropriate as the base year for analysis as it does not represent existing conditions and may minimize the relative noise impacts from the Preferred Alternative when compared with what appears to have been an especially noisy base year.	The Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. The No Action Alternative is the appropriate "base" comparison for assessing future year conditions and the effectiveness of the Airside Project. The Supplemental DEIS/FEIR expands upon the discussion between current and historical conditions and can be found in Section 4.2 of the Supplemental DEIS/FEIR.
6.16	Analysis Assumptions/ Methodologies	Passenger Forecasts	The DEIS analyses ignore the critical question of whether the improvements will spur additional growth at the airport. In comparing the alternatives, both the noise and air quality analyses assume that the future passenger/flight operations growth at Logan will remain constant regardless of whether or not the runway 14/32 is constructed. The analysis thereby avoids any serious consideration of what appears to be one of the most critical questions posed by this project-whether the proposed improvements, especially when combined with landside improvements, cumulatively facilitate future growth in flight operations and passenger traffic with corresponding increases in noise, traffic, and air pollution impacts.	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Logan Airport Airside analysis and GEIR/ESPRs. Section 4.2 of the Supplemental DEIS/FEIR includes more detailed discussion.

Code	Topic 1	Topic 2	Comment	Response
6.17	Regional Transportation	Regional Airports	...the scope of the DEIS, with its focus on construction of proposed runway 14/32 and the taxiway improvements, is too limited and fails to seriously consider regional improvements as alternatives to the Logan runway project. As EPA indicated in its previous comments, the DEIS should have identified a targeted regional strategy including both existing and potential capacity, as well as regional pricing and marketing to enhance the capacity and efficiency of, and access to, all New England airports.	The alternatives in the Supplemental DEIS/FEIR respond to state and Federal scoping directives. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Massport now expects that Logan Airport will not achieve the 37.5 million passenger forecasts until 2015, rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
6.18	Environmental Review Process	FAA/NEPA, MEPA	As EPA indicated in comments on the DEIS scope, the airside and landside projects are functionally linked, and as such, they should be evaluated together in a comprehensive EIS. The current analysis focuses entirely in airside issues with no real analysis of opportunities for Massport to integrate landside and airside planning to enable Logan to improve operations and handle the substantially greater numbers of passenger anticipated for the coming decades. In response to our scoping comments, the DEIS explains that the analysis is based on background planning information provided in the state Generic Environmental Impact Report (GEIR) and that the DEIS is based on the FAA scope which was developed through a public comment process. Unfortunately, our comments on the appropriate scope of analysis for the EIS were largely discounted, and the GEIR, a document prepared under the rules of state law, does not meet the requirements of NEPA. Thus, reliance on the GEIR to satisfy NEPA's requirements for a cumulative impact analysis is not appropriate.	The proposed improvements analyzed in the Supplemental DEIS/FEIR involve both construction and administrative actions that will facilitate aircraft operations (landings, takeoffs and taxiing). None of the improvements involve landside facility improvements (*e.g.*, terminals and roadways) or related operations. The Supplemental DEIS/FEIR analyzes in detail the impacts from aircraft operations, including analysis of noise and air quality impacts during the years 1993, 1998 and under future forecast scenarios as well as environmental benefits from certain of the improvement concepts under review. In this respect, the Supplemental DEIS/FEIR conforms with scoping directives from the lead federal agency (the FAA) and with applicable FAA environmental orders, all issued in accordance with NEPA, and with directives from EOEA issued under MEPA. The various GEIR documents, including the *Logan Airport 1998 Annual Update* and the *1999 Environmental Status and Progress Report* (previously GEIR), provide additional analytic context by examining cumulative impacts from airside (*i.e.*, aircraft) operations and landside (*e.g.*, vehicular traffic, terminal service vehicles) operations at Logan Airport as well as Massport's comprehensive mitigation program. The ESPR/GEIR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR as a background document. Each GEIR/ESPR submission is subject to public review and comment. The *Logan Airport 1998 Annual Update* and the *1999 ESPR* analysis is based on the same forecast levels used in the Supplemental DEIS/FEIR. The GEIR/ESPR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Supplemental DEIS/FEIR. Consistent with past practice, Massport expects that the FAA will take the GEIR/ESPR analysis into account during its deliberations and ultimate decision on the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
6.19	Ground Transportation	Access to Logan	EPA recommends that, rather than proceeding with the environmental review of the taxiway and runway improvements, Massport and FAA focus instead on establishing a strategy to make Logan Airport a more efficient transportation center with less impact on surrounding communities, by improving mass transit access to the Airport and preventing growth in the number of flight operations.	Massport is constantly striving to make Logan Airport a more efficient airport with less impact on surrounding communities. These efforts include improving mass transit access to Logan Airport. The Airside Project makes Logan Airport more efficient and will not affect vehicle traffic, transit systems or major roadway intersections. The Supplemental DEIS/FEIR discusses all the environmental impacts from the Airside Project. The ESPR/GEIR and its Annual Updates discuss Massport's efforts to lessen Logan Airport's total environmental footprint, especially impacts from ground access. However, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
6.20	Regional Transportation	Passenger Rail	One means to reduce the growth pressures on Logan Airport is to enhance the current intercity transportation options...Massport, in cooperation with EOTC, U.S. DOT, Amtrak, and other transportation agencies, should take active measures to promote high speed rail....	Chapter 2 of the Supplemental DEIS/FEIR provides discussion of the entire region's air transportation system and includes a discussion of alternative modes, specifically, high-speed rail and the extent of Massport's active involvement in this area. Refer to response to Comments 6.6 and 6.7.
6.21	Regional Transportation	Regional Airports	These efforts should not be limited to high speed rail but should also encourage and market the use of other regional airports to the benefit of Logan and surrounding communities.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional alternatives, and steps Massport has taken to foster increased use of these alternatives. Refer to response to Comments 6.6 and 6.7.
6.22	Alternatives	Peak Period Pricing	...the implementation of peak period pricing should be a piece of the regional transportation strategy. The DEIS clearly demonstrates that peak period pricing would serve to lessen delays substantially in the high growth future scenarios... Additional analysis is critical to determine whether the imposition of peak period pricing now would help send the necessary market signals to ensure that airlines' plans result in the most efficient use of Logan Airport...Such an evaluation should include an appropriate sensitivity analysis to help determine the operations/hour level where peak period pricing becomes effective.	Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport. Refer to responses to Comment 6.10 and 6.11.
6.23	Alternatives	Peak Period Pricing	According to the DEIS, Massport appears willing to consider peak period pricing only when Logan actually experiences over scheduling. For this measure, Massport is prepared to wait and see if peak period pricing is necessary. On the other hand, the DEIS details Massport's argument that it needs a new runway now, despite the exponential growth in passenger traffic through Green and Manchester. Following such logic, EPA questions why Massport doesn't wait on its decision to construct a new runway until it is clear whether the region really needs an expanded Logan, thereby giving the regional airports a chance to capture more traffic, consistent with the impressive gains made at Manchester and Green.	Additional analysis of PPP is set out in Section 4.5 the Supplemental DEIS/FEIR The regional airports at Manchester and T.F. Green/Providence have experienced exceptional traffic growth over the past several years. Massport estimates that in 1999 regional airports diverted 2.4 million passengers from Logan Airport. In the future, continued development at the regional airports should relieve some of the traffic growth pressures at Logan Airport, resulting in a reduced rate of traffic growth. Nevertheless, regional alternatives do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Refer to response to Comment 6.17.
6.24	Alternatives	Other Non-Construction Alternatives	Additional delay reduction benefits may be obtained from managing/prioritizing takeoffs so the large planes with more passengers are given preference over smaller planes during peak periods of delay.	Although prioritizing takeoffs based on aircraft size might reduce delays, the air traffic control system of the United States, which the FAA operates, is based on a first-come, first-serve policy under most circumstances. Any change in this policy would require a major federal decision and would involve significant implications within the entire air traffic control system.

Code	Topic 1	Topic 2	Comment	Response
6.25	Analysis Assumptions/ Methodologies	Planning Period	...the proposed project offers only short term relief (five years) for delay problems it is intended to resolve. Massport should extend the planning horizon for the analysis (currently only at ten years) as part of supplemental efforts to investigate longer term solutions. The solutions should actively integrate Logan operations with regional transportation planning (airside and landside integration).	The airside analysis demonstrates that the delay reduction benefits of proposed Runway 14/32 and the other recommended airside improvements increase in the future, from 43,000 annual hours of delay reduction under the 29 M Low Fleet scenario up to 78,000 hours under the 37.5 M passenger Low Fleet scenario. Delay and environmental impacts of the Airside Project were evaluated under a broad range of future operating conditions at Logan Airport. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Chapter 2 of the Supplemental DEIS/FEIR addresses the integration of the Airside Project and regional transportation.
6.26	Air Quality	Model	The DEIS's conclusion that the Preferred Alternative will have the least negative air quality impacts is a result of certain questionable assumptions. The air quality analysis assumes that the airport-related motor vehicle emissions and the number of flight operations will be identical for all the alternatives. Unfortunately, these assumptions underlying the air quality analysis ignore the possibility that certain alternatives may result in more passengers or more flight operations. Without an analysis of whether an additional runway will affect future growth of flight operations, the validity of the air quality conclusions...are questionable. The DEIS should have analyzed whether increased airside efficiency affects the number of flight operations in the future. If the answer is yes, the air quality analysis should be structured in a way to discern the true comparative impacts of each alternative.	Refer to first paragraph in response to Comment 6.16. The air quality analysis was based on facts, findings, and assumptions that best characterize operational conditions at Logan Airport under future alternative growth and development scenarios. The basis for these scenarios and corresponding conditions is presented in Section 5.4 of the Supplemental DEIS/FEIR.
6.27	Air Quality	NAAQS	Table 5.3-1 reflects the current NAAQS for criteria pollutants. However, the table contains the incorrect 24-hour NAAQS for fine particulate matter. Rather than 50 ug/m, the standard is 65 ug/m.	Table 5.4-2 of the Supplemental DEIS/FEIR has been corrected to indicate that the 24 hour standard for fine particulate matter is 65 micrograms per cubic meter.
6.28	Air Quality	NAAQS	In Section 5.3.1.2 (page 5-41 and 42), the Draft EIS/R reflects ambient levels of criteria air pollutants measured at the three closest Massachusetts DEP monitoring stations. These levels are reflected in Table 5.3-2. The Draft EIS/R compares these ambient levels with the one-hour ground-level ozone standard of 0.12 parts per million (ppm). In July 1997, EPA revised its ozone standard to an eight-hour standard of 0.08 ppm. The DEIS should use this more stringent standard as the point of comparison.	During the time that the analysis was conducted for the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR no definitive standard was in affect because of court challenges. The one-hour standard was applied in the Airside Project Draft EIS/EIR analysis. The available monitoring data for ozone eight-hour averages are now included in Section 5.4 of the Supplemental DEIS/FEIR. The eight-hour data are unavailable for years before 1995.

Code	Topic 1	Topic 2	Comment	Response
6.29	Environmental Justice	Demographic Data	...the DEIS does not satisfy either the intent or the specific directives of the federal government's environmental justice policy as expressed in the Executive Order, the DOT Order, and the CEQ Guidance. Despite CEQs statement that its guidance should be applied with flexibility, the DEIS uses extremely narrow definitions of low-income and minority populations. Use of such narrow definitions allows the FAA to conclude that there are no environmental justice issues because so few people fall within the narrowly defined categories.	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the United States DOT Final Order, the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.
6.30	Environmental Justice	Demographic Data	The DEIS presents no detailed demographic data for the communities surrounding Logan Airport nor does it identify the impacted community with any geographic precision. The impacted community is only identified by noise contours presented on a very small-scale map. There is no map clearly indicating the location of the study area.	Refer to new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
6.31	Environmental Justice	Demographic Data	Although required by the DOT Final Order, the DEIS does not define the populations served or affected by race, color, national origin, and income level. Table 8.7-1 is the only table presented in the environmental justice analysis. That table does not clearly indicate where the noise-exposed population is located, nor does it provide any detail in describing the demographics of that population. It is impossible for *any* individual citizen to tell from the table whether he or she is in the noise-exposed population. In addition, none of the information is mapped so that the public can see the distribution of health and environmental impacts across population groups.	The estimated population within the 65 dB and 60 dB DNL noise contours for the No Action and Preferred Alternatives is presented for each of the communities within the study area in Tables 6.8-6 through 6.8-10 of the Supplemental DEIS/FEIR. Figures 6.8.1 and 6.8.2 of the Supplemental DEIS/FEIR provide information on the distribution of median household income and minority populations within the study area. Refer to new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
6.32	Environmental Justice	Impacts	...DEIS presents little data and analysis on a broad range of potential adverse impacts. Because the environmental justice analysis in the report is brief and provides little basis for its conclusion that noise is the only adverse impact, especially in the context of cumulative impacts, it is impossible to review the rationale or data used in reaching that conclusion. Ironically, that is just the circumstance that federal environmental justice policy is intended to remedy.	The Supplemental DEIS/FEIR contains an expanded analysis of Environmental Justice considerations. Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8.6 of the Supplemental DEIS/FEIR for additional information.
6.33	Environmental Justice	Impacts	The CEQ Guidance directs agencies to consider the potential for multiple or cumulative exposure to health and environmental hazards even if the effects of the cumulative exposure are not within the control of the agency action. The DEIS offers no information regarding the health of the communities surrounding Logan. EPA understands that, for purposes of determining eligibility of homes for soundproofing, FAA may only rely on noise, generated by aircraft operations. However, in preparing the environmental justice portion of the DEIS, the cumulative noise impacts from all sources in affected neighborhoods is a critical consideration.	The Environmental Justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. The analysis showed some increase in population within the 65 dB contours primarily in the City of Chelsea if the Preferred Alternative is implemented. Environmental and health issues within the City of Chelsea were considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8.6 of the Supplemental DEIS/FEIR for additional information. Available public health studies for Boston, Winthrop and Revere were also reviewed and are presented in Section 6.8.7 of the Supplemental DEIS/FEIR.

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6.34	Environmental Justice	Impacts	...there is no discussion of the public health issues often raised by minority and low-income communities, such as asthma, respiratory distress, or attention deficit disorder. Most remarkably, there is no discussion of hearing loss, an obvious health concern to any population exposed to excessive noise. Without any discussion of baseline health conditions, it is impossible to evaluate the incremental impacts or risk associated with the proposed agency action.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
6.35	Environmental Justice	Impacts	...there is no discussion of interrelated social, cultural, occupational, historical, and economic factors that may increase the environmental effects of the proposed action. For example, the DEIS appears to assume that soundproofing completely addresses noise impacts in a neighborhood. There is no mention that over-flights impair residents" use of their porches or yards. Double-pane windows cannot protect the conversations on the street and front stoop that bind a community together.	Environmental and health studies relating to the City of Chelsea were reviewed to assess the potential for other cumulative or multiple adverse exposures, since the increase in population within the 65 dB DNL contour associated with the Preferred Alternative is primarily within this community. While it is true that sound insulation does not alleviate noise exposure outside, it is an effective technique that has been implemented effectively, not only at Logan Airport, but also at numerous other airports throughout the United States.
6.36	Environmental Review Process	Public Participation	Rather than responding directly to community concerns, the FAA instead often focuses on its compliance with process requirements...several community groups and members of Logan's Citizens Advisory Council complained to EPA that Massport and FAA failed to respond to specific requests made from October 1997 to late 1998 to engage in a concrete discussion with the community about plans for air side improvements at Logan, and that when the consultation did resume, it was just before release of the DEIS.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
6.37	Alternatives	Runway 14/32	It remains unclear how Massport and the FAA will be able to comprehensively "guarantee" unidirectional use (over the harbor only) of Runway 14/32.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32. Refer to Section 8.5 of the Supplemental DEIS/FEIR for a discussion of enforcement of the unidirectional limitation.
6.38	Noise	PRAS	...based on the recent public debate concerning PRAS goals, it is not evident that these goals reflect current community interests...the focus on PRAS goals as a benefit of the proposed runway inappropriately shifts the focus away from consideration of alternatives to reduce use of Logan (or air travel for that matter) as a means to eliminate delay. Asserting that the FAA will be able to distribute noise impacts more flexibly across impacted communities does nothing to address the question of whether those noise impacts are necessary or adequately mitigated.	The Supplemental DEIS/FEIR demonstrates that there have been no significant demographic changes to warrant an update of the PRAS goals. Massport does not have control of air travel demand, and continued economic prosperity will inevitably produce more demand for air travel. The Preferred Alternative mitigation program includes several new elements, including sound insulation, an expanded PRAS monitoring and reporting system, and implementation of an expanded PPP monitoring system. Construction of Runway 14/32 would allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

Code	Topic 1	Topic 2	Comment	Response
6.39	Analysis Assumptions/ Methodologies	Base Year	The use of 1993 as the base year is not appropriate. While it may be true that the 1993 noise impacts were a "worst case" due to the large number of Stage 2 aircraft, we do not believe that it represents the current situation. Moreover, the comparison of the alternatives with a particularly high noise year may serve to minimize what might otherwise be significant, changes from the current 1999 level of noise experienced by nearby community residents. Since the EIS references the fact that newer information exists (see page 5-32, " 1997 Annual Update for 1997 contours"), it is unclear why at the very least 1997 was not used as the base/current year.	Refer to response to Comment 6.15.
6.40	Analysis Assumptions/ Methodologies	Base Year	...the EIS indicates that the noise model used 1990 Census Tiger Files to predict the populations levels in the noise contours for the 1993 noise contours. We recommend that the document provide appropriate justification that 1990 population data is appropriate for use in 1993 without the use of any adjustment. It is also not clear what census data was used for modeling 1999 and 2010 years.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR used 1990 federal census data at the "block" level for all analysis years, which represents the most recent, detailed level of population data available. Estimates of 1995 population for the municipalities adjacent to Logan Airport, developed by the Massachusetts Institute for Social Research, indicate that the population is relatively stable. The 1995 population estimates are not available at a block group level. Refer to Section 6.8.3 of the Supplemental DEIS/FEIR for additional discussion.
6.41	Analysis Assumptions/ Methodologies	Base Year	The use of 1999 as the runway operational year is not appropriate since the new runway will not be operational this year. Therefore, we recommend that FAA provide additional new runway operational year modeling.	Massport and the FAA examined a wide range of future forecast levels in the Airside Project analysis. Logan Airport's rate of growth has slowed partially because of the emerging role of the alternative airports in serving the region's air travel demand. Logan Airport is not expected to reach the traffic level associated with the 29 million passenger scenario until 2003, about the time the runway will be operational. Thus, the runway operational analyses for the 29 million passenger scenario are valid.
6.42	Noise	Studies	Various maps in the noise analysis need to be supplemented. Specifically: While the "satellite view" contour maps are useful, there is a need for contour maps that have far greater detail. The contour maps in appendix L are better, but even those are not of the scale that we expect to see in FAA NEPA documents. It is likely that these maps will need to be of the fold out variety in order to show the appropriate scale; Detailed land use maps in color with noise contour overlays should also be provided. The actual land use as it relates to local zoning should *be* discussed in the appropriate sections of the document. These maps should be of the same scale as the as the new contour map requested...To enhance the discussion related to reduction of the 70 and 75 dBA contour areas and the slight increase the 65 dBA contour, we recommend supplemental maps be provided (with possible use of color) that clearly highlight were these changes occur.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
6.43	Environmental Review Process	FAA/NEPA	Since the basic FAA action is the approval of the modified Airport Layout Plan, the document should contain a copy of both the existing and proposed Airport Layout Plan....	Figures 3.1-1 and 3.1-2 of the Supplemental DEIS/FEIR show the existing and proposed airside features. The cover of the Airside Project Draft EIS/EIR also presents the existing and proposed layout. Modifications to the Airport Layout Plan are effective upon FAA approval.
6.44	Noise	Model	Detailed operation and fleet mix tables need to be provided for all modeled years. These tables should show: aircraft type, average daily operations, arrivals day, arrivals night, departure day and departure night. These data should match the input data used in the INM. The new tables should be sub-classed by commercial, commuter/air taxi, military and general aviation operations.	Detailed data on each of the fleet mixes that were under consideration may be found in Volume 3, Appendices E and H of the DEIS/EIR. Additional tables in Appendix E of the Supplemental DEIS/FEIR provide data on operations and runway usage used in the analyses of the High Regional Jet Fleet.

Code	Topic 1	Topic 2	Comment	Response
6.45	Noise	Impacts	Although the 60 dBA contours in the technical appendices do provide additional information, this information should be provided in the main volume of the EIS. We recommend that FAA show and discuss any areas within the 60 dBA contour that would experience a 3 dBA increase in accordance with the 1992 FICON guidance.	Refer to Section 6.2.3 and Tables 6.2-6 through 6.2-10 of the Supplemental DEIS/FEIR.
6.46	Noise	Impacts	While the noise analysis does provide some Lmax data, we recommend that this information be supplemented with detailed grid point SEL data for selected representative sites.	SEL and L_{max} are both indicators of noise from a single event and are directly correlated with each other, SELs being approximately 10 dB higher in value for a given aircraft overflight. This is because the SEL is integrated over time while L_{max} is an instantaneous sound level. Because of this relationship, tabulating SELs provides no additional information with which to compare alternatives. For example, in Table 6.2-18 in the Draft EIS/EIR, the first line of data reported for Site 1 on Andrews Street in South Boston shows no difference between Alternatives 1 and 1A, regardless which fleet is considered. SELs would also show no difference. At Site 3, where the L_{max} decreases between Alternatives 1 and 1A, a comparable table of SELs would show a decrease of almost identical magnitude. As the Airside Project Draft EIS/EIR indicates, "these L_{max} [or SEL] values are not as useful for assessing the relative noise among various locations and fleets as are the cumulative metrics such as DNL because they represent extreme values...and they do not consider how often the noise events occur."
6.47	Construction	Mitigation	Massport should commit to mitigative measures to control emissions from the heavy-duty engine construction equipment involved in any airport improvements. In its construction contracts, Massport should require contractors to participate in this program of retrofitting construction equipment.	Massport will require contractors to retrofit their heavy construction equipment with advanced pollution control devices in accordance with DEP's Clean Air Construction Initiative. Contractor owned equipment, such as front-end loaders, backhoes, cranes and excavators, will be retrofitted with oxidation catalysts to filter and break down hydrocarbons, particulate matter and carbon dioxide from diesel emissions. Refer to Section 6.9 and Chapter 8 of the Supplemental DEIS/FEIR for additional discussion of air quality mitigation measures during the construction period.

Liaison Outreach & Services Program

Federal Regions I & II

HISPANIC-AMERICAN
CHAMBER OFCOMMERCE

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U.S. Department of Transportation

Office of Small and Disadvantaged Business Utilization
Washington, D.C.

LETTER 7

Friday, April 16, 1999

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Mr. Arthur Pugsley-EOEA No. 10458
Secretary of Environmental Affairs
Attention MEPA Office
100 Cambridge Street
Boston MA 02205

Dear Mr. Pugsley:

The Hispanic-American Chamber of Commerce, an organization of businesses, individuals, and institutions active in the Spanish and Portuguese speaking markets in the Northeast United States and abroad, supports the Logan Modernization Project and a greater emphasis on regional alternatives for upgrading our transportation infrastructure, including high speed rail and upgrading of the Worcester airport. 7.1

Our organization conducts outreach and information activities on behalf of nearly 10,000 small and disadvantaged businesses in New England which stand to benefit from the above initiatives as potential contractors to transportation agencies.

In addition, we are advocates for the Hispanic community which comprises much of the population around Logan Airport and which stands to benefit directly in terms of jobs and economical transportation from modernization of the airport.

Cordially,

Bruce Young Candelaria
Executive Director/
LOSP Director, Regions I & II

Letter 7
US Department of Transportation, Liaison Outreach & Services Program Bruce Young Candelaria

Code	Topic 1	Topic 2	Comment	Response
7.1	Regional Transportation	Regional Airports	The Hispanic-American Chamber of Commerce, an organization of businesses, individuals, and institutions active in the Spanish and Portuguese speaking markets in the Northeast United States and abroad, supports the Logan Modernization Project and a greater emphasis on regional alternatives for upgrading our transportation infrastructure, including high speed rail and upgrading of the Worcester airport. The Hispanic community comprises much of the population around Logan Airport and which stands to benefit directly in terms of jobs and economical transportation from modernization of the airport.	Section 1.3 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to the regional economy.

Date: [illegible] Desrosiers at MPASTB4
4/22/99 1:53 PM
Priority: Normal
TO: Danielle Rinsler, Flavio Leo
Subject: EOEA 10458 Logan Airside Improvements

LETTER 8

Executive Office of Environmental Affairs
Attention: MEPA
Mr. Arthur Pugsley
EOEA 10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

I have provided verbal testimony to you earlier in my capacity as Executive Director of the Massachusetts Aeronautics Commission, as did our Chairman, Sherman W. "Whip" Saltmarsh, Jr. I also a cosigned the letter from the six state aviation directors to MEPA supporting the airside improvements to Logan International Airport and opposing peak period pricing. On this, the final day of the comment period, I wanted to share two other comments with you.

First, in your review of the EIS/EIR, I respectfully recommend that you do so with an eye toward all of the previous planning and environmental analyses that precede this EIS/EIR including, but not limited to, the Second Major Airport Study, the Strategic Assessment Report, the New England Regional Air Service Study, Logan's GEIR. In many ways, this EIS/EIR represents the next logical process in that long chain of credible planning and environmental analyses. 8.1

Second, I would hope that Massachusetts Environmental Policy Act Unit and the Federal Aviation Administration will review the data before them in light of existing and applicable federal and state laws, regulations and policies. I have come to have a great respect for process. It would be a shame to divert attention to issues which are outside of the process at hand. For example, some would argue that certain procedures or methodologies were wrong or inaccurate and some even argue that MEPA and the FAA should adopt new procedures or methodologies. I submit that such discussion would be more appropriate in a process related to proposed rulemaking. I believe that Massport employed appropriate procedures and methodologies and the integrity of the process has been maintained. 8.2

Thank you for your time and consideration of these comments.

Sincerely,

Stephen R. Muench, Executive Director
Massachusetts Aeronautics Commission
Ten Park Plaza, Room 6620
Boston, MA 02116

Letter 8
MA Aeronautics Commission, Steve Muench, Executive Director

Code	Topic 1	Topic 2	Comment	Response
8.1	Regional Transportation	Regional Airports	... in your review of the EIS/EIR, I respectfully recommend that you do so with an eye toward all of the previous planning and environmental analyses that precede this EIS/EIR including, but not limited to, the Second Major Airport Study, the Strategic Assessment Report, the New England Regional Air Service Study, Logan's GEIR. In many ways, this EIS/EIR represents the next logical process in that long chain of credible planning and environmental analyses.	Comment noted.
8.2	Environmental Review Process	FAA/NEPA MEPA	I hope that [EOEA and FAA] will review the data before them in light of existing and applicable federal and state laws, regulations and policies. ... some would argue that certain procedures or methodologies were wrong or inaccurate and some even argue that MEPA and the FAA should adopt new procedures or methodologies. ... I believe that Massport employed appropriate procedures and methodologies and the integrity of the process has been maintained.	Comment noted.

EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Metropolitan Boston - Northeast Regional Office

ARGEO PAUL CELLUCCI
Governor

JANE SWIFT
Lieutenant Governor

LETTER 9

BOB DURAND
Secretary

EDWARD P. KUNCE
Acting Commissioner

April 22, 1999

Executive Office of
Environmental Affairs
20th Floor
100 Cambridge Street
Boston, MA 02202

RE: Boston/Winthrop
Logan Airside Improvements
DEIR/EOEA #10458

Attn: MEPA Unit

Dear Secretary Durand:

The Department of Environmental Protection Northeast Regional Office has reviewed the Draft Environmental Impact Statement/ Report (DEIS/R) submitted by the Massachusetts Port Authority (Massport) for the identification and review of operational and environmental implications of alternatives for reducing current and projected levels of aircraft delay at Boston-Logan International Airport (EOEA #10458).

Air Quality:

Summary

The air quality analysis presented in the DEIS/R includes both an emissions inventory and dispersion modeling. The emissions inventory analysis compares the emissions burden of the alternatives and concludes that Alternative 1 will generate the least amount of carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NOx) and particulate matter (PM_{10}). The dispersion modeling results conclude that the highest predicted levels of CO, nitrogen dioxide (NO_2) and PM_{10} are below state and federal standards.

The DEIS/R makes the statement that "Air quality will improve due to

improved airfield efficiency and shorter delay periods attributable to each of the capital improvements." The project is being proposed by Massport to reduce aircraft delays and the associated costs of such delays during certain wind and weather conditions. Massport argues that the project is not designed to provide additional capacity for increased operations at Logan Airport. While DEP agrees that the project, and runway 14/32 in particular, will not be the primary factor that will draw additional air traffic to Logan, air travel and passenger demand is projected to increase dramatically. The air pollution impacts of this additional air traffic are substantial and merit the implementation of all feasible mitigation measures including, but not limited to, the strategies described below. 9.1

Massport's past and future commitments to mitigation measures through the environmental review process should be binding and a funding plan should be prepared to ensure their implementation. DEP recommends that Massport prepare and include this plan in the Final EIS/R. 9.2

Logan Airport Air Pollution Emissions Trends

Over the past several years, DEP has commented on the GEIR for Logan Airport that emissions trends for Logan Airport after 1999 are a large concern. In summary, long-term emissions projections indicate that NOx and CO emissions will increase in 1999 and in 2010 for total airport emissions. VOC emissions decreased from 1990-1997 due to a change in aircraft fleet mix and controls on motor vehicles, but have increased since 1997. The increases in emissions are directly attributable to increases in aircraft operations due to increased passenger demand. The majority of emissions are generated by aircraft operations and ground service equipment as illustrated by the following tables:

Total Airport Emissions (kg/day)			
Year	1997	1999	2010
VOC	3183	3269	3207
NOx	5726	6670	8343
CO	14640	14470	16686

Aircraft Emissions (kg/day)			
Year	1997	1999	2010
VOC	1959	1883	1490
NOx	4592	5365	6666
CO	6636	6096	9144

Ground Service Equipment (kg/day)			
Year	1997	1999	2010
VOC	530	596	786
NOx	622	693	934
CO	6098	6953	9144

Airport and aircraft emissions represent the largest uncontrolled source of air pollution nationwide and in Massachusetts. In fact, aircraft emissions are the only mobile source of air pollution in the Massachusetts State Implementation Plan (SIP) emissions inventory that have not been controlled or slated for near- or long-term emissions reductions. 9.3

DEP is particularly concerned about the projected increase in NOx emissions. For comparison purposes, airport NOx emissions are equivalent

to emissions from major stationary sources including power plants. For the 1999 summer ozone season (153 days from May 1st through September 30), total emissions from Logan Airport rank as the sixth largest source of NOx emissions when compared to the 37 sources regulated under 310 CMR 7.27, the NOx Allowance Program. In 2010, after implementation of further NOx reductions pursuant to EPA's NOx SIP Call, Logan Airport will most likely rank as one of the highest sources of NOx when compared to these same sources.

Aircraft Emissions Reduction Measures and Strategies

DEP's past comments on the GEIR have recommended measures and strategies to reduce emissions from Logan Airport. The recommendations include both specific measures as well as policies that could be initiated to ensure that future emissions from Logan Airport do not exceed existing 1999 levels. For example, DEP has commented that emissions at Logan Airport should be capped at 1999 levels. The basis for this recommendation is that Massachusetts is a serious nonattainment area for ozone and is required under the Clean Air Act Amendments of 1990 to meet health-based clean air standards by 1999 and to maintain these standards thereafter. In addition, EPA adopted a more stringent 8-hour ozone standard in 1997 after a lengthy scientific review process. EPA determined that a more stringent standard was needed to protect public health. It is likely that additional emissions reductions beyond those already planned for will be needed for Massachusetts to meet the 8-hour standard for ozone.

DEP is encouraged by Massport's willingness to explore opportunities to mitigate expected emissions due to increased activity at Logan. In response to the Secretary's Certificate on the 1997 Annual Update, DEP met with Massport on March 30, 1999. As a result of this meeting Massport has agreed to assist DEP by providing data to assess the potential emissions reductions from implementing emissions-based landing fees. In addition, Massport indicated that they are conducting a survey and inventory of ground service equipment (GSE). DEP believes this inventory will provide important data to target and plan for the conversion of GSE to less-polluting alternatives. DEP recommends the following strategies and measures as air pollution mitigation for Logan Airport. 9.4

Airport Emissions Caps

McGuire Air Force Base in New Jersey has established an emissions budget under the federal General Conformity Rule, 40 CFR Parts 6, 51, and 53 as part of a proposal for base realignment.[1] This emissions budget creates a level of emissions for 1996 and 1999 that this airport may not exceed for these years or in the future without creating emissions offsets or requesting a SIP revision. The budget includes thirty source categories of emissions on the base. Another example of a cap approach is John Wayne Airport in Orange County California where the number of gate operations is limited to a certain number.

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[1] An emissions budget is defined as the portion of a State Implementation Plan's projected emissions inventory that describe the levels of emissions (mobile, stationary, area, etc.) that provide for meeting reasonable further progress milestones, attainment, and/or maintenance for any criteria pollutant or its precursors.

As mentioned above, DEP suggests that emissions for Logan Airport be capped at 1999 levels and believes that McGuire Air Force Base and John Wayne Airport provide examples that this strategy is workable. 9.5

Economic Incentives for Cleaner Aircraft Engines

European airports have adopted policies where aircraft landing fees are established based on the emission characteristics of the aircraft. An example of a results-oriented emissions charge program is in Sweden where an aircraft emission charge for NOx and hydrocarbons (HC) was adopted in 1989. Two years later, HC emissions had declined by 62%, in part due to a decision by the domestic airline industry to modify the F28 fleet. Zurich Airport adopted an emissions charge in September of 1997 derived by decreasing landing fees by 5% and then redistributing the charge based on the emissions characteristics of the aircraft. The goal of the variable emissions charge is to provide an economic incentive for the airline industry to phase in cleaner engines and to deploy cleaner aircraft to areas with air quality problems. The Canton of Zurich established the aircraft emission charge program with the principle that all emission sources will have to contribute their share of emission reductions to meet air quality goals. Similar to U.S. airports, European airports are experiencing growth in travel demand and the relative contribution of airports to air pollution will continue to increase without further control strategies or programs.

To date, no airport in the United States has established an aircraft emissions charge, and this specific type of charge is not referenced in federal statute, case law or regulation. There is no direct legal precedent establishing the right of states and political subdivisions that own or operate airports to impose aircraft emission charges on commercial airlines. However, nothing in federal statute, case law or regulation prohibits the establishment of an aircraft emission charge. In fact, aircraft emission charges are a fairer approach to allocating the cost of mitigating air pollution generated by commercial aircraft than the weight-based landing fee system currently in place at most airports.

DEP's understanding is that airport operators assess aircraft landing fees to recover the costs of operating the airport; these fees may include the cost of environmental compliance. To the extent that Massport and the airlines are subject to an emissions cap and are responsible to mitigate air pollution from their activities, the adoption of an emissions-based landing fee system is warranted within the bounds of recovering the cost of environmental compliance and as a means to encourage cleaner aircraft engines. 9.6

Airside Operational Improvements

The DEIS/R proposes taxiway improvements including the Centerfield Taxiway, reconfiguring the Southwest Corner Taxiway System, extending Taxiway Delta and realigning Taxiway November. These improvements will reduce aircraft taxi time and associated emissions. DEP recommends that other measures be implemented at Logan to further reduce emissions from taxiing such as more widespread use of single engine taxiing. Terminal gate electrification is another measure with potential to reduce emissions significantly. DEP recognizes that these types of policies may be voluntary, but recommends that Massport provide further incentives or disincentives to increase participation by the airlines. These strategies not only reduce emissions, but also provide cost savings to the airline industry through fuel savings. Delta Airlines, for example, has reported savings of $5.9 million/year at Atlanta Airport alone. 9.7

Ground Service Equipment

Massport has made progress converting ground service equipment (GSE) and ground service vehicles to clean alternative fuels including compressed natural gas (CNG) and electric. DEP is encouraged by a program developed under the "Clean Air Partners" where tenants can purchase and be reimbursed for electric GSE equipment. However, despite this progress, the emissions inventory of emissions for all pollutants is projected to increase significantly in this category.

As mentioned above, Massport is in the process of inventorying GSE equipment at Logan. DEP believes this inventory is a critical first step for Massport to adopt a plan for vehicle and equipment conversions with specific emissions reduction targets. In addition to a plan for emissions reductions, Massport should actively promote these types of strategies and institute leasing agreements with the airlines and service providers to convert GSE. 9.8

Ground Access

Massport reported a decrease in HOV ridership levels from 1996-1997 in the 1997 GEIR Annual Update. This decrease was a result of another decline in the number of MBTA Blue Line transit riders accessing the airport; the number of transit riders has been declining since 1994. DEP is hopeful that the Blue Line Modernization project as well as the Airport Intermodal Transit Connector (AITC) will reverse this decline in transit ridership to the airport

Massport has adopted an airport passenger high occupancy vehicle (HOV) modeshare goal of 35.2% when annual airport passengers reach 37.5 million. DEP has commented previously that the targeted HOV modeshare goal of 35.2% should be higher, but Massport is reluctant to set a higher goal citing that HOV ridership increases may be harder to attain in the future. Nevertheless, DEP believes a higher modeshare is essential to accommodate the projected increase in air passengers without increasing air pollution from ground access vehicles. DEP recommends that MEPA require Massport to adopt a higher HOV modeshare goal and a specific action plan to reverse the trend of declining transit ridership. DEP believes these actions should precede the proposed Logan Airside Improvements Project. 9.9

One particular strategy that has been adopted by other airports is the consolidation of courtesy vehicles that serve rental car companies. Currently these courtesy vehicles circle Logan and pick up only their own customers. However, when there are no customers waiting, the vehicles create needless vehicle miles traveled (VMT), congestion and air pollution emissions. DEP recommends that Massport explore this strategy.

Construction Period Impacts

As MEPA is aware, last year the Central Artery Project, in cooperation with EPA-Region I, EOEA, Northeast States for Coordinated Air Use Management (NESCAUM) and DEP, with assistance from the Manufacturers of Emission Control Association (MECA), launched the Clean Air Construction Initiative. This program is the first in the nation to retrofit existing heavy construction equipment used at major public works/infrastructure projects with pollution control devices targeted at reducing diesel emissions and, consequently, reducing the localized adverse health impacts and nuisance conditions they may create. To date, ten (10) pieces of Central Artery construction equipment have been retrofitted and another sixty (60) pieces

are scheduled to be retrofitted by mid-1999.

In addition to implementation of diesel retrofit activities for the CA/T Project, DEP is actively discussing similar mitigation

actions for one or more projects being proposed by MBTA and MWRA and is planning to initiate discussions relative to a number of other large construction projects within the Boston Area.

DEP believes that the implementation of additional diesel emission controls on on-site heavy construction equipment can significantly mitigate localized, adverse air quality impacts. DEP recommends that MEPA include in its EIR scope the requirement that such actions be assessed by Massport for implementation as part of all construction activities related to construction at Logan Airport. 9.10

Parking Controls

Logan Airport and a portion of East Boston are subject to a parking freeze on airport-related parking. These parking freezes are included in the SIP as a measure to reduce ground-level ozone and carbon monoxide. Since the amendment of the Logan Freeze and adoption of the East Boston Freeze in 1989, Massport has made progress in relocating employee parking off of the airport and in encouraging less-polluting modes of access to the airport. However, DEP is aware of a proliferation of airport-related parking uses outside of the freeze boundaries most notably in Chelsea and in South Boston. DEP recommends that Massport complete a comprehensive inventory of all airport-related parking serving Logan and, if necessary, propose a management plan that is consistent with the goals of the parking freezes. 9.11

Study of Regional Transportation Alternatives

The DEIS/R reiterates Massport's estimate in the GEIR update that up to 7.3 million passengers can be diverted from Logan Airport to surrounding regional airports, rail and video teleconferencing. In comments on the 1994/1995 GEIR Update, DEP cited the need for an assessment and a comparison of the environmental impacts of regional aviation alternatives. The context of these comments is that DEP is in the position of reviewing many proposed airport projects without adequate information to assess their environmental impacts comparatively. DEP believes these comments are still relevant particularly in the context of the proposed project. As such, DEP recommends a more detailed study to look at the environmental impacts of the potential passenger diversion from Logan to allow for a comparison. Study components should include, at a minimum, impacts on air quality, vehicle miles traveled and wetlands. 9.12

Excavate and Building Demolition Materials:

Section 6.6 of the DEIS/R describes Massport's proposed procedures for management of the approximately 900,000 c.y. of excavate and building demolition materials (240,000 c.y. of this total relates to the need for removal and off-site management of a portion of the CA/T soils currently located on Governors Island that would interfere with the proposed runway 14/32).

- Page 6-99 describes the "approach" Massport is taking with regard to management of these materials which is, "...no excavation materials from Logan, no matter what the characterization results, will be disposed at sensitive areas, such as residential, recreational or wetland areas." DEP completely concurs with this approach and applauds Massport for taking such a protective position. 9.13

- Page 6-116 describes the anticipated project construction sequencing and indicates that the overwhelming majority of excavate production is anticipated to occur in the first two years of the project (2000 and 2001). Page 6-111 includes the following statements,

  "The majority of the excavated material has potential for being recycled as landfill daily cover and/or as landfill contouring closure material. Based on existing physical and chemical characteristics, the materials are compatible for recycle as daily cover and/or contouring closure materials and meet the MA DEP requirements for such applications.

  "Discussions with commercial landfill owners/operations have indicated that there is capacity at in-state and out-of-state landfills for the materials. Therefore, recycling as landfill daily cover and/or closure materials is considered to be the most viable soil management alternative."

DEP concurs with Massport's intention to beneficially reuse the excavate at landfills as either daily cover or pre-cap grading/shaping material ("contour closure material"). Based upon the status of unlined landfill closures and commercial landfill capacity (and therefore the "need" for mildly contaminated excavate), when Massport will require capacity for its excavate there may not be adequate demand for all the Logan material in the timeframe required by project sequencing. In this regard, DEP recommends that Massport assess backup options to minimize the potential for delays and/or cost increases. 9.14

- Relative to removal of the 240,000 c.y. of CA/T excavate currently located at Governors Island, staff from DEP has been working with representatives from Massport and Massachusetts Transportation Authority (MTA) to devise a confirmatory soil sampling program to allow for expedited and cost-effective off-site management of these soils.

- In various sections of the report (including 5-71, 5-75, 6-97, etc.) erroneous statements are made relative to the applicability of c.21E and the Massachusetts Contingency Plan (MCP) as it relates to the CA/T materials on Airport property. The following are relevant discussions and corrections for Massport to include into their Final document. 9.15

(1) Page 5-71 includes the following statement,

"All clearance material was removed by the MHD and disposed of off-site in 1996. In relation to the MCP, the corresponding terms for "clearance" and "non-clearance" are "remediation" and "non-remediation" waste, respectively."

The first sentence is correct, but the second with regard to defining Clearance and Non-Clearance is not. The terms Clearance and Non-Clearance relate strictly to determining whether or not the soils to be excavated for the CA/T Project exceed specific contaminant thresholds (a copy of the thresholds are appended to this comment letter) as it relates to off-site disposal options and worker protection. The definitions for these categories of CA/T soils is specified in the May 7, 1997, Amended MOU between MHD and DEP for management of CA/T excavate, and are indicated below.

"Clearance Criteria mean the concentration criteria for soils and groundwater requiring clearance analysis, as defined in the Clearance Procedures and as set forth in attached Exhibit B to this MOU."

"Non-Clearance Areas mean those portions of a Program Area outside of Clearance Areas identified by a Field Characterization Report, a Clearance Report, and/or a CA/T IRAC."

Much of the Non-Clearance soils are in-fact "remediation wastes" as defined under c.21E and the MCP.

(2) Page 5-75 includes the following statement,

"The Governors Island materials consist of silty sand with pockets of cohesive soils. In general, the stabilized harbor sediments contain lower contaminant levels than the excavated soils. The Response Action Outcome statement prepared by Massport concludes that a condition of No Significant Risk exists at Governors Island."

The characterization of harbor sediments as "less contaminated" than the excavated soils is incorrect. Most of the 90,000 c.y. of sediments placed into a double-lined landfill on Governors Island are significantly more contaminated than the CA/T soils placed at adjacent areas of Governors Island. The placement of the CA/T dredged sediments and excavated soils was specifically approved by DEP under the authority of c.21E/MCP in November 22, 1994 correspondence based on submission by MHD and approval by DEP of a Human Health and Ecological Risk Assessment.

(3) Page 6-97 includes the following statement,

"As described in Section 5.6, materials stored at Governors Island as part of the Central Artery/Tunnel Project (CA/T Project) were initially classified by the Massachusetts Highway Department (MHD) using criteria defined in a Memorandum of Understanding (MOU) between the MA DEP and MHD. While these criteria were initially used to characterize the materials, the MOU criteria have since been superseded by standards established in the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000)."

The discussion relative to the MOU excavate criteria being superseded by the MCP is incorrect. The MOU's authority is derived directly from c.21E, see excerpts below taken from the MOU.

"In accordance with the provisions of c.21E §3(c), authorizing DEP to integrate the implementation and enforcement of c.21E with other programs established for the protection of public health, safety, welfare, and the environment, MHD and DEP enter into and agree that this MOU sets forth the procedures to be followed by DEP and MHD to comply with c.21E and the MCP with respect to all response actions undertaken and conducted in connection with the design and construction of the Central Artery/Tunnel Project.

"It is the intent and understanding of DEP and MHD that all words and phrases used in this MOU which are defined in the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, (hereinafter "M.G.L. c.21E" or "c. 21E") and/or in the Massachusetts Contingency Plan, 310 CMR 40.0000 et. seq.,

(hereinafter "MCP" or "the MCP"), shall have that definition ascribed to them unless otherwise expressly defined herein."

DEP has previously made a formal determination that the permanent placement of the CA/T dredged sediments and excavate at Governors Island does not result in a condition of Significant Risk as defined in the MCP.

The DEP Northeast Regional Office appreciates the opportunity to comment on this proposed project. Specific questions regarding the air quality issues should be addressed to Christine Kirby at (617) 292-5631. Specific questions regarding solid waste/contaminated soils issues should be addressed to Steve Lipman at (617) 292-5698. General questions regarding these comments should be directed to David Shakespeare at (978) 661-7797.

Sincerely,

John Felix,
Deputy Regional Director,
MEPA Review Coordinator

cc: David Murphy, DEP/Commissioner's Office, Boston
Steve Lipman, DEP/Commissioner's Office, Boston
Christine Kirby, BWP/AQ Boston

Letter 9
MA Department of Environmental Protection
Northeast Regional Office
John Felix, Deputy Regional Director, MEPA Review Coordinator

Code	Topic 1	Topic 2	Comment	Response
9.1	Mitigation	Initiatives	While DEP agrees that the project, and runway 14/32 in particular, will not be the primary factor that will draw additional air traffic to Logan, air travel and passenger demand is projected to increase dramatically. The air pollution impacts of this additional air traffic are substantial and merit the implementation of all feasible mitigation measures....	Refer to the *Logan Airport 1999 ESPR* (previously GEIR) for the status of Massport's mitigation programs and to Chapter 8 of the Supplemental DEIS/FEIR for a discussion of proposed Airside Project mitigation measures.
9.2	Mitigation	Initiatives	Massport's past and future commitments to mitigation measures through the environmental review process should be binding and a funding plan should be prepared to ensure their implementation. DEP recommends that Massport prepare and include this plan in the Final EIS/R.	Massport's mitigation measures are reinforced through compliance with M.G.L. Chapter 30A, Section 61 and through specific state and federal certificates approving projects that have mitigation. The status of the Section 61 Finding commitments are tracked and reported in the *Logan Airport 1999 ESPR* (previously GEIR). See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR. Massport follows a five-year capital budget planning process to provide context for financing specific projects. As these projects, which include established mitigation measures, proceed to the implementation stage, appropriate financing plans are finalized, which can include proceeds from bond issues, available internal funds, and grant funds. These plans are developed through the Massport Board approval process.
9.3	Air Quality	Impacts	...long-term emissions projections indicate that NOx and CO emissions will increase in 1999 and in 2010 for total airport emissions. VOC emissions decreased from 1990-1997 due to a change in aircraft fleet mix and controls on motor vehicles, but have increased since 1997. The increases in emissions are directly attributable to increases in aircraft operations due to increased passenger demand. Airport and aircraft emissions represent the largest uncontrolled source of air pollution nationwide and in Massachusetts. DEP is particularly concerned about the projected increase in NOx emissions. In 2010, after implementation of further NOx reductions pursuant to EPA's NOx SIP Call, Logan Airport will most likely rank as one of the highest sources of NOx when compared to these same sources.	The EOEA May 7, 1999 Certificate on the Airside Project Draft EIS/EIR requested that Massport undertake a feasibility study of implementing measures to reduce NOx emissions at Logan Airport. This study is currently underway and will be presented to MEPA by the end of March 2001. Appendix A (*Ozone Modeling Support Document for the New England Domain*) of DEP's Attainment Submittal of April 1998, indicated that on-road mobile sources are a greater concern for NO_x and area sources a greater concern for VOCs than Logan Airport.
9.4	Air Quality	Mitigation	DEP is encouraged by Massport's willingness to explore opportunities to mitigate expected emissions due to increased activity at Logan.	Massport is actively involved in many air quality initiatives and explored other options to reduce emissions from activities at Logan Airport in the *Logan Airport 1999 ESPR* (previously GEIR).
9.5	Air Quality	Mitigation	...DEP suggests that emissions for Logan Airport be capped at 1999 levels and believes that McGuire Air Force Base and John Wayne Airport provide examples that this strategy is workable.	Refer to response to Comment 9.3.

Code	Topic 1	Topic 2	Comment	Response
9.6	Air Quality	Emission-Based Landing Fees	To the extent that Massport and the airlines are subject to an emissions cap and are responsible to mitigate air pollution from their activities, the adoption of an emissions-based landing fee system is warranted within the bounds of recovering the cost of environmental compliance and as a means to encourage cleaner aircraft engines.	Refer to response to Comment 9.3.
9.7	Air Quality	Taxiway Improvements	These improvements will reduce aircraft taxi time and associated emissions. DEP recommends that other measures be implemented at Logan to further reduce emissions from taxiing such as more widespread use of single engine taxiing.	Refer to response to Comment 9.4.
9.8	Air Quality	Alternative Fuels	Massport has made progress converting ground service equipment (GSE) and ground service vehicles to clean alternative fuels...Massport is in the process of inventorying GSE equipment at Logan. DEP believes this inventory is a critical first step for Massport to adopt a plan for vehicle and equipment conversions with specific emissions reduction targets...Massport should actively promote these types of strategies and institute leasing agreements with the airlines and service providers to convert GSE.	Massport has taken enterprising steps to encourage tenant use of alternative fuels [electric and compressed natural gas]. Massport will use the results of the ground service equipment survey to assess the feasibility of establishing alternative fuel targets for tenant vehicles and ground service equipment.
9.9	Ground Transportation	HOV	DEP recommends that MEPA require Massport to adopt a higher HOV modeshare goal and a specific action plan to reverse the trend of declining transit ridership. One particular strategy that has been adopted by other airports is the consolidation of courtesy vehicles that serve rental car companies. DEP recommends that Massport explore this strategy.	The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's progress on meeting its air passenger goal of 35.2 percent by the time air passenger volumes reach 37.5 million annual passengers. Consideration will be given to ways to enhance transit ridership and use of the Logan Express bus service. In addition, Massport is considering consolidation of car rental facilities, which will facilitate the consolidation of the courtesy vehicles serving the rental car companies.
9.10	Construction	Air Quality	DEP believes that the implementation of additional diesel emission controls on on-site heavy construction equipment can significantly mitigate localized, adverse air quality impacts. DEP recommends that MEPA include in its EIR scope the requirement that such actions be assessed by Massport for implementation as part of all construction activities related to construction at Logan Airport.	Massport will require contractors to retrofit their heavy construction equipment with advanced pollution control devices in accordance with DEP's Clean Air Construction Initiative. Contractor owned equipment, such as front-end loaders, backhoes, cranes and excavators, will be retrofitted with oxidation catalysts to filter and break down hydrocarbons, particulate matter and carbon dioxide from diesel emissions. Refer to Section 6.9 and Chapter 8 of the Supplemental DEIS/FEIR for additional discussion of air quality mitigation measures during the construction period.
9.11	Air Quality	Parking Freeze	DEP recommends that Massport complete a comprehensive inventory of all airport-related parking serving Logan and, if necessary, propose a management plan that is consistent with the goals of the parking freezes.	The *Logan Airport 1999 ESPR* (previously GEIR) provides an inventory of parking at Logan Airport, clearly identifying Massport's adherence to the parking freeze. This information is provided to DEP on a quarterly basis and is reported in the ESPR or subsequent Annual Updates. These documents also discuss parking demand and management at Logan Airport.
9.12	Regional Transportation	Diversion	The DEIS/R reiterates Massport's estimate in the GEIR update that up to 7.3 million passengers can be diverted from Logan Airport to surrounding regional airports, rail and video teleconferencing...DEP recommends a more detailed study to look at the environmental impacts of the potential passenger diversion from Logan to allow for a comparison. Study components should include, at a minimum, impacts on air quality, vehicle miles traveled and wetlands.	In accordance with the MEPA Certificate on the Airside Project Draft EIS/EIR, the Supplemental DEIS/FEIR contains a summary of the environmental impacts of growth at the regional airports, based on existing available environmental documents and studies. Refer to Appendix B of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
9.13	Soil/Sediment	Reuse/ Disposal Option	Page 6-99 describes the "approach" Massport is taking with regard to management of these materials which is, "...no excavation materials from Logan, no matter what the characterization results, will be disposed at sensitive areas, such as residential, recreational or wetland areas." DEP completely concurs with this approach and applauds Massport for taking such a protective position.	Comment noted.
9.14	Soil/Sediment	Reuse/ Disposal Option	DEP concurs with Massport's intention to beneficially reuse the excavate at landfills as either daily cover or pre-cap grading/shaping material...when Massport will require capacity for its excavate there may not be adequate demand for all the Logan material in the timeframe required by project sequencing. In this regard, DEP recommends that Massport assess backup options to minimize the potential for delays and/or cost increases.	Massport recognizes that there may not be sufficient in-state landfill capacity. Alternative sites will be examined during design. The volume of soil excavated has been reduced as a result of the on-going removal of stockpiled CA/T soil material from Governors Island, and the findings of a subsurface investigation program that much of the existing soil material on the airport is suitable for construction and therefore does not have to be removed. Massport recently completed a soil boring and chemical analytical program along the centerlines of Runway 14/32 and the Centerfield Taxiway. The preliminary soil chemical data indicate that the large majority of soil to be excavated is not regulated soil in that it did not exceed the S-2 Reportable Concentration. Therefore, this excavate may be recycled at in-state or out-of-state lined landfills or used at industrial sites for fill. In accordance with Massport's Soil Management Plan, the excavate will not be used for fill or any other use at environmentally sensitive sites such as near wetlands, playgrounds, water supplies, etc.
9.15	Soil/Sediment	Reuse/ Disposal Option	In various sections of the report (including 5-71, 5-75, 6-97, etc.) erroneous statements are made relative to the applicability of c.21E and the Massachusetts Contingency Plan (MCP) as it relates to the CA/T materials on Airport property.	The sections referenced in the comment have been clarified. The soil classifications used in the Airside Project Draft EIS/EIR were a combination of terms from the original MOU between the DEP and MassHighway for the temporary storage of soil at Governors Island and the current Massachusetts Contingency Plan (MCP). The older MOU terminology was included for background. To avoid further confusion, the Supplemental DEIS/FEIR addresses these soils using only the MCP terminology.

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

LETTER 10

21 April 1999

NHESP File: 96-384

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Project Name:	Logan Airside Improvements
Proponent:	Massport, Federal Aviation Administration
Location:	Boston
Document Reviewed:	DEIR/EIS
EOEA File Number:	10458

Attention: MEPA Unit/Arthur Pugsley

Dear Secretary Durand,

The Natural Heritage and Endangered Species Program ('NHESP') has reviewed the Draft Environmental Impact Report for the Logan Airside Improvements project and would like to offer the following comments regarding impacts to state-protected rare species.

The proposed Logan Airside Improvements project will impact nesting and feeding habitat of the state 'endangered' Upland Sandpiper (*Bartramia longicauda*) and will result in the 'taking' of a state-protected rare species pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). NHESP has been meeting with Massport and their consultants to work out the details of a Conservation Permit that would allow a 'taking' in return for both on-site and off-site mitigation. The on-site mitigation has been detailed in the DEIR/EIS. The proposed off-site mitigation will entail restoring approximately 150 acres of Upland Sandpiper habitat at the Massachusetts Military Reservation. The details of the proposed restoration work have not been completed but Massport should finalize these details with NHESP before the final EIR is submitted to MEPA. 10.1

Natural Heritage & Endangered Species Program
Route 135, Westborough, MA 01581 **Tel:** (508) 792-7270 x 200 **Fax:** (508) 792-7275
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement
http://www.state.ma.us/dfwele

We appreciate the opportunity to comment on this project.

Sincerely,

Hanni Dinkeloo
Endangered Species Counsel

cc. John Silva, FAA
Betty Desrosiers, Massport
Stewart Dalzell, Cortell Assoc.
Seth Kaplan, Conservation Law Foundation

Letter 10
MA Division of Fisheries & Wildlife, National Heritage & Endangered Species Program Hanni Dinkeloo, Endangered Species Counsel

Code	Topic 1	Topic 2	Comment	Response
10.1	Ecosystems	Rare Species	The proposed Logan Airside Improvements project will impact nesting and feeding habitat of the state 'endangered' Upland Sandpiper (*Bartramia longicauda*) and will result in the 'taking' of a state protected rare species pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). NHESP has been meeting with Massport and their consultants to work out the details of a Conservation Permit that would allow a 'taking' in return for both on-site and off-site mitigation. The details of the proposed restoration work have not been completed but Massport should finalize these details with NHESP before the final EIR is submitted to MEPA.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.

OFFICE OF THE PRESIDENT
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1007

THOMAS F. BIRMINGHAM
PRESIDENT

LETTER 11

April 22, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
Cambridge Street 20th Floor
Boston, MA 02202

Dear Secretary Durand:

Since the inception of the debate over the proposed new runway at Logan International Airport, I have sought to assess the issue on the merits and with an emphasis on fact-based, verifiable analysis. Although a purely parochial view would have dictated my fierce and immediate opposition to the proposal, that was not my approach. I chose to put research above demagoguery because ultimately that is in all of our best interests.

This proposal has statewide and regional implications. It needs to be reviewed in that broad context with regard to our environment, our economy and the quality of life experienced by the residents of Massachusetts. I have listened to proponents and opponents and have heard the variety of arguments, analyses and projections.

With the comment period in the MEPA process drawing to an end, I feel compelled to share my serious reservations about the proposed new runway. The 17 questions I have included below suggest that significant issues about the efficacy and desirability of the proposed runway remain unanswered.

I am requesting that Massport withdraw its application before the Secretary and that a "Blue Ribbon Commission" be formed to examine the issues posed not only with regard to Logan, but also concerning the adequacy of this entire region's air transportation system. 11.1

This Commission must be comprised of individuals who represent the variety of interests involved. A Commission can work—and inspire the respect and confidence of interested parties—only if the review is reasoned, thorough and balanced. I am not inclined to disparage any individuals currently working at or for Massport but as an institution it suffers from a serious lack of credibility. There is too much prologue of malleable commitments and revisionist history for a decision of this import to rely solely

on Massport's assessments and recommendations. A number of the questions I have raised concern the appearance of selectivity and bias in the information Massport has proffered to further its goal.

It is my hope that Massport will voluntarily agree to this approach. It is in its best interest for any developments to grow out of a substantiated, defensible and comprehensive review. If Massport, however, is not willing to turn to an unbiased, top-level commission at this stage, then I am prepared to consider legislation to impose a moratorium. My hope is that we can move forward with a commitment to cooperation and information. If that is not possible, I will oppose runway construction until a "Blue Ribbon Commission" has sufficient time to conduct a study and make its report.

There ought not to be a rush to judgment when the infrastructure, air quality and livability of the Commonwealth is at stake. We need time and advice to move forward with greater knowledge and confidence than anyone can possess at this point.

1. Massport has indicated that alleviating delays is the primary reason for the runway. If delays are such a problem, then why isn't there detailed analysis of the historical delay data in the Draft Environmental Impact Study/ Report (EIS/R)? 11.2

2. Delays declined between 1993 and 1997 (with the exception of 1996). Massport has provided insufficient analysis of this trend. Can anything be learned from this experience? 11.3

3. Delay management is at the crux of Massport's argument for the runway. Yet the EIS/R delay management review fails to explore the issue fully. Instead the runway is posited as the best solution. Why does Massport conclude that a runway is the foremost option at this point, when other alleviating measures are not fully explored? 11.4

4. Massport contends that the proposed new runway will reduce delays. Yet there is an acknowledgement that in the future delays will increase above current levels. There is some indication delays will return to current levels within 5 years. If this is accurate, how can the runway be portrayed as a long-term solution to alleviate delays? Why isn't there a comprehensive plan to meaningfully alleviate delays long-term? 11.5

5. Massport numbers seem to show that in 2010 peak pricing alone is more effective to reduce delay. Is that accurate? If so, why isn't Massport proposing that approach now? 11.6

6. Massport raises concerns about the economic impact of peak pricing on specialized markets such as Cape Cod. Why can't special exemptions be put in place for these types of specialized markets? Alternatively, why can't at least some of the air traffic related to these specialized markets use other airports, such as Hanscom or Worcester? 11.7 11.8

7. Would the new runway and midfield taxiway provide long-term reduction of airport congestion or will the same problems reoccur if flight volume is increased? What prevents flight volume from increasing? 11.9

8. Has Massport utilized all of the non-Logan options to reduce airport congestion, including increased use of regional airports, Hanscom Field, congestion pricing and other alternatives? 11.10

9. Massport data seem to suggest there could be a tripling of airplane travel over East Boston, Chelsea, South End, and parts of South Boston, Roxbury and Jamaica Plain. Is this accurate? What is the justification for further impacting these neighborhoods? 11.11

10. Massport suggests there will be a reduction in noise in parts of East Boston, Revere, South Boston, Dorchester and Milton. How can this be reconciled with Massport's proposal to construct a center field taxiway for 4-22 runways? 11.12

11. What mitigation measures would be provided to the impacted communities (beyond soundproofing of homes)? 11.13

12. Massport makes the promise to use the new runway in only one direction. How can Massport assure residents, who have experienced Massport's efforts to amend environmental documents by breaking promises they made, that this is different? Are there enforceable guarantees for no overland flights using the new runway, and what controls will be in place to prevent the Federal Aviation Administration from overriding local agreements? What is to prevent Massport from working to amend conditions set forth in the EIR? 11.14

13. Reducing the number of small aircraft using Logan airport would reduce delays. Is it accurate that aircraft carrying fewer than 50 passengers use 45% of Logan take-off and landing capacity? Where does Logan rank nationally in terms of the number of flights going in and out the airport? And where does Logan rank nationally in terms of the number of small flights going in and out of the airport? Doesn't the construction of a short 14-32 runway worsen delay by encouraging continued investment in small aircraft? 11.15

14. Don't inefficient and outmoded terminals contribute to delays at Logan? How much of the problem is due to aircraft waiting to get access to gates and physical constraints on the number of ticket agents and baggage handling? What is Massport's plan for addressing one of its more problematic terminals, Terminal A? 11.16

15. What are Massport's plans to handle the increased need for public transportation to the airport, once capacity is increased? 11.17

16. Massport is now touting plans to increase usage of Worcester Airport. Why did Massport wait until public pressure arose for regional airports to file the bill that gives them control of this airport? Are there other options that could be pursued but due to lack of interest remain unexplored? 11.18

17. There are concerns about the levels of increased toxic emissions from aircraft. What sort of assurance can be provided that the state's implementation plan to comply with the Federal Clean Air Act will not be jeopardized by increased air traffic? Even if the state is in technical compliance, there ought to be an estimate as to what level of increase could result from the growth in air traffic at Logan before the runway proceeds. 11.19

I respectfully request you to consider this overwhelming number of unanswered questions in deciding the suffioiency of Massport's environmental impact report for this project.

Ultimately, I believe it would be fundamentally irresponsible for a project of this magnitude to move forward while major issues remain unresolved. For this reason, I hope Massport will withdraw its application until a truly independent commission can comprehensively review the issue. Also, I intend to support a legislative moratorium if Massport proceeds with this project nonetheless.

Thank you for considering these comments.

Very truly yours,

Thomas F. Birmingham

Letter 11
MA State Senator Thomas F. Birmingham

Code	Topic 1	Topic 2	Comment	Response
11.1	Environmental Review Process	Blue Ribbon Panel	I am requesting that Massport withdraw its application before the Secretary and that a "Blue Ribbon Commission" be formed to examine the issues posed not only with regard to Logan, but also concerning the adequacy of this entire region's air transportation system.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March 2000 and then met at least monthly with a final meeting in December 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS; the Airside Project Draft EIS/EIR; responses to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR; and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies have concluded that The Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high-speed rail are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of regional transportation alternatives to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999, attendance at a second summit in December 2000, and its assumption of operating responsibility for the Worcester Regional Airport in January 2000. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of Massport's initiatives in support regional transportation alternatives.
11.2	Purpose and Need	Delay	Massport has indicated that alleviating delays is the primary reason for the runway. If delays are such a problem, then why isn't there detailed analysis of the historical delay data in the Draft Environmental Impact Study/ Report (EIS/R)?	Chapters 1 and 4 of the Supplemental DEIS/FEIR provide analysis of delays at Logan Airport. Delays primarily occur when wind or weather conditions require the use of configurations with fewer than three active runways or when poor weather requires increased separation distances between aircraft. Proposed Runway 14/32 would be designed to reduce delays at Logan Airport from adverse winds Section 1.6 of the Supplemental DEIS/FEIR contains a description of the delay factors at Logan Airport, and a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.

Code	Topic 1	Topic 2	Comment	Response
11.3	Purpose and Need	Delay	Delays declined between 1993 and 1997 (with the exception of 1996). Massport has provided insufficient analysis of this trend. Can anything be learned from this experience?	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent and continued to increase in 2000. In 2000, Logan Airport was second most delayed in the United States for arrivals. This represents the worst rank in Logan Airport's history. Refer to Chapter 1 of the Supplemental DEIS/FEIR for a discussion of Logan Airport delays caused elsewhere in the system. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.

Code	Topic 1	Topic 2	Comment	Response
11.4	Purpose and Need	Delay	Delay management is at the crux of Massport's argument for the runway. Yet the EIS/R delay management review fails to explore the issue fully. Instead the runway is posited as the best solution. Why does Massport conclude that a runway is the foremost option at this point, when other alleviating measures are not fully explored?	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility Study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside Project analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
11.5	Delay	Solution	Massport contends that the proposed new runway will reduce delays. Yet there is an acknowledgement that in the future delays will increase above current levels. There is some indication delays will return to current levels within 5 years. If this is accurate, how can the runway be portrayed as a long-term solution to alleviate delays? Why isn't there a comprehensive plan to meaningfully alleviate delays long-term?	If no actions are taken to alleviate the delay problem, future delays will increase substantially. For example, under the 37.5M Low Fleet scenario, runway-related delays will nearly double (95 percent), or by 114,000 annual hours, over 1998 delay levels. By implementing the Preferred Alternative, delays will increase in the future as aircraft operations increase, because delays from inclement weather (IFR conditions), such as snowstorms or fog, cannot be avoided. The Preferred Alternative, however, significantly reduces delays that occur during clear weather conditions (VFR conditions). If no actions are taken, VFR delays will increase by 75 percent, or 38,000 hours, over 1998 levels. With the Preferred Alternative, VFR delays actually *decline* by 18 percent, or 9,000 hours. This represents a reduction in VFR delays of more than 50 percent compared to the No Action Alternative for the 37.5 M Low Fleet scenario.
11.6	Alternatives	Peak Period Pricing	Massport numbers seem to show that in 2010 peak pricing alone is more effective to reduce delay. Is that accurate? If so, why isn't Massport proposing that approach now?	The Airside analysis indicates that PPP is an effective option when airline's schedule beyond the normal hourly operating capacity of the airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
11.7	Alternatives	Peak Period Pricing	Massport raises concerns about the economic impact of peak pricing on specialized markets such as Cape Cod. Why can't special exemptions be put in place for these types of specialized markets?	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

Code	Topic 1	Topic 2	Comment	Response
11.8	Regional Transportation	Regional Airports	...why can't at least some of the air traffic related to these specialized markets use other airports, such as Hanscom or Worcester?	Regional carriers that provide service between the Cape Cod and Island markets and Logan Airport are not likely to shift these services to other regional airports because doing so would reduce the number of passengers and the economic viability of such services. Regional carriers serving Logan Airport carry a mix of local and connecting passengers. As the largest city in New England, the Boston metropolitan area represents the largest concentration of demand for outlying regional carrier markets. Also, up to 50 percent of the passengers on regional carrier flights connect to other flights at Logan Airport. Shifting regional carrier flights to other airports, such as Manchester Airport or T.F. Green/Providence Airport would likely reduce the amount of on-board passenger traffic since a significant number of passengers are either traveling to Boston or connecting to flights that are not available from the outlying airports. For example, service to Manchester would not be a viable alternative for a Provincetown passenger traveling to a location in downtown Boston. Likewise, service to Providence would not be attractive to a Provincetown passenger trying to reach Denver, since there are no nonstop Denver services at T.F. Green/Providence Airport..
11.9	Alternatives	Runway 14/32, Taxiway Improvements	Would the new runway and midfield taxiway provide long-term reduction of airport congestion or will the same problems reoccur if flight volume is increased? What prevents flight volume from increasing?	Proposed Runway 14/32 and all other proposed projects would reduce current and future delays and enhance safety. The sooner that these improvements are implemented, the more long-term delay benefits will be realized. Major factors in airline competition are frequency of service and number of markets served. PPP was included in the airside improvement alternatives to address delays caused by airline over-scheduling. Airline over-scheduling is only a problem when flight demand during the peak hours exceeds the airfield's average VFR capacity. Because of competitive factors, airlines have reduced peak period flights since 1993. As a result, airline over-scheduling is not currently a problem at Logan Airport and Massport is not recommending the implementation of PPP at this time. Flight volume at Logan Airport is a function of the demand for air travel. Growth in air travel demand is principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports.
11.10	Alternatives	Other Non-Constructi on Alternatives	Has Massport utilized all of the non-Logan options to reduce airport congestion, including increased use of regional airports, Hanscom Field, congestion pricing and other alternatives?	Refer to response to Comment 11.8 and to Chapter 2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
11.11	Noise	Runway Use	Massport data seem to suggest there could be a tripling of airplane travel over East Boston, Chelsea, South End, and parts of South Boston, Roxbury and Jamaica Plain. Is this accurate? What is the justification for further impacting these neighborhoods?	Also refer to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of runway use and to Sections 6.2 of the Supplemental DEIS/FEIR for a discussion of noise impacts. In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Similarly, overflights affecting Winthrop (Runway 27 arrivals and Runway 9 departures) will decline from 88,224 in 1998 to 55,805. As a result of the relief for these communities, flights over the water and flights over less impacted communities will increase. With Runway 14/32, the over-water procedure (Runway 14 and Runway 15 departures, Runway 32 and Runway 33 arrivals) becomes the most used set of runways with operations increasing from 34,222 in 1998 to 82,965. Overflights affecting the South End, parts of South Boston, and Roxbury (Runway 27 departures) will increase from 20,356 to 41,974, making this the fourth most used procedure, up from fifth in 1998. Overflights affecting Chelsea, the Eagle Hill section of East Boston, Everett, and Somerville (Runway 33 departures and Runway 15 arrivals) will increase from 9,804 to 35,801. This will become the fifth most used procedure, up from the sixth, or least used procedure in 1998.
11.12	Noise	Taxiway Improvements	Massport suggests there will be a reduction in noise in parts of East Boston, Revere, South Boston, Dorchester and Milton. How can this be reconciled with Massport's proposal to construct a center field taxiway for 4-22 runways?	The purpose of the proposed Centerfield Taxiway system is to improve the flow of taxiing aircraft and to reduce aircraft ground delay. With the Centerfield Taxiway in place, neighbors in Winthrop and East Boston adjacent to the taxiways will experience small reductions in ground noise. These are different from the noise level reductions that occur in parts of East Boston, Revere, South Boston, and Dorchester with the Preferred Alternative. Improvements in those communities are derived from the added flexibility afforded by Runway 14/32. It allows the redistribution of traffic so that there are fewer landings on Runway 4L and 4R and fewer takeoffs on Runways 22L and 22R. The taxiway itself has no bearing on these flights.
11.13	Noise	Mitigation	What mitigation measures would be provided to the impacted communities (beyond soundproofing of homes)?	Chapter 8 of the Supplemental DEIS/FEIR summarizes Massport's proposed project-specific mitigation program associated with the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
11.14	Alternatives	Runway 14/32	Massport makes the promise to use the new runway in only one direction. How can Massport assure residents, who have experienced Massport's efforts to amend environmental documents by breaking promises they made, that this is different? Are there enforceable guarantees for no overland flights using the new runway, and what controls will be in place to prevent the Federal Aviation Administration from overriding local agreements? What is to prevent Massport from working to amend conditions set forth in the EIR?	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 (heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations, which would thereby limit operational impacts over residential areas. To reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. It is anticipated that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
11.15	Alternatives	Other Non-Constructi on Alternatives	Reducing the number of small aircraft using Logan Airport would reduce delays. Is it accurate that aircraft carrying fewer than 50 passengers use 45% of Logan take-off and landing capacity? Where does Logan rank nationally in terms of the number of flights going in and out the airport? And where does Logan rank nationally in terms of the number of small flights going in and out of the airport? Doesn't the construction of a short 14-32 runway worsen delay by encouraging continued investment in small aircraft?	Refer to Section 8.5 of the Supplemental DEIS/FEIR for a discussion of ways the unidirectional restriction can be enforced. Small aircraft can be accommodated on any runway configuration at Logan Airport. Proposed Runway 14/32 would allow Logan Airport to maintain its full Visual Flight Rule capacity in northwest wind conditions and would not provide a new capability to accommodate small aircraft, nor would it encourage additional investment in this type of equipment. Based on an analysis of airline schedules for May 1999, 41.7 percent of Logan Airport's scheduled arrivals and departures were on regional aircraft with fewer than 50 seats. For calendar year 1998, Logan Airport ranked eighth among United States airports in terms of total aircraft operations. Based on May 1999 airline schedules, Logan Airport ranked fifth among United States airports in terms of scheduled arrivals and departures on aircraft with fewer than 50 seats and ranked seventh in terms of total scheduled aircraft operations. Massport has proposed to implement a Peak Period Monitoring System to determine, based on future growth in scheduled aircraft operations, if airline overscheduling is becoming a problem at Logan Airport. Should airline-overscheduling conditions arise, Massport will initiate Phase 1 of a phased PPP implementation process. In Phase 1 of the process, Massport will meet with individually airlines to seek voluntary schedule adjustments to avoid delays that result from overscheduling.

Code	Topic 1	Topic 2	Comment	Response
11.16	Delay	Apron Alternatives	Don't inefficient and outmoded terminals contribute to delays at Logan? How much of the problem is due to aircraft waiting to get access to gates and physical constraints on the number of ticket agents and baggage handling? What is Massport's plan for addressing one of its more problematic terminals, Terminal A?	The Airside analysis evaluates delays related to inefficiencies of the airfield and does not include delays related to aircraft waiting to access gates or outmoded terminals and terminal facilities. Massport and individual airlines are currently undertaking redevelopment of the landside portion of the airport *(i.e.*, terminals, roadways, etc.). These projects are also required to undergo environmental review. For Terminal A, Delta Air Lines received environmental approval for its proposed terminal replacement project in late 1999. *Logan Airport's 1999 ESPR* (formerly GEIR) reports on cumulative impacts of Logan Airport's landside and airside operations.
11.17	Ground Transportation	Access to Logan	What are Massport's plans to handle the increased need for public transportation to the airport, once capacity is increased?	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
11.18	Regional Transportation	Regional Airports	Massport is now touting plans to increase usage of Worcester Airport. Why did Massport wait until public pressure arose for regional airports to file the bill that gives them control of this airport? Are there other options that could be pursued but due to lack of interest remain unexplored?	Massport has a long-standing relationship with the City of Worcester to aid Worcester Regional Airport in reaching its full potential, thereby improving the efficiency of the New England air transportation network. Massport assumed operational control of the Worcester Regional Airport on January 15, 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of Massport's efforts to promote increased utilization of Worcester Regional and the other regional airports.
11.19	Air Quality	NAAQS	There are concerns about the levels of increased toxic emissions from aircraft. What sort of assurance can be provided that the state's implementation plan to comply with the Federal Clean Air Act will not be jeopardized by increased air traffic? Even if the state is in technical compliance, there ought to be an estimate as to what level of increase could result from the growth in air traffic at Logan before the runway proceeds.	The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR and Appendix F. These inventories show that all Alternatives, including the No Action and Preferred Alternative, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

LETTER 12

SENATOR HENRI S. RAUSCHENBACH
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COMMITTEES:
SENATE WAYS AND MEANS
HEALTH CARE
ENERGY

April 22, 1999

Massachusetts Environmental Protection Agency
1 Winter Street
Boston MA, 02108

Dear Secretary Durand:

We, the Cape Cod Legislative Delegation, write to you in determined support of proposed runway 14/32 at Logan International Airport. The transportation needs of our districts are inexorably linked to Logan airport in much the same way as every other region in eastern Massachusetts. Efficient operation of the Boston airport has immediate and measurable impact on economics and quality of life for Cape and Islands residents. For instance, Cape Air/Nantucket Airlines, the largest independent regional server in the country, flies 150,000 passengers to and from Boston each year. Passengers include Cape and Island residents traveling on business as well as those seeking medical procedures or other services unavailable locally. Moreover, air transport is central to the success of our tourism industry, one of the main sources of our constituent's livelihoods. In all, the unique geographic realities of the Cape and Islands wed our interests to events at Logan. Too often, delays in Boston become fully manifest in local consequences. We thank you for your consideration and do urge your favorable view of this initiative.

12.1

Respectfully Submitted,

THE CAPE COD LEGISLATIVE DELEGATION

HENRI S. RAUSCHENBACH
State Senator
Cape & Islands District

THERESE MURRAY
State Senator
Plymouth & Barnstable District

NANCY CAFFYN
State Representative
3rd Barnstable District

ERIC TURKINGTON
State Representative
Barnstable, Dukes & Nantucket

DEMETRIUS ATSALIS
State Representative
2nd Barnstable District

SHIRLEY GOMES
State Representative
4th Barnstable District

RUTH PROVOST
State Representative
Barnstable & Plymouth District

THOMAS GEORGE
State Representative
1st Barnstable District

HSR/cb

Letter 12
Cape Cod Legislative Delegation
Senator Henri S. Rauschenbach

Code	Topic 1	Topic 2	Comment	Response
12.1	Purpose and Need	Delays	Efficient operation of the Boston airport has immediate and measurable impact on economics and quality of life for Cape and Islands residents. Passengers include Cape and Island residents traveling on business as well as those seeking medical procedures or other services unavailable locally. Moreover, air transport is central to the success of our tourism industry, one of the main sources of our constituent's livelihoods. Too often, delays in Boston become fully manifest in local consequences.	Comment noted.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

REPRESENTATIVE
ROBERT A. DeLEO
19TH SUFFOLK DISTRICT
ROOM 20, STATE HOUSE

TEL. (617) 722-2410

LETTER 13

Chairman
Committee on
Bills in the Third Reading
Chairman
M.W.R.A. Legislative Caucus
Legislative Caucus on
Older Citizens Concerns
Committee Member:
Ethics

April 7, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, Massachusetts 022025

Mr. John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, Massachusetts 01803

Dear Mr. Pugsley and Mr. Silva:

As allowed by state and federal law, I submit to you comments regarding proposals put forth by the Massachusetts Port Authority and Federal Aviation Administration entitled, "Logan Airside Improvements Planning Project," in reference to proposed construction and augmentation of the General Edward Lawrence Logan Airport.

I have the distinct pleasure and honor of representing the residents of Winthop and part of Revere in the Massachusetts House of Representatives. Both in that capacity and as a resident of Winthrop myself, I have had a keen interest in matters concerning Logan Airport for many years. From that experience as well as from a careful review of all MassPort expansion proposals, I can say unequivocally and without hesitation that if the expansion planes are carried out, it will represent the single largest environmental attack the residents of communities which neighbor Logan have ever had to endure.

The primary reason for MassPort's undertaking of this course of action is its desire to reduce delays. It goes without saying that any reduction in delays at Logan Airport would benefit not only the local economy of the Greater Boston Area, but the economy of the entire Commonwealth as well. It should be stated that those who oppose

expansion at Logan do not, in any manner, oppose either delay reduction or economic growth. We do, however, oppose the method which MassPort has chosen to remedy the current delay-prone situation.

It is the contention of the Massachusetts Port Authority that without the proposed Airside improvements, Logan Airport will continue to experience increasing delays. This is true, however, even if all of the proposed construction were to be completed, Logan would still return to its present level of delays within five (5) years. While MassPort may dispute this number within a range of a few years, it is still an undeniable fact that as demand increases, delays will increase as well. Whether they rise at a slower or faster rate is an inconsequential question because it does not speak to a long-term, viable solution. In essence, MassPort is requesting to undertake a project which will degrade the environmental status of the region, (as I will describe latter), while not adequately addressing the underlying problem. This represents environmental harm perpetrated for less than practical, let alone justifiable, reasons. 13.1

The issue of noise and air pollution has many parallels to the issue of delays in the sense that the MassPort solution again provides only temporary relief. One need look no further than those who I represent in Winthrop and Revere to see that even people who would ostensibly benefit from the construction of an East/West runway realize the folly of expansion. Even with a 35% reduction in operation over their heads, in short order the number of operations, and thus, the level of noise pollution will be back to present levels and will continue to rise in the future. 13.2

In the mean time, communities affected by operations on Runways 33 and 27 including Charlestown, Chelsea, Revere, Somerville, Cambridge, Melrose, Roxbury, South Boston, Jamaica Plain, Roslindale, West Roxbury, Brookline and East Boston would see operations more than triple. While MassPort describes these increases as a more "equitable distribution" of noise and air pollution, I believe it is only a temporary shuffling of a problem which has been conceived based on limited concepts of "distribution." Add to this equation the fact that MassPort has no quantitative data regarding the actual pollutants expelled by aircraft, and the result is an expansion proposal which is proceeding on less than justified conclusions. 13.3

This question of distribution also speaks to a larger environmental concern; namely the concept of environmental justice. Given the undeniable fact that aircraft expel pollutants, it follows that an increase in air traffic will lead to an increase in pollutants. Why then should one region of the Commonwealth be made to suffer these increases when the benefit of expansion is clearly meant for the entire Commonwealth? I urge that consideration be given to those who have endured both noise and air pollution since the airport's inception, for they have already paid for economic progress by sacrificing their health and quality of life. 13.4

As you consider the concept of environmental equity, I further urge you consider other detrimental aspects of MassPort's expansion proposals other than the construction

of a new runway. One of these proposals, which I hold in extreme contempt based on its direct affect on the communities that I represent as well as its probable detriment to the Greater Boston area at large, is the construction of a centerfield taxiway. The orientation of this proposed taxiway will require aircraft be aligned such that their idling engines face directly toward Winthrop and Revere. It is no great scientific revelation that this orientation will result in increases in the pollutants present in Winthrop and Revere air. Moreover, a secondary but no less important issue is the simple fact that this taxiway will allow Logan Airport to increase its overall operations by freeing up piers at the various terminals. As has been stated before, any increase in operations will result in an increase in pollutants. 13.5

The Port Authority has also suggested that as part of its Airside Improvements it be allowed to apply to the Federal Aviation Administration to lower its minimum landing requirements. This would accomplish two goals, both of which would prove to be environmentally unsound. First, it would allow pilots to make a final landing decision at a lower altitude in inclement weather. A low decision altitude would necessarily mean that when a landing is aborted, the resulting engine power increase needed to execute a missed-approach would itself have to be initiated at a lower altitude. Put simply, when a missed approach is executed at a lower altitude, the result is more noise for the residents who live underneath the final approach pattern. Any lowering of minimums would necessarily lead to increased noise pollution in the immediate area. 13.6

In closing, let me restate my firm belief that expansion at Logan will necessarily entail increased environmental degradation and increased suffering for Logan's neighbors. Thank you for your consideration of my thoughts on this matter. Please call on me if I can be of any further assistance.

Very truly yours,

ROBERT A. DeLEO
State Representative

RAD/jce

Letter 13
MA State Representative Robert A. DeLeo

Code	Topic 1	Topic 2	Comment	Response
13.1	Purpose and Need	Delays	It is the contention of the Massachusetts Port Authority that without the proposed Airside improvements, Logan Airport will continue to experience increasing delays. This is true, however, even if all of the proposed construction were to be completed, Logan would still return to its present level of delays within five (5) years. Massport is requesting to undertake a project which will degrade the environmental status of the region, while not adequately addressing the underlying problem.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
13.2	Noise	Impacts	The issue of noise and air pollution has many parallels to the issue of delays in the sense that the Massport solution again provides only temporary relief. Even with a 35% reduction in operations over their heads, in short order the number of operations, and thus, the level of noise pollution will be back to present levels and will continue to rise in the future.	The ground noise analyses in Section 6.2.4 of the Airside Project Draft EIS/EIR lead to the opposite conclusion. For example, Table 6.2-21 of the Airside Project Draft EIS/EIR indicates that, at all seven sites examined, the reduction in exposure is greater under both the longer-term 37.5M High Fleet and 29M Low Fleet scenarios than it is under the near-term 29M Low Fleet scenario. Recent growth trends suggest the 37.5 million passenger level is now more likely to occur around 2015. (Refer to related discussion in Section 1.4.2 of the Supplemental DEIS/FEIR).
13.3	Noise	Impacts	Communities affected by operations on Runways 33 and 27 including Charlestown, Chelsea, Revere, Somerville, Cambridge, Melrose, Roxbury, South Boston, Jamaica Plain, Roslindale, West Roxbury, Brookline and East Boston would see operations more than triple. While Massport describes these increases as a more "equitable distribution" of noise and air pollution, I believe it is only a temporary shuffling of a problem which has been conceived based on limited concepts of "distribution."	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
13.4	Environmental Justice	Impacts	Given the undeniable fact that aircraft expel pollutants, it follows that an increase in air traffic will lead to an increase in pollutants. Why then should one region of the Commonwealth be made to suffer these increases when the benefit of expansion is clearly meant for the entire Commonwealth.	Section 6.4 of the Supplemental DEIS/FEIR contains a thorough analysis of air quality impacts from the Airside Project. The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.

Code	Topic 1	Topic 2	Comment	Response
13.5	Alternatives	Taxiway Improvements	The orientation of the proposed centerfield taxiway will require aircraft be aligned such that their idling engines face directly toward Winthrop and Revere. This orientation will result in increases in the pollutants present in Winthrop and Revere air. This taxiway will allow Logan Airport to increase its overall operations by freeing up piers at the various terminals. As has been stated before, any increase in operations will result in an increase in pollutants.	Refer to response to Comment 13.4. In addition, the NAAQS serve as an indicator of the acceptability of current pollutant concentrations since these standards were designed to protect human health and welfare. Dispersion modeling indicates that no alternatives violate the NAAQS.
13.6	Alternatives	Reduced Approach Minimums	The Port Authority has also suggested that as part of its Airside Improvements it be allowed to apply to the Federal Aviation Administration to lower its minimum landing requirements. It would allow pilots to make a final landing decision at a lower altitude in inclement weather. When a missed approach is executed at a lower altitude, the result is more noise for the residents who live underneath the final approach pattern. Any lowering of minimums would necessarily lead to increased noise pollution in the immediate area.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

PAUL C. DEMAKIS
REPRESENTATIVE
8TH SUFFOLK DISTRICT
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LETTER 14

Committees on
Government Regulations
Public Service
Transportation

LORI A. JODOIN
LEGISLATIVE AIDE

April 22, 1999

Mr. Arthur Puglsey
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Re: Logan Airside Improvements Planning Project
Draft Environmental Impact Statement/Report

Dear Mr. Puglsey:

I am writing to express my strong opposition to the proposal by the Massachusetts Port Authority to construct Runway 14/32 at Logan International Airport in Boston. Additionally, because the Draft Environmental Impact Statement/Report submitted by Massport contains several serious flaws, I strongly urge the Secretary to reject the DEIS/DEIR as inadequate and to require Massport to submit a new DEIS/DEIR.

1. Massport's delay projections are unreliable and appear to vastly overstate the extent of delays at Logan. 14.1

Massport's delay projections give the appearance of having been created to justify the construction of Runway 14/32. First, Massport apparently chose to develop its own model for estimating delays at Logan rather than relying on models used to estimate delays at other airports in the United States. There is inadequate discussion in the DEIS/DEIR on how its model were selected and developed.

Moreover, Massport uses 1993 as a base year, when delays were at a peak. Federal Aviation Administration data shows an 18% reduction in delays since that time. Additionally, Massport's model uses hourly weather observations from 1981-1990. Furthermore, Massport's delay calculations do not differentiate between the various causes of delays, including, in addition to delays caused by northwest wind conditions, delays caused by severe weather, the airlines, and delays at other airports.

Massport should be required to produce actual and current delay data derived from a universally accepted source such as the FAA. If Massport is permitted to use its own model to estimate delays, it should be required: 1) to explain how its model was selected and developed; 2) to use 1998 as a base year; 3) to use an updated 10-year average of hourly weather observation; and 4) to isolate delays caused by northwest wind conditions from delays from other causes. 14.1

2. The DEIS/DEIR does not adequately consider alternatives to the construction of Runway 14/32. 14.2

The DEIS/DEIR does not consider alternatives to the construction of Runway 14/32, including expanded use of Hanscom Field, especially for small aircraft, and construction of a second airport. It gives only superficial consideration to peak period pricing of landing fees. Massport should be required to consider these alternatives before being allowed to proceed with the construction of Runway 14/32.

3. The construction of Runway 14/32 is a short-term, "band-aid" solution to the problem of delays at Logan. Massport has no plan for dealing with long-term growth. 14.3

It appears that the construction of Runway 14/32 may reduce delays at Logan by as little as 20 percent. Moreover, according to Massport's own projections, even with the construction of Runway 14/32, delays will be back to current levels by 2005.

The DEIS/DEIR provides no plan for dealing with long-term growth at Logan and the resulting increase in delays. Additionally, it does not provide a comprehensive analysis of ground access, the parking freeze, and terminal capacity and how these critical components will affect increases in passengers and operations at Logan.

Massport should be required to extend the planning period from 2010 to 2020 with accompanying revisions in projected levels of activity and impact. Massport should be required to develop a detailed plan to shift most future growth in air traffic and passengers away from Logan. This plan should include specific goals and measures, including a major expansion of service and capacity at other airports in the region.

4. Massport cannot guarantee that Runway 14/32 will be unidirectional.

Massport has no legal authority to guarantee that Runway 14/32 will be unidirectional. Accordingly, Massport should be required to provide a detailed analysis of all impacts of Runway 14/32 based on the assumption it will be bi-directional. 14.4

5. There is inadequate mitigation for the severe environmental impacts the construction of Runway 14/32 will have on Logan's neighbors. 14.5

The construction of Runway 14/32 will result in a doubling or tripling of flights over a wide swath of metropolitan Boston. Massport offers no mitigation, such as soundproofing, to the vast majority of residents who will be affected by the increased noise caused by the new runway. Soundproofing is offered only to a small number of residents in very close proximity to Logan. Massport should be required to develop additional mitigation measures to reduce the noise impacts on the thousands of other residents who will be impacted by the new runway.

In summary, Runway 14/32 is a short-term, band-aid solution to an exaggerated problem. Its actual purpose appears to be to stimulate growth at Logan rather than reduce delays. It will result in severe negative impacts, especially a dramatic increase in noise, on many communities in and around Boston. The mitigation proposed by Massport is insufficient to reduce these impacts. Moreover, Massport has no long-term plan to address future increases in operations and passengers at Logan.

For all the reasons stated herein, Massport should not be permitted to proceed with the construction of Runway 14/32. The Secretary should reject the DEIS/DEIR as inadequate and require Massport to submit a new DEIS/DEIR that addresses the concerns raised in this letter.

Thank you for your consideration.

Sincerely,

Paul C. Demakis

Paul C. Demakis
State Representative
8th Suffolk District

Letter 14
MA State Representative Paul C. Demakis

Code	Topic 1	Topic 2	Comment	Response
14.1	Delay	Model	Massport's delay projections are unreliable and appear to vastly overstate the extent of delays at Logan. Massport should be required to produce actual and current delay data derived from a universally accepted source such as the FAA. If Massport is permitted to use its own model to estimate delays, it should be required: 1) to explain how its model was selected and developed; 2) to use 1998 as a base year; 3) to use an updated 10-year average of hourly weather observation; and 4) to isolate delays caused by northwest wind conditions from delays from other causes.	Sections 1.6 and 1.8 of the Supplemental DEIS/FEIR describe FAA and U.S. DOT measures of delay and their limitations, including historical data on delays at Logan Airport and other major United States airports, and discusses the estimation and modeling of flight delays. Regardless of the delay measure used, Logan Airport has consistently been one of the most delayed airports in the nation, ranking sixth in total delays and third in arrival delays in 1998. Historically, FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. In fact, delayed flights at Logan Airport, as measured by the FAA, increased by 30 percent in 1998. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994 and now Logan Airport is the third most delayed airport in the United States in terms of arriving flights. Because the FAA and U.S. DOT delay statistics only record historical delays, the FAA requires delay modeling when evaluating the future delay reduction benefits of airport capital improvements. The methodology used for the Airside Project provides a consistent and systematic estimate of flight delays caused by constraints at Logan Airport. The analysis based on this methodology indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels. Consistent with the request made by EOEA in its Certificate, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. The methodology used for the Airside Project provides a consistent and systematic estimate of flight delays caused by constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The analysis based on this methodology indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels. Comparative analysis of 1981 to 1990 weather with 1989 to 1998 weather identified no significant differences in statistical properties. Appendix I of the Airside Project Draft EIS/EIR contains a case study of delays under northwest wind conditions. Section 4.6 of the Supplemental DEIS/FEIR also presents information on delays under northwest wind conditions and includes and analysis of northwest wind delays in 1998.

Code	Topic 1	Topic 2	Comment	Response
14.2	Alternatives	Runway 14/32	The DEIS/DEIR does not adequately consider alternatives to the construction of Runway 14/32. Massport should be required to consider [Hanscom Field, construction of a second major airport and peak period pricing] before being allowed to proceed with the construction of Runway 14/32.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
14.3	Analysis Assumptions	Planning Period	The construction of Runway 14/32 is a short-term, "band-aid" solution to the problem of delays at Logan. Massport has no plan for dealing with long-term growth. Massport should be required to extend the planning period from 2010 to 2020 with accompanying revisions in projected levels of activity and impact. Massport should be required to develop a detailed plan to shift most future growth in air traffic and passengers away from Logan. This plan should include specific goals and measures, including a major expansion of service and capacity at other airports in the region.	An expanded and updated discussion of the regional alternatives is presented in Chapter 2 of the Supplemental DEIS/FEIR. Massport supports all the planned improvement projects that will enhance the attractiveness of the regional airports as alternatives to Logan Airport. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a description of the upcoming New England Airports System Study. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
14.4	Alternatives	Runway 14/32	Massport cannot guarantee that Runway 14/32 will be unidirectional. Massport should be required to provide a detailed analysis of all impacts of Runway 14/32 based on the assumption it will be bi-directional.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.

Code	Topic 1	Topic 2	Comment	Response
14.5	Noise	Mitigation	There is inadequate mitigation for the severe environmental impacts the construction of Runway 14/32 will have on Logan's neighbors. Massport should be required to develop additional mitigation measures to reduce the noise impacts on the thousands of other residents who will be impacted by the new runway.	Chapter 8 of the Supplemental DEIS/FEIR summarizes Massport's proposed project-specific mitigation program associated with the Preferred Alternative including: Runway 14/32 would be designed, constructed, and operated to handle over-water operations only (unidirectional). Massport would seek to construct Runway 14/32 to reflect unidirectional use. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. During the construction period an extensive array of traffic, air quality and noise mitigation measures will be employed to mitigate temporary construction impacts. A PRAS monitoring system to gather data and report on the actual achievement of PRAS. The objective of this system is to improve achievement of the PRAS goals and to provide a broader platform for disseminating of the monitoring results.

The Commonwealth of Massachusetts
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State House, Boston 02133-1054

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LETTER 15

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April 22, 1999

Robert Durand
Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA # 10458
100 Cambridge Street, 20th Floor
Boston MA 02202

Dear Secretary Durand:

I am writing to offer my comments on the proposed runway expansion for Logan Airport. The Logan Airside Improvements Planning Project, (EOEA # 10458), includes proposals to construct a new 5,000 foot runway, (Runway 14/32), to build a centerfield taxiway, and to lower arrival altitude minimums at the existing General Edward Logan Airport in Boston.

Before any construction can begin however, Massport is required to file its Environmental Impact Statement and Environmental Impact Report for approval by the Executive Office of Environmental Affairs in accordance with the Massachusetts Environmental Policy Act. Simply put, I believe that the studies are inadequate regarding the possible effects of these projects. I feel that Massport has taken a "band-aid" approach that does not begin to address the actual problems that Logan is experiencing and will continue to experience for the next twenty years. 15.1

In closing, I wish to express my strong opposition to the proposed Logan Airside Improvements Project and I would urge you to reject the Draft EIS/EIR.

Thank you and if I can provide any additional information please do not hesitate to contact me.

Sincerely,

Christopher G. Fallon
State Representative
Assistant Majority Leader

Letter 15
MA State Representative Christopher G. Fallon

Code	Topic 1	Topic 2	Comment	Response
15.1	Analysis Assumptions	Planning Period	I believe that the studies are inadequate regarding the possible effects of these projects. I feel that Massport has taken a 'band-aid' approach that does not begin to address the actual problems that Logan is experiencing and will continue to experience for the next twenty years.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals. Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

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Boston, MA 02133-1054
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Kevin W. Fitzgerald
State Representative
Assistant Majority Whip
Floor Division Leader

15th Suffolk District
Mission Hill / Jamaica Plain / Roxbury

LETTER 16

April 16, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20 th Floor
Boston, MA 02202

Dear Secretary Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows: I am opposed to this plan. I have grave concerns about increased air traffic, noise and pollution which would result from this shortsighted proposal. EOEA should find significant planning deficiencies in Massport's Draft Environmental Impact Statement (DEIS), and require that it be withdrawn.

Logan Airport was constructed in a residential neighborhood. Massport should not be allowed to take a segmented approach to Logan's development. Landside improvement projects (which accommodate ground passenger handling) and airside improvement projects (which accommodate aircraft handling) are interrelated. Both generate increased traffic and pollution. Both must be included in any planning document. Massport must also accept ultimate responsibility for controlling passenger and cargo growth. They must not simply be presented as immutable forces of nature. 16.1 16.2

The EOEA and the FAA should require Massport to change the base year in its calculations to calendar year 1998 and revise all presentations in the DEIS/DEIR to reflect that. They should also extend the planning period from 2010 to 2020 and revise all the projected levels of activity accordingly. Outdated whether data should be replaced with current information. Massport should use the FAA's definition of delays in their work. The DEIS/DEIR should be republished to reflect all these changes. 16.3

The alleged benefits of this plan focus narrowly on the short term, namely a very small decrease in passenger delays. The plan sidesteps the long-term consequences of increased air traffic over Jamaica Plain, Roxbury and all of the surrounding neighborhoods. Massport also does not address the ultimate questions of the limits to 16.4 16.5

growth at Logan. What is the end limit to the number of take offs and landings that the airport can handle? How many passengers can the airport process? When do they expect to reach these limits, or is the airport going to continually expand until it further disrupts East Boston? What will this mean for the quality of life of all Boston neighborhoods?

We need to explore a regional, comprehensive transportation plan. Such a plan must include consideration of another location for a second airport, as well as steering air traffic to Hanscom and Worcester. As a constituent wrote, we also need to divert air travelers to the new Amtrack high speed train between Boston, New York and Washington D.C. We also need to build the North South rail Link between North and South Stations. Perhaps the increased use of video conferencing can replace the need for some business travelers to fly into Logan. 16.6

Massport needs to study the reasons for the perceived increase in demand for air traffic and find more creative alternatives besides building another runway. Perhaps Massport should take a page out of the book of the electric utility companies. Some of them have found that it is more desirable to give customers discounts on energy efficient light fixtures and thereby reduce demand, than it would be to invest in building more plants to increase capacity. 16.7

There are many more problems with the DEIS regarding noise, environmental impacts, construction impacts, endangered species, soundproofing, flight tracks, night time operations and etc. Without going into more detail, I believe that the case has already been made that the DEIS must be withdrawn and rewritten. It should answer each of the specific problems and questions brought up in the Community Advisory Committee review.

Thank you for your attention in this very important matter. If you have any questions regarding this testimony, please contact me at my office at (617) 722-2250.

Sincerely,

Kevin W. Fitzgerald
State Representative

Letter 16
MA State Representative Kevin Fitzgerald

Code	Topic 1	Topic 2	Comment	Response
16.1	Environmental Review Process	MEPA	Massport should not be allowed to take a segmented approach to Logan's development. Landside improvement projects (which accommodate ground passenger handling) and airside improvement projects (which accommodate aircraft handling) are interrelated. Both generate increased traffic and pollution. Both must be included in any planning document.	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's ESPR (formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."
16.2	Alternatives	Operational Restrictions	Massport must also accept ultimate responsibility for controlling passenger and cargo growth.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.

Code	Topic 1	Topic 2	Comment	Response
16.3	Analysis Assumptions	Base year	The EOEA and the FAA should require Massport to change the base year in its calculations to calendar year 1998 and revise all presentations in the DEIS/DEIR to reflect that. They should also extend the planning period from 2010 to 2020 and revise all the projected levels of activity accordingly. Outdated weather data should be replaced with current information. Massport should use the FAA's definition of delays.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historic perspective to the delay problem at Logan Airport and for use in model calibration. Section 4.6 of the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. It should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project is a comparison of the Preferred Alternative to the No Action Alternative. Delay and environmental impacts of the Airside Project were evaluated under a broad range of future operating conditions at Logan Airport. Current air traffic trends at Logan Airport, as described in the Supplemental DEIS/FEIR, indicate that the 37.5 M scenario level may not be reached until 2015, and the 45 M level may not occur until 2020 or beyond. The planning horizon considered in the airside analysis therefore extends well beyond ten years. Comparative analysis of 1981 to 1990 weather with 1989 to 1998 weather identifies no significant differences in statistical properties. Section 4.4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays. It includes a description of FAA and DOT delay measures, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data on delays at Logan Airport and other major United States airports. The FAA and DOT delay statistics only record (imprecisely) historical delays; they cannot predict future delays.
16.4	Noise	Impacts	The plan sidesteps the long-term consequences of increased air traffic over Jamaica Plain, Roxbury and all of the surrounding neighborhoods.	The Supplemental DEIS/FEIR indicates that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
16.5	Cumulative Impacts	Master Plan	Massport also does not address the ultimate questions of the limits to growth at Logan. What is the end limit to the number of take offs and landings that the airport can handle? How many passengers can the airport process? When do they expect to reach these limits?	Federal constitutional provisions (preemption, commerce clause, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the federal Airport Improvement Program grants which Massport receives restrict Massport's ability to control the number of aircraft operations at Logan Airport. Refer also to response to Comment 16.3.

Code	Topic 1	Topic 2	Comment	Response
16.6	Regional Transportation	Regional Airports	We need to explore a regional, comprehensive transportation plan. Such a plan must include consideration of another location for a second airport, as well as steering air traffic to Hanscom and Worcester. As a constituent wrote, we also need to divert air travelers to the new Amtrak high speed train between Boston, New York and Washington D.C. We also need to build the North South rail Link between North and South Stations. Perhaps the increased use of video conferencing can replace the need for some business travelers to fly into Logan.	Logan Airport is part of a regional system of airports that includes T.F Green/Providence, Worcester Regional and Manchester Airports. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field, consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR. Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester Airport, T.F. Green/Providence Airport and Worcester Regional Airport, preclude the need for a second major airport. Massport holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic. The acceptance of videoconferencing and other means of telecommunications by businesses as a substitute for air travel is largely dependent upon the quality of the available technology and private sector decisions outside the authority of FAA and Massport. Massport encourages such initiatives from state government and others.
16.7	Purpose and Need	Delays	Massport needs to study the reasons for the perceived increase in demand for air traffic and find more creative alternatives besides building another runway.	Refer to response to Comment 16. 5 and 16.6

The Commonwealth of Massachusetts

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LETTER 17

ADMINISTRATIVE ASSISTANT
MAGGI CARFIELD

67 DANE STREET
SOMERVILLE, MA 02143
HOME TEL. (617) 666-9479

March 29, 1999

Robert Durand, Secretary
MEPA Unit - Executive Office of Environmental Affairs
100 Cambridge St., 20th floor
Boston MA 02202
attn: Arthur Pugsley

Dear Secretary Durand,

This letter is in brief response to the draft Environmental Impact Report for the proposed Airside Improvements Project for Logan Airport.

People in Somerville are already disturbed by the noise of airplanes approaching or leaving Logan Airport, and are worried about the possible tripling of overflights which may take place.

My view, after listening to presentations by proponents and opponents of the proposed Runway 14-32, is that the main result of that runway will be to increase traffic. Even with high-speed rail about to open, there will probably be an increased demand by people wanting to fly into Boston. My understanding is that this increase could be accommodated by changing from smaller to larger airplanes to carry the traffic. This would lead to less pollution, less noise, and fewer delays, without increasing the number of flights as much, although if all the planes are larger, they can approach the airport in closer succession. 17.1

So, you should be exploring ways to discourage smaller aircraft. Building Runway 14-32, which could be used only by such planes, would go in the opposite direction, encouraging the scheduling of flights accommodating fewer than 50 passengers. In other words, if you build it, they -- small aircraft -- will come. 17.2

I urge MassPort to explore the many cheaper and more environmentally sound ways to increase the number of passengers using Logan. I also urge you to consider plans for regional solutions, including other airports and rail. 17.3

Finally, delays at Logan result not only from delayed flights but from tunnel traffic. Better mass transit access, or diversion of some flights to Hanscom or Worcester, could help resolve this problem. 17.4

On behalf of my many constituents who have contacted me on this issue, I strongly oppose building 14-32 and thereby increasing air traffic dramatically over our city.

Sincerely,

Patricia Jehlen

Letter 17
MA State Representative Patricia Jehlen

Code	Topic 1	Topic 2	Comment	Response
17.1	Purpose and Need	Delays	Increased demand could be accommodated by changing from smaller to larger airplanes to carry the traffic. This would lead to less pollution, less noise, and fewer delays, without increasing the number of flights.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.
17.2	Alternatives	Runway 14/32	Building Runway 14-32 would encourage the scheduling of flights accommodating fewer than 50 passengers.	Refer to Section 8.5 of the Supplemental DEIS/FEIR for a discussion of ways the unidirectional restriction can be enforced. Small aircraft can be accommodated on any runway configuration at Logan Airport. Runway 14/32 would simply allow Logan Airport to maintain its full VFR capacity in northwest wind conditions and will not provide a new capability to accommodate small aircraft, nor should it encourage additional investment in this type of equipment. Since Aviation Deregulation in 1979, airlines have been free to select their own markets, schedules and equipment without Federal, State or local intervention. Major factors in airline competition are frequency of service and number of markets served. Airlines schedule flights and select aircraft types based on profitability, not runway characteristics at a single airport in the network.

Code	Topic 1	Topic 2	Comment	Response
17.3	Regional Transportation	Regional Airports, Passenger Rail	... Massport should explore the many cheaper and more environmentally sound ways to increase the number of passengers using Logan. I also urge you to consider plans for regional solutions, including other airports and rail.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
17.4	Ground Transportation	Access to Logan Airport	Delays at Logan result not only from delayed flights but from tunnel traffic. Better mass transit access, or diversion of some flights to Hanscom or Worcester, could help resolve this problem.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent EDR (Annual Updates). Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

LETTER 18

SENATOR STEPHEN F. LYNCH
FIRST SUFFOLK DISTRICT
STATE HOUSE, ROOM 424
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COMMITTEES:
COMMERCE AND LABOR
(CHAIRMAN)
WAYS AND MEANS
EDUCATION
PUBLIC SERVICE
COUNTIES
ETHICS

April 12, 1999

Secretary Robert A. Durand
Executive Office of Environmental Affairs
Attention: MEPA Unit, Arthur Pugsley, EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

RE: MEPA Project Number: **EOEA No. 10458**

Dear Secretary Durand:

I would like to be recorded in opposition to the proposed Logan Airside Improvements Planning Project as outlined in the Draft Environmental Impact Statement/Report by the Massachusetts Port Authority (Massport) and the Federal Aviation Administration (FAA). This report outlines the proposal plans to build a new runway 14/32, and to construct and operate a new Centerfield Taxiway.

As the State Senator for the First Suffolk district, I am ever aware of the health and safety hazards that face the impacted communities below the flight paths. I appreciate the opportunity to comment on this proposal.

Safety Issues

The flight paths of Logan Airport already present serious safety concerns for the residents of its surrounding communities. Not long ago, the Dorchester community experienced the crash of an airplane on Lonsdale Street. Several homes were destroyed, the pilot killed, and a permanent feeling of unease has remained. In addition, another incident occurred in the Cedar Grove section of Dorchester when an engine fell off an aircraft and landed near a development for the elderly. Incidents such as these remind the neighborhoods of Boston of the need for reducing the dangers presented by overhead aircraft. 18.1

Health Concerns

In addition to the dangerous risk of crashes, the neighboring communities of Logan Airport must also contend with air and noise pollution. We recently met with physicians and public health officials of the South Boston Health Center regarding relentless noise associated with over-head aircraft which they believe adversely impacts the health of local residents.

Although noise pollution has a major effect on the lives of the people neighboring the airport, it is not the only health risk involved. Massport has offered no meaningful attempt to measure the level of air pollution associated with the jet fuel emissions.

Increased air traffic will lead to more air pollution and various upper respiratory problems including asthma. The neighborhoods of South Boston, Dorchester and Roxbury all contend with unusually high incidents of these types of health problems. 18.2
Recently, I filed legislation that calls for the study of health impacts by Logan Airport on surrounding communities. Senate Docket Number 1878, *An Act Relative to a Public Health Study of the Impacts of Logan International Airport* would direct the Bureau of Environmental Health Assessment of the Department of Public Health to conduct an environmental risk assessment of health impacts of the airport on the communities. More specifically, it would examine the incidences of respiratory disease and cancer in these communities, as well as other health problems. Until we can ascertain the affects of the airport on its neighboring communities, I believe that it is dangerous to allow any further expansion at Logan.

Traffic Issues

Obviously, the further development of Logan International Airport will attract an increased number of vehicular traffic to our neighborhood streets. While specific truck routes have been created to divert trucks from our neighborhood streets, passenger cars have continued to use these residential communities as a cut-through 18.3
to the highway system. To date there has not been a traffic study or a mitigation plan proposed. This lack of acknowledgement of the traffic impact of Logan Airport on the neighborhoods is shortsighted and disrespectful.

We know Logan Airport is intrusive, noisy and relentlessly disruptive of our environment and health. Massport should seriously consider the resources of regional 18.4
airports before looking to expand Logan.

Once again, I thank you for the opportunity to comment on this matter. I urge the MEPA Unit of the Executive Office of Environmental Affairs to keep these issues in mind as you consider this document. Thank you for your consideration. If I can be of further assistance, please contact my office.

Sincerely,

STEPHEN F. LYNCH
State Senator

SFL/cp

Letter 18
MA State Senator Stephen F. Lynch

Code	Topic 1	Topic 2	Comment	Response
18.1	Alternatives	Runway Use	The flight paths of Logan Airport already present serious safety concerns for the residents of its surrounding communities. [There is a] need for reducing the dangers presented by overhead aircraft.	The first goal of the FAA and Massport is always to provide safe air transportation. Logan Airport has a tightly controlled system of flight tracks and procedures to prevent aircraft accidents. Runway 14/32 and the other proposed Airside improvements are designed to enhance safety and efficiency of traffic operations in the air and on the ground. The runway will segregate smaller aircraft and reduce congestion during northwest wind conditions, reducing the possibility of mistakes and potential for accidents.
18.2	Public Health	Health Effects	Increased air traffic will lead to more air pollution and various upper respiratory problems including asthma. The neighborhoods of South Boston, Dorchester and Roxbury all contend with unusually high incidents of these types of health problems. Until we can ascertain the affects of the airport on its neighboring communities, I believe that it is dangerous to allow any further expansion at Logan.	Public health is discussed in Section 6.8 of the Supplemental DEIS/FEIR. Dispersion modeling for the air quality analysis indicates no violation of the NAAQS, which were designed to protect human health and welfare.
18.3	Ground Transportation	Access to Logan	Further development of Logan International Airport will attract an increased number of vehicular traffic to our neighborhood streets. Passenger cars have continued to use these residential communities as a cut-through to the highway system. To date there has not been a traffic study or a mitigation plan proposed.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.
18.4	Regional Transportation	Regional Airports	Massport should seriously consider the resources of regional airports before looking to expand Logan.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

REPRESENTATIVE
LIZ MALIA
11TH SUFFOLK DISTRICT

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LETTER 19

Committees on:
SCIENCE and TECHNOLOGY
PERSONNEL and ADMINISTRATION
COUNTIES

LEGISLATIVE AIDE
KAREN VAN KOOY
Karen.VanKooy@state.ma.us

April 22, 1999

Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston MA 02202

Dear Mr. Pugsley;

I am writing to voice my strong opposition to the Massport plans to build a new runway (Runway 14/42) and redesign taxiways at Logan Airport. I am requesting that MEPA deny approval of the draft Environmental Impact Statement (EIS) submitted by Massport to implement their proposal.

As the State Representative for parts of Jamaica Plain, Dorchester, Roslindale and Roxbury, I urge you to take into consideration the fact that much of the data used by Massport to justify their request is questionable in its accuracy, and in fact raises many more questions than it answers.

The transportation needs of New England and the greater Boston area are extremely complex and should be addressed in a comprehensive, regional manner. Although well intentioned, Massport's new runway proposal falls far short of offering any substantial solutions to those needs. The addition of a new runway at Logan will only encourage the expansion of an already too large airport in a too dense urban neighborhood. It is impossible to believe that resulting noise and air quality issues won't have a disastrous effect on residents in the immediate and surrounding communities. I am also alarmed that no effort was made in this report to measure the impact of increased road and ground traffic. 19.1 19.2

Unfortunately, a major opportunity to explore specifics of other potential solutions to our air and general transportation needs was lost in rushing this study to completion. As an elected official with an extremely diverse district to represent, I believe it would be irresponsible of me to not oppose Massport's request until we have all had an opportunity

to both study alternatives and answer the many health and public safety questions that have been raised.

I appreciate the opportunity to express my concerns and thoughts in this matter. Thank you for your attention to this matter.

Sincerely,

LIZ MALIA
State Representative

Letter 19
MA State Representative Liz Malia

Code	Topic 1	Topic 2	Comment	Response
19.1	Alternatives	Runway 14/32	The addition of a new runway at Logan will only encourage the expansion of an already too large airport in a too dense urban neighborhood. It is impossible to believe that resulting noise and air quality issues won't have a disastrous effect on residents in the immediate and surrounding communities.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR. The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR. These inventories show that all Alternatives, including the Build and No-Build Alternatives, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.
19.2	Ground Transportation	Access to Logan	I am also alarmed that no effort was made in this report to measure the impact of increased road and ground traffic.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

LETTER 20

SENATOR MICHAEL W. MORRISSEY
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COMMITTEES:
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WAYS AND MEANS
NATURAL RESOURCES AND AGRICULTURE
TRANSPORTATION
REDISTRICTING (VICE-CHAIR)

April 14, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley- EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Dear Mr. Pugsley:

I would like to take this opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Logan Airside Improvements Planning Project. After reviewing the DEIR and attending various meetings on this matter I am writing to oppose the proposed runway 14/32 at Logan Airport.

I have reviewed the DEIR and Draft Environmental Impact Statement (DEIS) for the Logan Airside Improvements Planning Project and it is an incomplete document that needs to be re-drafted. The data and studies used to project the necessity of the new runway were out-of-date, using 1993 as a base year and therefore unreflective of the current situation. For instance, the Airside delay model (DELAYSIM) used hourly weather observations from 1981-1990. Due to the effects of El Nino and La Nina the weather patterns have changed significantly within the last five years and this information is no longer relevant. The study should construct and use a new 10-year average. There are contradictions in the calculations of delays as well. Massport developed their own model for estimating delay, rather than using the Federal Aviation Administration (FAA)-approved SIMMOD model. The FAA shows the delay situation at Logan has improved by decreasing by 36% between the years 1993 and 1997. 20.1 20.2

The DEIR does not include studies of other sources of delay that plague Logan Airport. The problems of parking and ground access are critical issues to getting people in and out of Logan quickly and efficiently. These issues will be even more crucial with the forecasted dramatic increases in passengers and operations at Logan. Terminal capacity and the baggage claim areas are also topics of concern. These areas have been improved, but with the projected increase in passengers there will be a need for more improvements down the road. The previously mentioned issues should have been studied as well, to see how much of an impact on 20.3

delays they actually have. When addressing the problem of delays, the whole operation of Logan needs to be taken into consideration, not just the weather.

The DEIR also failed to include studies of alternative plans in additional to the proposed runway 14/32. There is no mention of the impact of using several regional airports to relieve some of the traffic flowing into Logan Airport from across the state. Many citizens from the central and southeastern parts of the state drive hours to get to Logan when there are airports with the potential to be competent air service providers within a half-hour or less. In Worcester, Hyannis, and New Bedford there are airstrips, that with improvements could provide the state with the regional air transportation it needs. However, the DEIR did not mention these regional airports and the impact they would have on Logan, particularly in the area of delays. 20.4

There have been improvements in regard to delay at Logan Airport. As mentioned earlier there has been a 36% decrease in delays from 1993 to 1997. The FAA has further reported that 1998 delays were 18% lower than 1993 levels, this information was not included in the DEIR. These reductions in delays occurred without the implementation of any airside improvements. The thought of constructing the new runway to reduce weather-related delays actually has the effect of increasing the all-weather capacity of the airport; thus allowing for additional aircraft operations. Massport officials have said this is a short-term solution. The DEIR makes no long-term analysis of growth and delay problems at Logan, ending its analysis at the year 2010. By that date, with the new runway, and use of its proposed regional alternatives, Massport still projects delays to have increased by 39,000 hours annually. The Commonwealth needs a long-term solution we can not go through this same situation ten years down the road; we need to plan for the future of the Commonwealth now. 20.5 20.6

My constituents have their own concerns about the construction of the new runway. Several people were outraged that taxpayers dollars were funding the publicity campaign in favor of the new runway, when most people are opposed. Many people feel that Massport is resorting to a divide and conquer strategy when dealing with surrounding communities. By stressing to communities that they will see a reduction and pitting them against the other communities that will see an increase, in order to gather enough support for the proposal to pass.

Other constituents do not trust Massport and see this runway as a way to increase the number of aircraft coming and going at Logan and ultimately increasing the noise over their neighborhoods. This is in no way a case of "not in my backyard"; these people have lived with Logan for over 23 years, they simply can not take any more. Massport has talked about soundproofing the areas that receive the most noise pollution. Did they think about how many homes that will include? This does not seem feasible and even if it is, this does not resolve the problem when people want to use their backyards or when the windows are open. 20.7

As you can see there are many unresolved issues pertaining to the proposed runway 14/32 at Logan Airport. Many things were left out of Massport's DEIR that are pertinent to the discussion of the new runway. Citizens of the Commonwealth deserve all the facts since the decision will be effecting their daily lives. There was not enough exploration into supporting the regional airports and making them alternate locations for air service. We should spread the access and the noise that goes with it, around the region, not just around Boston. This will solve several problems at once. The delay and congestion issues will be improved by diverting travelers to other airports. The residents surrounding the airport will get a slight break with a reduction in noise from aircraft flying over their homes. In addition, travelers that live far from Boston will have closer alternatives with possible cheaper prices. 20.8

I respectfully request that you reject Massport's Draft Environmental Impact Report and solicit a more complete study of the proposed plan. This matter needs to be studied from all angles using up-to-date data in order to project what future situations might hold. Your consideration of this matter is greatly appreciated. If you have any questions or need additional information, please do not hesitate to contact me at my office.

Very truly yours,

Michael W. Morrissey
Senator Norfolk and Plymouth District

Letter 20
MA State Senator Michael W. Morrissey

Code	Topic 1	Topic 2	Comment	Response
20.1	Analysis Assumptions/ Methodologies	Base Year	The data and studies used to project the necessity of the new runway were out-of-date, using 1993 as a base year and therefore unreflective of the current situation. For instance, the Airside delay model (DELAYSIM) used hourly weather observations from 1981-1990. Due to the effects of El Nino and La Nina the weather patterns have changed significantly within the last five years and this information is no longer relevant. The study should construct and use a new 10-year average.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historic perspective to the delay problem at Logan Airport and for use in model calibration. Section 4.6 of the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. It should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project is a comparison of the Preferred Alternative to the No Action Alternative. Comparative analysis of 1981 to 1990 weather with 1989 to 1998 weather identifies no significant differences in statistical properties.
20.2	Delay	Model	There are contradictions in the calculations of delays as well. Massport developed their own model for estimating delay, rather than using the Federal Aviation Administration (FAA)-approved SIMMOD model.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports.
20.3	Ground Transportation	Access to Logan Airport	The DEIR does not include studies of other sources of delay that plague Logan Airport. The problems of parking and ground access are critical issues to getting people in and out of Logan quickly and efficiently... with the projected increase in passengers there will be a need for more improvements down the road. When addressing the problem of delays, the whole operation of Logan needs to be taken into consideration, not just the weather.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis. Massport has implemented an aggressive airport access program designed to increase the use of public transport modes and decrease the reliance on private automobiles to access Logan Airport. The impact of the passenger activity levels, used in the Airside Project documents, on ground access patterns was studied and reported in previous GEIRs. The GEIR analysis indicates that the projected growth can be accommodated by Logan Airport. In addition, Section 2.7 of the Supplemental DEIS/FEIR discusses the proposed MBTA improvements in transit access to Logan Airport. Ground access and mass transit access to Logan Airport was also discussed in the *Logan Airport 1999 ESPR*. The *1999 ESPR* was filed on December 15, 2000.

Code	Topic 1	Topic 2	Comment	Response
20.4	Regional Transportation	Regional Airports	The DEIR also failed to include studies of alternative plans in additional to the proposed runway 14/32. There is no mention of the impact of using several regional airports to relieve some of the traffic flowing into Logan Airport from across the state.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. As the analysis in Chapter 2 of the Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because a third operating runway is not available during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
20.5	Purpose and Need	Delays	There have been improvements in regard to delay at Logan Airport. As mentioned earlier there has been a 36% decrease in delays from 1993 to 1997. The FAA has further reported that 1998 delays were 18% lower than 1993 levels, this information was not included in the DEIR.	The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States. Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. Refer also to response to Comment 85.4. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals
20.6	Analysis Assumptions/ Methodologies	Planning Period	The DEIR makes no long-term analysis of growth and delay problems at Logan, ending its analysis at the year 2010. By that date, with the new runway, and use of its proposed regional alternatives, Massport still projects delays to have increased by 39,000 hours annually. The Commonwealth needs a long-term solution we can not go through this same situation ten years down the road.	Delay and environmental impacts of the Airside Project were evaluated under a broad range of current and future activity levels at Logan Airport. Current air traffic trends at Logan Airport, as described in the Supplemental DEIS/FEIR, indicate that the 37.5 M level may not be reached until 2015, and the 45 M level may not occur until 2020 or beyond. The planning horizon considered in the airside analysis therefore extends well beyond ten years. Refer also to response to Comment 20.4.

Code	Topic 1	Topic 2	Comment	Response
20.7	Noise	Sound Insulation	Massport has talked about soundproofing the areas that receive the most noise pollution. Did they think about how many homes that will include? This does not seem feasible and even if it is, this does not resolve the problem when people want to use their backyards or when the windows are open.	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences. Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
20.8	Regional Transportation	Regional Airports	There was not enough exploration into supporting the regional airports and making them alternate locations for air service. We should spread the access and the noise that goes with it, around the region, not just around Boston. This will solve several problems at once. The delay and congestion issues will be improved by diverting travelers to other airports. The residents surrounding the airport will get a slight break with a reduction in noise from aircraft flying over their homes. In addition, travelers that live far from Boston will have closer alternatives with possible cheaper prices.	Refer to response to Comment 20.4.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

LETTER 21

SENATOR THERESE MURRAY
PLYMOUTH AND BARNSTABLE DISTRICT
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COMMITTEES:
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TRANSPORTATION (VICE CHAIR)
WAYS AND MEANS
STEERING AND POLICY
HEALTH CARE
FEDERAL FINANCIAL ASSISTANCE

May 24, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Dear Secretary Durand,

I write to you today to express my opposition to peak period pricing at Boston/Logan International Airport. 21.1

The Cape, as you know, faces many complex transportation issues. Air travel has increased over the years and provides a vital alternative to automobile travel. The demand for these types of alternatives is rising annually. There is no reason we should be contemplating increasing fees on these methods of travel.

Additionally, small rural airports are usually served by smaller airlines. This type of financial hardship will only serve to force these airlines to increase their fares, and eventually put them out of business.

I have spent a tremendous amount of my time on transportation projects throughout the state. I am wholeheartedly committed to promoting alternative modes of transportation in areas, such as the Cape Cod and the South Shore, where roads and bridges are at peak level capacity. I am hopeful you will safeguard what little transportation alternatives exist in the areas and oppose peak period pricing.

Thank you for your attention to this matter.

Sincerely yours,

THERESE MURRAY
State Senator
Plymouth and Barnstable District

TM/ramj

Letter 21
MA State Senator Therese Murray

Code	Topic 1	Topic 2	Comment	Response
21.1	Alternatives	Peak Period Pricing	...express my opposition to peak period pricing at Boston/Logan International Airport. The Cape, as you know, faces many complex transportation issues. Air travel has increased over the years and provides a vital alternative to automobile travel. The demand for these types of alternatives is rising annually. There is no reason we should be contemplating increasing fees on these methods of travel. Small rural airports are usually served by smaller airlines. This type of financial hardship will only serve to force these airlines to increase their fares, and eventually put them out of business.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This Exemption Program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

EUGENE L. O'FLAHERTY
REPRESENTATIVE
2ND SUFFOLK DISTRICT

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LETTER 22

April 23, 1999

Mr. Arthur Pugsley
Associate Environmentalist, MEPA
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 2000
Boston, MA 02202

RE: Draft Environmental Impact Statement/Report, Logan Airside Improvements Planning Project, February, 1999 (EPA Number D-FAA-B51017-MA)

Dear Mr. Pugsley:

I would like to express my concerns with the Draft Environmental Impact Statement/Report (DEIS/R) prepared by the Massachusetts Port Authority regarding the Authority's plans to construct what is commonly called Runway 14/32.

The DEIS/R has failed to address adequately the concerns of Chelsea and Charlestown residents under Logan International Airport's flight paths. Massport projects at least a threefold increase of flights over my district under the air traffic management plans based on construction of Runway 14/32. This is a heavy burden for communities already suffering a disproportionate level of industrial burdens, communities long excluded from many federal and state soundproofing and other mitigation efforts. 22.1

Significant questions remain about the methodology Massport used in preparing the DEIS/R, including how they calculated the flight delay rate, the heart of their argument for Runway 14/32, and how Massport came to the curious conclusion that communities such as Chelsea and Charlestown do not suffer disproportionately from their operations. I respectfully request that you reject the Massachusetts Port Authority and Federal Aviation Administration's DEIS/R for the proposed airside improvements at Logan International Runway. I further request that you do whatever is in your capacity to require the Commonwealth of Massachusetts to create an 22.2

independent commission to conduct a fair and comprehensive assessment of our regional air transportation needs.

Thank you very much for your attention to this important matter. Please do not hesitate to contact me if you have any question about my comments or concerns.

Very truly yours,

Eugene L. O'Flaherty

EUGENE L. O'FLAHERTY
State Representative, 2nd Suffolk District

/las

Letter 22
MA State Representative Eugene L. O'Flaherty

Code	Topic 1	Topic 2	Comment	Response
22.1	Alternatives	Runway 14/32	The DEIS/R has failed to address adequately the concerns of Chelsea and Charlestown residents under Logan International Airport's flight paths. Massport projects at least a threefold increase of flights over my district under the air traffic management plans based on construction of Runway 14/32.	PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere. No one in Chelsea or Charlestown currently experiences noise that is this high.
22.2	Delay	Model	Significant questions remain about the methodology Massport used in preparing the DEIS/R, including how they calculated the flight delay rate.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports. The methodology used for the Airside Project provides a consistent and systematic estimate of flight delays caused by constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The analysis based on this methodology indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels. The FAA, who co-authored the Supplemental DEIS/FEIR, approved all the models, which have been validated in previously published studies of Logan Airport.

ANTHONY
PETRUCCELLI
STATE REPRESENTATIVE

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April 22, 1999

LETTER 23

Arthur Pugsley
Associate Environmentalist
MEPA Unit–Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Subject: Comments Regarding EOEA #10458, Logan Airside Planning Project

Dear Mr. Pugsley:

The following comments regarding EOEA #10458, Logan Airside Planning Project are respectfully submitted.

To begin, I have eliminated the word "Improvements" from the official title of this project as an intrinsic distortion of the report's contents. I recommend "Expansion" as an appropriate substitute, in the spirit of accuracy.

• I am unalterably opposed to the proposed unidirectional Runway 14/32. This new runway would more than triple jet flights over some of the most densely populated communities in the region, including the Eagle Hill neighborhood in East Boston. Because these areas already suffer from some of the highest levels of Logan airport jet noise it is simply unacceptable to increase their noise exposure by tripling the number of jet flights on Runway 15R/33L which would result directly from the planned Runway 14/32. 23.1

The tripling of jet flights over these communities is documented in Massport's own draft environmental impact statement/report that is the subject of this review. For example, in Volume III, Technical Appendix H, pages 2 through 4 the data clearly demonstrate that ***total jet operations, arrivals and departures, on existing Runway 15R/33L would more than triple in Alternative 1A compared to Alternative 4.*** Alternative 1A is Massport's preferred alternative that is based on the unidirectional Runway 14/32 while Alternative 4 is current airport configuration. Jet operations from Runway 15R/33L are the main source of aircraft noise exposure for these residential communities.

ANTHONY PETRUCCELLI
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I am opposed to Runway 14/32 for other reasons:

Runway 14/32 points directly at East Boston's most densely populated neighborhood, Jeffries Point, which currently is not subjected to direct overflights although the area suffers heavily from aircraft ground noise. Massport claims in the DEIS/R that Jeffries Point will not experience Runway 14/32 overflights because it will be designated as a unidirectional runway with overwater operations only.

However nowhere in the DEIS/R does Massport describe the irreversible legal instruments that would be necessary to guarantee against any future reversal of a temporary unidirectional runway operation. In fact statements on pages P-4 and P-5 in the section entitled Massport – FAA Roles make it clear that any runway operational restrictions put in place today would be subject to future modification pending application from Massport to the FAA when both agencies will be administered by different policy makers. 23.2

Runway 14/32 would jeopardize Jeffries Point even in a unidirectional configuration due to the inevitable overflights resulting from missed approaches to Runway 32 which would pass directly over the neighborhood. 23.3

• I am opposed to the proposals to reduce the bad weather instrument landing system (ILS) mimimums on Runways 15R, 27 and 22L. The effect of these actions would be to expose residential communities to increased jet flight noise from the additional jet overflights attendant on the increased availability of these runways to operational usage compared to existing conditions. This negative environmental effect is described in the DEIS/R, Volume III, Technical Appendix D, page 2: *"The proposal to reduce the ILS minimums to the lowest allowable for these three runways would increasre their annual availability, and allow operations to continue during periods of low visibility..."* 23.4

However I do support the proposal to reduce the Runway 33L ILS minimums because this might shift some bad weather landings from overland to overwater approaches. 23.5

ANTHONY
PETRUCCELLI
STATE REPRESENTATIVE

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• I am opposed to the centerfield taxiway proposal because of it's potential negative noise impacts on the Orient Heights area of East Boston, particularly the Bayswater Street neighborhood. 23.6

The DEIS/R is deficient in that in does not adequately address alternatives to the alleged Logan Airport delay problem which is the basis of the proposed expansion plan. A regional airport system plan is called for which would fully utilize the potential of other regional airports such as Providence, RI and Manchester, NH. 23.7

I am also opposed to the DEIS/R because it completely fails to address the larger problem of airport related activities on the quality of life of East Boston. The existing growth rate of Logan Airport threatens to suffocate our community with air freight warehouses, heavy truck traffic, rental vehicles and other similar activities. I again call on the Massachusetts Office of Environmental Affairs to immediately institute a complete freeze on all Logan airport related activities in East Boston to protect our community from being totally overwhelmed by the airport. 23.8

Sincerely,

Anthony Petruccelli

Anthony Petruccelli

Letter 23
MA State Representative Anthony Petruccelli

Code	Topic 1	Topic 2	Comment	Response
23.1	Alternatives	Runway 14/32	Runway 14/32 would more than triple jet flights over some of the most densely populated communities in the region, including the Eagle Hill neighborhood in East Boston. Because these areas already suffer from some of the highest levels of Logan Airport jet noise it is simply unacceptable to increase their noise exposure by tripling the number of jet flights on Runway 15R/33L which would result directly from the planned Runway 14/32.	While Eagle Hill is expected to experience significant noise exposure above 65 DNL for various future scenarios, it is *not* among the most highly exposed areas around Logan Airport. The most highly exposed areas are primarily in Winthrop and to the north of Logan Airport in East Boston and Revere (see Tables 6.2-5 and 6.2-24. As a consequence, with the increased flexibility in use of runways afforded by Runway 14/32, PRAS tends to recommend additional overflights of Eagle Hill so as to benefit more highly exposed areas experiencing levels of 70 or 75 DNL and above.
23.2	Alternatives	Runway 14/32	Nowhere in the DEIS/R does Massport describe the irreversible legal instruments that would be necessary to guarantee against any future reversal of a temporary unidirectional runway operation.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
23.3	Alternatives	Runway 14/32	Runway 14/32 would jeopardize Jeffries Point even in a unidirectional configuration due to the inevitable overflights resulting from missed approaches to Runway 32 which would pass directly over the neighborhood.	Runway 14/32 will be used primarily in VFR weather conditions. A missed approach, which is an exceedingly rare occurrence in VFR conditions, would not affect Jeffries Point because it would turn to the left.
23.4	Alternatives	Reduced Approach Minimums	I am opposed to the proposals to reduce the bad weather instrument landing system (ILS) minimums on Runways 15R, 27 and 22L. The effect of these actions would be to expose residential communities to increased jet flight noise from the additional jet overflights attendant on the increased availability of these runways to operational usage compared to existing conditions.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.

Code	Topic 1	Topic 2	Comment	Response
23.5	Alternatives	Reduced Approach Minimums	I do support the proposal to reduce the Runway 33L ILS minimums because this might shift some bad weather landings from overland to overwater approaches.	The implementation of the Category III ILS for Runway 33L will be evaluated at a later date in a separate EIS upon completion of the Runway Safety Ends Improvement Project.
23.6	Alternatives	Taxiway Improvements	I am opposed to the centerfield taxiway proposal because of potential negative noise impacts on the Orient Heights area of East Boston, particularly the Bayswater Street neighborhood.	The ground taxi noise calculated for the northeast end of Runway 4/22, at locations in Winthrop and East Boston, show small to moderate *reductions* in ground noise of 2 to 3 dB for the Preferred Alternative when compared to the No Build Alternative (refer to Tables 6.2-15, 6.2-16, and 6.2-17 in the Supplemental DEIS/FEIR). This is true for average and for maximum propagation conditions and for all operational scenarios examined. The main reason for these noise decreases is the reduction of the number of taxiing aircraft waiting to takeoff on Runways 22L&R. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the taxiways reducing ground noise and emissions for close in residents of East Boston and Winthrop.
23.7	Regional Transportation	Regional Airports	The DEIS/R is deficient in that it does not adequately address alternatives to the alleged Logan Airport delay problem which is the basis of the proposed expansion plan. A regional airport system plan is called for which would fully utilize the potential of other regional airports such as Providence, RI and Manchester, NH.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
23.8	Alternatives	Impacts	I am also opposed to the DEIS/ R because it completely fails to address the larger problem of airport related activities on the quality of life of East Boston. The existing growth rate of Logan Airport threatens to suffocate our community with air freight warehouses, heavy truck traffic, rental vehicles and other similar activities.	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's ESPR (formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
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LETTER 24

COMMITTEES:
SENATE WAYS AND MEANS
HEALTH CARE
ENERGY

April 7, 1999

Massachusetts Environmental Protection Agency
1 Winter Street
Boston MA, 02108

Dear Secretary Durand:

I write to you in determined support of proposed runway 14/32 at Logan International Airport. The transportation needs of my district are inexorably linked to Logan airport in much the same way as every other region in eastern Massachusetts. Efficient operation of the Boston airport has immediate and measurable impact on economics and quality of life for Cape and Islands residents. For instance, Cape Air/Nantucket Airlines, the largest independent regional server in the country, flies 150,000 passengers to and from Boston each year. Passengers include Cape and Island residents traveling on business as well as those seeking medical procedures or other services unavailable locally. Moreover, air transport is central to the success of our tourism industry, one of the main sources of my constituent's livelihoods. In all, the unique geographic realities of the Cape and Islands wed our interests to events at Logan. Too often, delays in Boston become fully manifest in local consequences.

24.1

I thank you for your consideration and do urge your favorable view of this initiative.

Respectfully Submitted,

Henri S. Rauschenbach
State Senator
Cape & Islands district

Letter 24
MA State Senator Henri S. Rauschenbach

Code	Topic 1	Topic 2	Comment	Response
24.1	Alternatives	Runway 14/32	I write to you in determined support of proposed runway 14/32 at Logan International Airport. Efficient operation of the Boston airport has immediate and measurable impact on economics and quality of life for Cape and Islands residents. Cape and Island residents travel on business as well as seek medical procedures or other services unavailable locally. Moreover, air transport is central to the success of our tourism industry. Too often, delays in Boston become fully manifest in local consequences.	Comment noted.

House of Representatives

BYRON RUSHING

State House – Room 542B
Boston, MA 02133-1054
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Rep.ByronRushing@house.state.ma.us

Ninth Suffolk District
Audubon Circle
Copley Place
Fenway
Lower Roxbury
Orchard Park
Prudential
St. Botolph
South End

LETTER 25

April 22, 1999

Arthur Pugsley
Executive Office of
Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attn: MEPA Office

Re: Logan Airside Improvements Planning Project, Boston, MA. EOEA #10458.

Dear Mr. Pugsley:

I am writing to comment on the Draft Environmental Impact Statement/Report (EIS/R) for the above project.

I have represented the South End and Lower Roxbury neighborhoods of Boston in the Massachusetts House of Representatives since 1983. I serve on the Joint Committee on Transportation in the Legislature. In 1995 and 1996 I attended the final meetings of the Runway 27 EIS Advisory Committee (That EIS was completed in 1996 and the FAA Record of Decision was signed in 1977. As of April of this year, the approved flight track for departures off Runway 27 is still not being flown accurately within the accepted flight corridor by the majority of planes).

I request the Secretary of Environmental Affairs find the Draft EIS/R inadequate and incomplete and order that the Draft EIS/R be withdrawn from further public consideration or processing pending the development of a meaningful participatory process for evaluation of alternatives to the Runway 14/32 proposal. I request the Secretary to ask also that for an equitable, comprehensive, long-term, air and ground and water transportation program for the region be adopted before any further consideration of this proposal or any other proposed expansion of or at Logan Airport.

I have come to these conclusions in regard to the Draft EIS/R and to Massport's handling of this process for the following reasons:

1. **The Airside Improvements Project will impose an unacceptable noise burden upon my constituents and other communities without any commensurate benefit either to Logan Airport or to the citizens of the Commonwealth.** The EIS/R argues a narrow case for construction of a new runway and taxiway without examining in appropriate detail how these construction projects will adversely affect the surrounding impacted communities. The EIS similarly fails to evaluate the effect of the increased demand which will be generated by the proposed construction project on its terminal facilities, baggage handling parking capacity, public transportation an road access at the airport. 25.1 25.2

2. **Massport's assertions about delay are questionable at best.** The Citizens Advisory Committee to Massport (CAC) has determined the Massport failed to use readily available data on delay from the FAA to support its representations about the severity of the problem at Logan. My community's representative on that body has convinced me that there is no basis for Massport's assertions about the new runway as a tool for delay reduction at the airport. To the contrary, it appears that the delay situation will worsen within 5 years or less while Logan will have subjected its neighbors to an environmental nightmare of noise and pollution. 25.3

I do not believe that delays at Logan airport justify this $20 million proposed short-term solution. I know that Logan has problems and that delays are one of them. But Massport has not explained to my satisfaction what causes whatever number of delays there are. Are they delays which are unavoidable due to storms and dangerous weather conditions? Are they caused by the airlines? By delays at other airports? By cargo and baggage handling and ground transportation problems? It is counterintuitive to say delays are the problem and then advocate increasing capacity at the airport. No one has demonstrated that delays at Logan have slowed down growth in Boston for the past ten years. 25.4

The burden of proof is on Massport. It has failed to articulate any standard for acceptable delay or growth at Logan. It has also failed to provide a long-term or comprehensive analysis of the general congestion at the airport. Almost all of the airfield delay data is simulated. Actual delay has decreased since 1993 according the CAC consultants and they question the discrepancy between FAA and Massport methodology. In any event, actual data on delay over the years is not presented. 25.5

3. **The EIS/R gives short shrift to fundamental environmental justice implications of the proposal.** It contains no detailed evaluation of the impacts of this project on minority and low-income populations living adjacent to the project. The document shows that Massport did not actively obtain the population and impact information required by the executive Order 12898 and the DOT Order regarding environmental 25.6

justice. **The only specific data presented is noise data, which compares** the projected noise impacts (which are significantly understated) in particular communities to the study area as a whole, rather than showing the discrepancies among and between various communities which are impacted by the project; and other impacts, such as the impacts from air pollutants and odor, are not addressed at all. The environmental justice information is presented in a way which suggests Massport simply "checking off" ~~His~~ requirement rather than attempting, in good faith, to provide a meaningful evaluation of the project on minority and low-income communities.

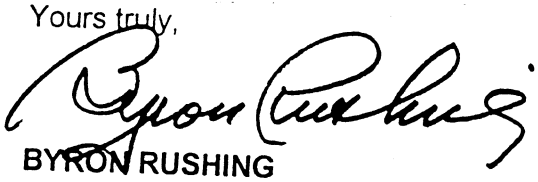
Furthermore, Massport has failed to perform any outreach to impacted non-English-speaking Latino residents in my Districts. There is a large community here, several thousand residents in Villa Victoria and in Lower Roxbury who will be severely and adversely impacted by this proposed runway construction project. Massport's failure to attempt any opportunity for comment by Spanish and Portuguese speakers is a direct violation of the Executive Order. 25.7

4. **The project, by Massport's own account in the DEIS, will generate, at best, limited, dubious and short term benefits for the traveling public while imposing onerous and permanent noise and pollution burdens on Massport's neighbors.** The Runway construction proposal is an ill-conceived stop-gap measure which would fundamentally alter the configuration and capacity of the airport and cause increased environmental injury to Logan's neighbors.

I cannot end these comments without mentioning the outrage expressed by many of my constituents regarding Massport's attempts to skew the process. **Massport's paid advertising campaign, during the public comment period, is an outrageous violation of the spirit of the environmental laws with which Massport nas to comply in order to receive approval for this project.** That it would engage in such a blatant attempt to influence the environmental process by purveying false and misleading information about the purposes and results of this complex project should, in itself, be viewed as grounds to reject the EIS/R. If left to stand, it will make a mockery of the environmental process itself. Many more people will have heard the false claims in the TV and radio advertising than will have had access to the Environmental Impact Statement. That Massport refused to hold educational meetings in many communities and failed to provide any information in the Spanish language while engaging in deceptive advertising should be severely sanctioned. In no event should Massport, or a group calling itself Citizens for Efficient Regional Transportation, be allowed to submit to MEPA any results from an alleged "survey" being conducted in conjunction with this

campaign. The "survey" is completely biased and uses invalid polling methods to come up with a result predestined to favor the project.

Yours truly,



BYRON RUSHING
State Representative

Letter 25
MA State Representative Byron Rushing

Code	Topic 1	Topic 2	Comment	Response
25.1	Noise	Impacts	The Airside Improvements Project will impose an unacceptable noise burden upon my constituents and other communities without any commensurate benefit either to Logan Airport or to the citizens of the Commonwealth. The EIS/R argues a narrow case for construction of a new runway and taxiway without examining in appropriate detail how these construction projects will adversely affect the surrounding impacted communities.	Section 4.3 of the Supplemental DEIS/FEIR contains a history of PRAS development and performance at Logan Airport. In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures. Section 4.3 of the Supplemental DEIS/FEIR provides an evaluation of existing measures for monitoring PRAS performance and demonstrates that the FAA has improved its performance relative to the PRAS goals. The Preferred Alternative mitigation program includes additional reporting requirements recommended to enhance the monitoring effort.
25.2	Ground Transportation	Access to Logan Airport	The EIS fails to evaluate the effect of the increased demand which will be generated by the proposed construction project on its terminal facilities, baggage handling parking capacity, public transportation and road access at the airport.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.

Code	Topic 1	Topic 2	Comment	Response
25.3	Delay	Model	Massport failed to use readily available data on delay from the FAA to support its representations about the severity of the problem at Logan. My community's representative on that body has convinced me that there is no basis for Massport's assertions about the new runway as a tool for delay reduction at the airport. To the contrary, it appears that the delay situation will worsen within 5 years or less while Logan will have subjected its neighbors to an environmental nightmare of noise and pollution.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
25.4	Purpose and Need	Delay	Massport has not explained to my satisfaction what causes whatever number of delays there are. Are they delays which are unavoidable due to storms and dangerous weather conditions? Are they caused by the airlines? By delays at other airports? By cargo and baggage handling and ground transportation problems? No one has demonstrated that delays at Logan have slowed down growth in Boston for the past ten years.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion by addressing constraints at Logan Airport. Delays caused by conditions at other airports or other factors, such as mechanical failure, are not addressed since Massport cannot influence these delays. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.

Code	Topic 1	Topic 2	Comment	Response
25.5	Delay	Model	Massport has also failed to provide a long-term or comprehensive analysis of the general congestion at the airport. Actual delay has decreased since 1993 according the CAC consultants and they question the discrepancy between FAA and Massport methodology. Actual data on delay over the years is not presented.	The Draft EIS and Supplemental DEIS/FEIR contain detailed analyses of congestion at Logan Airport for six future operating scenarios, which at current growth rates are expected to extend to the year 2024. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays which would be directly affected by Runway 14/32 have risen steadily since 1994. The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States. Logan Airport's estimated annual delay hours in 1998 were over six times the FAA's threshold of 20,000 hours for a severely delayed airport. Refer to Section 1.4 and Appendix C of the Supplemental DEIS/FEIR for a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.
25.6	Environmental Justice	Demographic Data	The EIS/R contains no detailed evaluation of the impacts of this project on minority and low-income populations living adjacent to the project. The document shows that Massport did not actively obtain the population and impact information required by the executive Order 12898 and the DOT Order regarding environmental justice. The only specific data presented is noise data, which compares the projected noise impacts (which are significantly understated) in particular communities to the study area as a whole, rather than showing the discrepancies among and between various communities which are impacted by the project; and other impacts, such as the impacts from air pollutants and odor, are not addressed at all.	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR. Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8.6 of the Supplemental DEIS/FEIR for additional information.

Code	Topic 1	Topic 2	Comment	Response
25.7	Environmental Justice	Demographic Data	Massport has failed to perform any outreach to impacted non-English-speaking Latino residents in my Districts. Massport's failure to attempt any opportunity for comment by Spanish and Portuguese speakers is a direct violation of the Executive Order.	Massport has involved the Hispanic community in public review of the Airside Project. Copies of the Airside Project Draft EIS/EIR were distributed to the Chelsea Human Services Collaborative, the Centro Hispano de Chelsea, and the Chelsea Commission on Hispanic Affairs. Consistent with FAA policy of providing translation on request, a Spanish-language interpreter was present at a meeting on February 23, 1999 with the Latin American Planning and Development Group. Massport also held a public hearing on March 3, 1999 with the Chelsea City Council at which over one hundred citizens had the opportunity to provide comment to Massport officials following a presentation of the Proposed Project.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

LETTER 26

April 23, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Mr. John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Pugsley and Mr. Silva:

Recognizing that the public comment period for the Draft Environmental Impact Statement/Report on the Logan Airside Improvements Planning Project is drawing to a close, and that Massport is preparing to move ahead with the next stage of the MEPA/NEPA process, I thought this an appropriate time to express my ideas and concerns about the Airside Improvements Planning Project as it is currently structured. I am writing to you as a member of the Joint Committee on Transportation and as an elected representative from the town of Braintree who has had an opportunity to fully review the plans for the Airside Improvements Planning Project.

It is evident that, due to the unique weather and wind patterns around Logan Airport, the airport is subject to delays, even on perfectly clear days. The current runway lay-out makes the airport especially vulnerable to delays, a problem that the proposed Runway 14/32 is designed to alleviate. Delays are understandably unpopular with travelers, especially with business travelers, and none of us want to see Logan so hobbled by schedule problems that Boston becomes known as a notoriously difficult destination. That would be harmful both to our economy and to our civic pride. Moreover, delays are also damaging to our environment, as planes idle on the tarmac and circle in the sky, all the while releasing foul fumes into the air.

Recognizing that delays are a serious impediment to the smooth and efficient management of operations at Logan Airport, we still need to ask some important questions about the Airside Improvements Planning Project, and especially about the long-term efficacy of any proposal that includes runway construction. The first and most obvious question is based on the assumption

that Runway 14/32 will be built: for how long will it be able to alleviate current and projected delays? Although Massport has attempted to answer this question, the Citizen's Advisory Committee has supplied me with alternative data, and I would like some clarification on this point. 26.1

Conversely, if we choose not to act on the Airside Improvements Planning Project at this juncture, where will Massport find itself in ten years or twenty years? If we do move ahead with the proposed plan, will this be the final piece in the overall puzzle of modernizing Logan? 26.2

The Draft EIS/EIR further claims that Runway 14/32, combined with the other improvements included in the Airside Improvements Planning Project, will "...allow noise impacts to be spread more equitably across communities and over water..."[1] This should offer much-needed relief for certain neighboring communities currently receiving the major share of noise and other impacts from Logan Airport, an effort I applaud.

In order to manage the current weather-related delays, it is clear Massport needs to make modifications to its existing operations. A reduction in the number of delays, coupled with a more equitable distribution of the impact of airport activities, is obviously a worthy goal. But it is important not to be short-sighted in our approach to improving Massport's current infrastructure. Massport needs to recognize the importance of taking a long-term, regional approach to air and ground transportation in the Commonwealth, including expanding the use of the airports in Worcester and New Bedford. These airports will never function on the same scale as Logan, but they can provide valuable service for their immediate communities. 26.3

The following is a list of points which should be addressed as Massport prepares to move forward with the Airside Improvements Planning Project:

- Any discussion of proposed Runway 14/32 must include conditions for it to be used only as a unidirectional runway. Massport has made this a part of the Draft EIS/EIR, but it must now demonstrate to the communities of the Citizens Advisory Committee that it is capable of making and keeping that commitment. Logan's neighbors will count on that promise to be maintained even as traffic grows at Logan. A firm committment to the unidirectional runway will not only help to limit the impact of airplane noise on the surrounding communities but will also add an important level of credibility to the proposal. 26.4

- Massport and the Federal Aviation Administration must seriously consider a long-term plan to expand the capacity of the Commonwealth's other airports, including Worcester Regional Airport. An increase in the use of our other airports would help to relieve some of the pressure on Logan. A number of options should be weighed, including relocating to one of the state's smaller airports a portion of the freight traffic and/or the private/corporate jet traffic that currently flows through Logan. 26.5

- The Commonwealth should work with the states of New Hampshire and Rhode Island, home respectively to Manchester Airport and T.F. Greene Airport, to develop a comprehensive tri-state plan for managing ground and air traffic in and out of New England. As both passenger and freight traffic in the region increase in the future, Logan will not be able to efficiently handle all of the air-traffic demand without assistance from airports in our neighboring states. 26.6

- To further assist those communities that may experience an increase in airplane noise from an increase in activity at Logan, Massport and the Federal Aviation Administration must establish an expanded noise abatement program, including increased funding for residential sound-proofing efforts. Massport and the Federal Aviation Administration should also explore the possibility of requiring planes using Logan's facilities to either be new and therefore less noisy or else to have been retrofitted for noise reduction. I understand that there are other urban airports in the country that have restrictions on the types of aircraft that can use their runways, a mechanism that Massport should consider. 26.7 26.8

- Massport should also work with the impacted communities to consider the possibility of establishing rules about hours of operation for Runway 14/32 that are acceptable to the residents of those communities as well as to the airport. Massport currently has certain rules about how late planes can fly in and out of Logan; those rules should be strengthened in response to community concerns about noise. 26.9

- As mentioned in Section 2.4.2.5. of the Draft EIS/EIR, Massport has worked to calculate the impact of Amtrak's new high-speed rail service on the number of people using Logan. I have seen and read several different figures for this projected impact, and I believe it's important to develop precise data. 26.10

- The issue of peak-hour pricing, which is covered in the Draft EIR/EIS and which has been a part of the public discussion on the Airside Improvements Planning Project, is a mechanism which I believe will not help to alleviate the current problem of delays at Logan Airport. It has been demonstrated to me that peak-hour pricing may do economic harm to some of the smaller airlines serving our region, those same carriers that the proposed Runway 14/32 is specifically designed to serve. For this reason, I believe that peak-hour pricing would not be an appropriate administrative choice for Massport at this point. 26.11

Over the past decade, the Commonwealth has worked aggressively to improve its transportation networks and to upgrade its existing transportation infrastructure. The opening of the Ted Williams Tunnel (T.W.T.), the direct connection between the Massachusetts Turnpike and the Ted Williams Tunnel, the progress of the Central Artery Project, and the modernization of the MBTA's Blue Line are all projects that have and will directly improve access to Logan Airport from downtown Boston and beyond. It is not an accident that these projects have been made a priority by the Commonwealth as they increase intermodal accessibility around the Greater Boston area. In order for these investments to have the maximum possible impact, however, it is vital that Logan be able to function as efficiently and smoothly as possible.

The proposed construction of Runway 14/32 and the Centerfield Taxiway is designed to alleviate current weather-related delays only. But projections show a growth in the number of trips to and from Logan, growth that will occur regardless of whether we move ahead with the Airside Improvements Planning Project. In a way, this is a good problem, because it demonstrates what we already know: that the Boston area is a wonderful place to spend time. Our rich history, thriving financial, educational, and health care sectors, as well as its proximity to the beaches of Cape Cod and the ski slopes of the Berkshires all make Boston a desirable destination. The new Convention Center, when it is completed, will be a further draw. We need to find a way to balance the projected and potential growth at Logan, however, with the quality of life concerns of the cities and towns under the Logan flight paths. This is not a case of 'build it and they will come,' for they are already coming. We need to address that fact in a manageable, efficient, and effective way.

At the same time, however, we must think about the long-term future of air travel in New England, and that requires us to plan more broadly. Therefore, must begin to incorporate the Commonwealth's smaller airports into our aviation network, whether for passengers or for freight, and we must look beyond our borders to airports in our neighboring states.

As one who travels through Logan Airport, and who tries to understand the myriad transportation programs of the Commonwealth, I know that access to safe, convenient, and affordable air travel is in the best interest of Massachusetts and New England as we move into the 21st century.

It is my hope that you will consider my thoughts in the sincere way that they have been offered.

Very Truly Yours,

Joseph C. Sullivan
State Representative
5th Norfolk District

cc: Mr. Peter Blute
Executive Director, Massport

Letter 26
MA State Representative Joseph C. Sullivan

Code	Topic 1	Topic 2	Comment	Response
26.1	Alternatives	Runway 14/32	For how long will Runway 14/32 be able to alleviate current and projected delays?	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
26.2	Purpose and Need	Delay	If we choose not to act on the Airside Improvements Planning Project at this juncture, where will Massport find itself in ten years or twenty years? If we do move ahead with the proposed plan, will this be the final piece in the overall puzzle of modernizing Logan?	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.

Code	Topic 1	Topic 2	Comment	Response
26.3	Regional Transportation	Regional Airports	Massport needs to recognize the importance of taking a long-term, regional approach to air and ground transportation in the Commonwealth, including expanding the use of the airports in Worcester and New Bedford.	Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport reports on the status of the New Bedford Airport Project in Section 2.6 of the Supplemental DEIS/FEIR.
26.4	Alternatives	Runway 14/32	Any discussion of proposed Runway 14/32 must include conditions for it to be used only as a unidirectional runway. Massport must now demonstrate to the communities of the Citizens Advisory Committee that it is capable of making and keeping that commitment.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.

Code	Topic 1	Topic 2	Comment	Response
26.5	Regional Transportation	Regional Airports	Massport and the Federal Aviation Administration must seriously consider a long-term plan to expand the capacity of the Commonwealth's other airports, including Worcester Regional Airport. A number of options should be weighed, including relocating to one of the state's smaller airports a portion of the freight traffic and/or the private/corporate jet traffic that currently flows through Logan.	While Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport (as of January 2000), Massport is engaged in promoting the use of other alternative regional airports and travel modes to relieve traffic growth pressures at Logan Airport. Refer to response to Comment 26.3. Since cargo operations account for only two percent of aircraft activity at Logan Airport and occur during off-peak hours, cargo operations do not contribute to delays at Logan Airport. General Aviation, including private jets comprise only 5 percent of Logan Airport operations. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users.
26.6	Regional Transportation	Regional Airports	The Commonwealth should work with the states of New Hampshire and Rhode Island, home respectively to Manchester Airport and T.F. Greene Airport, to develop a comprehensive tristate plan for managing ground and air traffic in and out of New England.	Refer to response to Comment 26.3.
26.7	Noise	Sound Insulation	Massport and the Federal Aviation Administration must establish an expanded noise abatement program, including increased funding for residential sound-proofing efforts.	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.
26.8	Noise	Hushkitted Aircraft	Massport and the Federal Aviation Administration should also explore the possibility of requiring planes using Logan's facilities to either be new and therefore less noisy or else to have been retrofitted for noise reduction.	For over ten years, Massport has had several noise rules that have increased the proportions of quieter airplanes in the Logan Airport fleet. However, as of 2000, the FAA requires that almost all commercial aircraft comply with the Stage 3 FAR Part 36 noise certification standards which, up to now, have only applied to certain new aircraft types. As a result, almost all aircraft in the Logan Airport fleet in 2000 and subsequent years will be of the new quiet, Stage 3 types or hushkitted Stage 2 aircraft. Section 5.2 of the Supplemental DEIS/FEIR discusses the status of the use of hushkitted Stage 3 aircraft at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
26.9	Alternatives	Runway 14/32	Massport should also work with the impacted communities to consider the possibility of establishing rules about hours of operation for Runway 14/32 that are acceptable to the residents of those communities as well as to the airport. Massport currently has certain rules about how late planes can fly in and out of Logan; those rules should be strengthened in response to community concerns about noise.	The intent of Massport's Noise Rules, which were first drafted in the 1970s, was to minimize the exposure from Logan Airport's aircraft operations on residential areas. Since the Massport Noise Rules were first enacted, the National Noise Policy Act (the "Noise Act") was enacted as Federal law. Under the Noise Act, future amendments to Massport's Noise Rules or other types of airport access restrictions are subject to FAA review and require completion of a FAR Part 161 Study. Since the Noise Act was enacted, the FAA has not approved any Part 161 access restrictions proposed by airport operators.
26.10	Regional Transportation	Passenger Rail	It's important to develop precise data on the impact of Amtrak's new high-speed rail service on the number of people using Logan.	The analysis of regional alternatives presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR relies on air to high-speed rail diversion estimates published in the Supplemental DEIS/FEIR and Section 4(f) Statement, Northeast Corridor Improvement Project, prepared by the Federal Rail Administration in October 1994. In preparing the Supplemental DEIS/FEIR, Massport contacted Amtrak for more recent estimates, but Amtrak did not have any updated ridership estimates that could be released to Massport. Amtrak's written response to Massport's request for updated ridership numbers is contained in Appendix B of the Supplemental DEIS/FEIR.
26.11	Alternatives	Peak Period Pricing	The issue of peak-hour pricing, which is covered in the Draft EIR/EIS and which has been a part of the public discussion on the Airside Improvements Planning Project, is a mechanism which I believe will not help to alleviate the current problem of delays at Logan Airport. Peak-hour pricing may do economic harm to some of the 10 smaller airlines serving our region, those same carriers that the proposed Runway 14/32 is specifically designed to serve. For this reason, I believe that peak-hour pricing would not be an appropriate administrative choice for Massport at this point.	Refer to Section 4.5 of the Supplemental DEIS/FEIR for an expanded discussion of PPP. An exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5.3 of the Supplemental DEIS/FEIR. The section provides an illustrative exemption program and its impact on the delay reduction potential of PPP. The analysis in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR shows that, because PPP eliminates a small number of small aircraft operations, it does not produce any environmental benefits or impacts. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

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Chairman
Committee on Public Safety
ROOM 39, STATE HOUSE

LETTER 27

April 21, 1999

Robert Durand, Secretary
MEPA Unit Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

RE: **Draft Environmental Impact Report EOEA #10458**
Logan Airport Expansion

Dear Secretary Durand:

I am writing to express my strong opposition to the proposal of the Massachusetts Port Authority (Massport) for the expansion of Logan International Airport (Logan). The proposed expansion of Logan will have a devastating impact on the quality of life in my legislative district, particularly upon those who reside in East Somerville and East Cambridge.

If Massport moves forward on its proposal to expand Logan, the number of flights over East Somerville and East Cambridge will increase three-fold to approximately **20,000 operations each year**. The runway at Logan that most directly impacts my legislative district is 33L. Currently, runway 33L generates approximately 6,000 operations annually. However, with the proposed expansion, runway 33L usage -- and the resulting noise and air pollution -- will **triple**. It is unfair to require the predominantly working class neighborhoods to the West of Logan to shoulder so much of the burden of the proposed expansion. 27.1

Another major problem with the proposed expansion of Logan is the fact that at best this is a temporary solution to the delay problems there. By 2005 Logan will experience as many, if not more delays than in 1998 **with the proposed expansion,** according to Massport's own estimates. The short term relief that Massport's expansion proposal would provide does not warrant the permanent loss of quality of life for the residents of the communities to the West of Logan. 27.2

I agree that the Commonwealth has to take action to address the problem of increased air traffic in eastern Massachusetts. The best way to do this, however, is to follow the lead of our competitors to the South. Both New York City and Washington DC have secondary airports that can handle the increasing demand for air travel. It is time for the Commonwealth to explore the possibility of expanding one of the regional airports already in existence. This will accomplish two major goals: decreasing demand at Logan and more equitably distributing air traffic throughout the Commonwealth. Such a solution would be beneficial to the business interests as well as the human interests currently at stake. I strongly urge the MEPA unit to deny any permits for the expansion of Logan at this time. 27.3

Thank you for your attention to this very important matter.

Sincerely Yours,

Timothy J. Toomey Jr.

Letter 27
MA State Representative Timothy J. Toomey

Code	Topic 1	Topic 2	Comment	Response
27.1	Environmental Justice	Impacts	With the proposed expansion, runway 33L usage--and the resulting noise and air pollution--will triple. It is unfair to require the predominantly working class neighborhoods to the west of Logan to shoulder so much of the burden of the proposed expansion.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Refer to Section 6.2 and Section 6.8 of the Supplemental DEIS/FEIR, respectively, for additional information on noise impacts and environmental justice.
27.2	Analysis Assumptions	Planning Period	Another major problem with the proposed expansion of Logan is the fact that at best this is a temporary solution to the delay problems there. By 2005 Logan will experience as many, if not more delays than in 1998 with the proposed expansion, according to Massport's own estimates. The short term relief that Massport's expansion proposal would provide does not warrant the permanent loss of quality of life for the residents of the communities to the West of Logan.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
27.3	Regional Transportation	Regional Airports	It is time for the Commonwealth to explore the possibility of expanding one of the regional airports already in existence. This will accomplish two major goals: decreasing demand at Logan and more equitably distributing air traffic throughout the Commonwealth.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

LETTER 28

SENATOR ROBERT E. TRAVAGLINI
SUFFOLK AND MIDDLESEX DISTRICT
ROOM 511
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SENATE MAJORITY WHIP

April 22, 1999

Robert Durand, Secretary
of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge St., 20th Fl.
Boston MA 02202

Dear Secretary Durand:

I write to offer comment on Massport's Draft EIR/EIS *Logan Airside Improvements Planning Project – EOEA No.10458.* The purpose of this project is expand operations at Logan International Airport. No matter how many times Massport states otherwise, this project would allow Massport to fly more planes in and out of its facility. The construction of a new runway at Logan Airport does nothing to enhance the quality of the environment, and in truth potentially has the ability to be very destructive. Representations that building the runway is a regional solution fail to ring true as Massport's proposal does not contain a regional airport plan or address the need for increased use of Hanscom Field and Worcester Municipal Airport. It also does not explore any plans for a second major airport within either Massachusetts or the New England region.

Massport, and the administration, should begin by relocating certain existing cargo operations from Logan to Hanscom and to make infrastructure improvements to Worcester Airport that will make both air fields viable alternatives to Logan Airport. In addition, more emphasis should be placed on developing and marketing other airports in the New England area including: New Bedford, Providence RI and Manchester NH. 28.1

If runway 14/32 is supposed to be a regional solution, then why is the brunt of airport operations being borne by residents of East Boston, Winthrop, Revere, Chelsea, the South End and South Boston? The real issue is when is enough, enough? The remedies proposed by Massport are stop gap measures that will be meaningless upon completion of the project. The proposal is supposed to assist in reducing delays at Logan airport, yet there is no break down regarding inevitable delays caused by New England weather, nor the delays caused by the airlines themselves which might be solved administratively. Massport's "preferred alternative" instead, 28.2

pits neighborhood against neighborhood and does not reduce noise but redistributes it temporarily and results in increased noise and operations in the long term.

In the document Massport states that "Alternatives 1 and 1A will allow for increased utilization of Runway 15/33 to levels more consistent with PRAS goals." Then the report goes on to state that the plan would "reduce total population within the most severe noise impact areas (i.e. 70 and 75 DNL contours), but will increase the noise exposed population at 65 dB or greater for all scenarios in comparison to Alternative 4." The No Action scenario appears to have less noise impact on the affected communities than any so-called benefit derived from constructing a new runway. There is also the question of Massport's definition of "noise impact areas", does this refer only to residences located within "noise contour" areas which are defined by Massport and submitted to the FAA or does this reflect residences which are actually receiving high levels of noise which can be documented by actual data? Complaints of increased noise seem to indicate many more residences being impacted than are currently subject to mitigation measures by Massport or located within a "sound contour". 28.3

By their own admission increases in expected passengers traveling through Logan Airport will result in more hours of delay than are experienced today, even with the addition of a new runway. Runway 14/32 does not begin to address the real problem – that Logan Airport is overextended and will not be able to handle the projected number of passengers who wish to fly to Massachusetts. 28.4

I also have many concerns relating to the actual construction of the new runway, the preferred options require a waiver from certain FAA minimum safety requirements. This requires further explanation and Options A and B which impact the Hyatt Harborside Hotel and Boston Harbor, respectively, should not even be on the table. Obviously the physical constraints of building 14/32 should be considered, if you need a waiver maybe it isn't an appropriate idea to build. In addition, throughout the document Massport contends that if the new runway isn't built that Logan will "become an airport that operates primarily in a North-South configuration". This is the current state of operations at Logan Airport, not something that will be created by an action or inaction on the part of Logan. 28.5 28.6

The portion of the DEIS/EIR which discusses cumulative impacts seems to minimize the reality of significant construction occurring in a very small area. The CA/T project will be at peak construction in 2001, with other construction activities happening concurrently with various projects at Logan, which if the project is approved would include construction of 14/32 and construction of the centerfield taxiway. Cumulative truck traffic, even if diverted from local streets, impacts the adjoining residential street network. CA/T and Logan road construction will have a significant impact on how trucks would access the Ted Williams Tunnel and Route 1A (an extremely congested roadway). Without having a better sense of the destination of all the anticipated truck traffic it becomes difficult to assess the impact to air quality from idling and increased congestion on the various roadways to and from Logan. 28.7

The plan also requires that a significant amount of material be excavated totaling 777,000 cubic yards. There is no mention of how stockpiles would be treated, what is Massport's plan to reduce fugitive dust from these materials? The DEIS/EIR does not present a comprehensive 28.8

view of the total amount of excavate generated from the total number of construction projects occurring concurrently, and does not detail the disposal plan. Also, Massport hopes to accomplish most of the major construction on the runway and the centerfield taxiway during the first quarter of 2000 and 2001. Dust control would potentially be dangerous and difficult to achieve with only the use of water. Massport should consider the use of chemical soil stabilizers during these winter months to prevent the accumulation of frozen mud and ice which can be tracked across runways and onto the surrounding roadway system.

I have serious concerns relative to night-time work and would expect that every measure would be taken to reduce noise at the source and would request the use of all appropriate noise mitigation measures, including sound curtains, as needed. It is important that penalties for violating noise levels be included in any contract for any airside improvement project. 28.9

While I am pleased to see that Massport would require a transportation management plan by contractors I am still concerned about construction workers utilizing local streets to park their personal vehicles, especially when working a late shift or weekends. There must be penalties included in any contract to address any potential violations. 28.10

Massport talks about a possible Memorandum of Understanding between impacted communities and the Port Authority to "ensure" that 14/32 is unidirectional and that protections remain in place restricting the use of the runway. An MOU is only as good as the people who craft it, and there is no guarantee that any of the original parties will still be in positions of power in the future when there will be an attempt to lift these restrictions, and there is never any long term guarantee for mitigation. 28.11

In closing, I wish to express my strongest opposition to the proposed Logan Airside Improvements Project, especially the construction of a new runway. I would urge you to reject the Draft EIR/EIS.

Thank you for the opportunity to comment on this proposal, and if I can provide any additional information please do not hesitate to contact me.

Sincerely,

ROBERT E. TRAVAGLINI
Senate Majority Whip

Letter 28
MA State Senator Robert E. Travaglini

Code	Topic 1	Topic 2	Comment	Response
28.1	Regional Transportation	Regional Airports	Massport, and the administration, should begin by relocating certain existing cargo operations from Logan to Hanscom and to make infrastructure improvements to Worcester Airport that will make both air fields viable alternatives to Logan Airport. In addition, more emphasis should be placed on developing and marketing other airports in the New England area including: New Bedford, Providence, RI and Manchester, NH.	cargo operations account for only two percent of aircraft activity at Logan Airport and occur during off-peak hours, cargo operations do not contribute to delays at Logan Airport. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Airside Project Draft EIS/EIR for these improvements. In addition, Massport has pursued a variety of initiatives to promote the use of other alternative regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials.

Code	Topic 1	Topic 2	Comment	Response
28.2	Noise	Runway 14/32	If runway 14/32 is supposed to be a regional solution, then why is the brunt of airport operations being borne by residents of East Boston, Winthrop, Revere, Chelsea, the South End and South Boston? Massport's "preferred alternative" instead, does not reduce noise but redistributes it temporarily and results in increased noise and operations in the long term.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
28.3	Noise	Model	Does Massport's definition of "noise impact areas" refer only to residences located within "noise contour" areas which are defined by Massport and submitted to the FAA or does this reflect residences which are actually receiving high levels of noise which can be documented by actual data? Complaints of increased noise seem to indicate many more residences being impacted than are currently subject to mitigation measures by Massport or located within a "sound contour".	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Status and Planning Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed soundproofing program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) those residences that fall within the 1998 65 dB Day-Night Sound Level contour as presented in the *Logan Airport 1998 Annual Update.* For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement soundproofing improvements. While not related to Airside Project impacts, Massport commits to begin discussions with the FAA with the goal of instituting local or national restrictions on the use of hushkitted Stage 3 aircraft at Logan Airport. Massport reports on the status of those consultations in the *Logan Airport 1999 Environmental Status and Planning Report* (previously GEIR).

Code	Topic 1	Topic 2	Comment	Response
28.4	Alternatives	Runway 14/32	Runway 14/32 does not begin to address the real problem - that Logan Airport is overextended and will not be able to handle the projected number of passengers who wish to fly to Massachusetts.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
28.5	Alternatives	Runway 14/32	Options A and B which impact the Hyatt Harborside Hotel and Boston Harbor, respectively, should not even be on the table.	Refer to Section 3.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32.
28.6	Alternatives	Runway 14/32	Massport contends that if the new runway isn't built that Logan will "become an airport that operates primarily in a North-South configuration". This is the current, state of operations at Logan Airport, not something that will be created by an action or inaction on the part of Logan.	Logan Airport currently operated in a north-south configuration 70 percent of the time. Without Runway 14/32, it would operate in a north-south direction more than 90 percent of the time under the future scenarios.
28.7	Construction Period	Other major Projects	The DEIS/EIR discussion of cumulative impacts seems to minimize the reality of significant construction occurring in a very small area. The CA/T project will be at peak construction in 2001, with other construction activities happening concurrently with various projects at Logan, which if the project is approved would include construction of 14/32 and construction of the centerfield taxiway. Cumulative truck traffic, even if diverted from local streets, impacts the adjoining residential street network. CA/T and Logan road construction will have a significant impact on how trucks would access the Ted Williams Tunnel and Route I A (an extremely congested roadway). Without having a better sense of the destination of all the anticipated truck traffic it becomes difficult to assess the impact to air quality from idling and increased congestion on the various roadways to and from Logan.	The cumulative construction impacts associated with the airside projects occurring simultaneously with the Central Artery/Tunnel (CA/T) construction and other projects at Logan Airport and in East Boston are not anticipated to be significant because of project coordination and mitigation programs that will reduce construction period impacts. The peak cumulative construction traffic would occur in 2003, mostly as a result of concurrent CA/T construction on the airport. Truck traffic associated with construction decreases significantly after 2003 as CA/T construction on the airport is completed. Refer to Section 7.5 of the Supplemental DEIS/FEIR for a discussion of cumulative construction impacts. A discussion of the construction phasing, truck trips, and mitigation measures to be employed during construction of the Preferred Alternative is presented in Section 6.9 of the Supplemental DEIS/FEIR.
28.8	Construction	Soils	The plan also requires that a significant amount of material be excavated totaling 777,000 cubic yards. There is no mention of how stockpiles would be treated, what is Massport's plan to reduce fugitive dust from these materials? The DEIS/EIR does not present a comprehensive view of the total amount of excavate generated from the total number of construction projects occurring concurrently, and does not detail the disposal plan. Also, Massport hopes to accomplish most of the major construction on the runway and the centerfield taxiway during the first quarter of 2000 and 2001. Dust control would potentially be dangerous and difficult to achieve with only the use of water. Massport should consider the use of chemical soil stabilizers during these winter months to prevent the accumulation of frozen mud and ice which can be tracked across runways and onto the surrounding roadway system.	The volume of soil to be excavated has been reduced as a result of the on-going removal of stockpiled CA/T soil material from Governors Island, and the findings of a subsurface investigation program that much of the existing soil material on the airport is suitable for construction and therefore does not have to be removed. Section 6.7 of the Supplemental DEIS/FEIR includes the current project amount of soils to be excavated for offsite disposal and reuse and also discusses recent soil characterization analyses and updates the Draft EIS/ EIR analysis of soil reuse alternatives. Section 7.5 of the Supplemental DEIS/FEIR outlines other construction projects occurring concurrently and Section 8.5 of the Supplemental DEIS/FEIR describes the construction phase mitigation controls to minimize fugitive dust.
28.9	Construction	Noise	I have serious concerns relative to nighttime work and would expect that every measure would be taken to reduce noise at the source and would request the use of all appropriate noise mitigation measures, including sound curtains, as needed. It is important that penalties for violating noise levels be included in any contract for any airside improvement project.	The DEP identifies two criteria against which construction noise can be judged: it cannot increase ambient levels by more than ten dB, and it cannot produce a "pure tone" condition. The analysis of nighttime construction noise levels does not show any significant impact from construction noise, since no pure tone noise is allowed to be emitted from construction equipment such as back-up alarms, as specified in Massport's construction mitigation guidelines.

Code	Topic 1	Topic 2	Comment	Response
28.10	Construction	Traffic	While I am pleased to see that Massport would require a transportation management plan by contractors I am still concerned about construction workers utilizing local streets to park their personal vehicles, especially when working a late shift or weekends. There must be penalties included in any contract to address any potential violations.	The construction contract for the Airside Project will prohibit construction parking on local streets. The selected contractor will be required to develop a transportation management plan that addresses compliance with the parking restrictions. This transportation management plan will be subject to the review and approval of Massport.
28.11	Alternatives	Runway 14/32	Massport talks about a possible Memorandum of Understanding between impacted communities and the Port Authority to "ensure" that 14/32 is unidirectional and that protections remain in place restricting the use of the runway. An MOU is only as good as the people who craft it, and there is no guarantee that any of the original parties will still be in positions of power in the future when there will be an attempt to lift these restrictions, and there is never any long term guarantee for mitigation.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.

The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

LETTER 29

ERIC T. TURKINGTON
STATE REPRESENTATIVE
BARNSTABLE, DUKES & NANTUCKET DISTRICT

BARNSTABLE, CHILMARK, EDGARTOWN
FALMOUTH, GAY HEAD, GOSNOLD
NANTUCKET, OAK BLUFFS, TISBURY
WEST TISBURY & YARMOUTH

Vice Chairman
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ROOM 473F, STATE HOUSE
TEL. (617) 722-2210
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Rep.EricTurkington@house.state.ma.us

April 6, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
Cambridge Street, 20th Floor
Boston, MA 02202

Dear Mr. Pugsley,

I am writing in regards to the Massport's Draft Environmental Impact Report/Environmental Impact Statement as it pertains to the Logan Airside Improvements Planning Project.

Although I believe that Massport's preferred alternative is a reasonable response in dealing with Logan's congestion, I am concerned about its decision to keep its option to implement peak period pricing should that become necessary. As Massports' study shows, peak period pricing would have a particularly negative impact on unaffiliated carriers serving the Cape and Islands, since charges could increase by up to 1000% for landing and take-offs during peak-travel times. Unaffiliated carriers would be forced to raise ticket prices by up to 50% or deal with a negative profit margin, which could lead to a reduction of service or even bankruptcy. 29.1

Loss of airline service could further result in job loss, increased traffic congestion, and a crippled tourism industry for Cape Cod and the Islands. As such, peak period pricing should not be implemented.

Sincerely,

ERIC T. TURKINGTON
State Representative

Letter 29
MA State Senator Eric T. Turkington

Code	Topic 1	Topic 2	Comment	Response
29.1	Alternatives	Peak Period Pricing	... I am concerned about ... [Massport's] decision to keep its option to implement peak period pricing should that become necessary. As Massport's study shows, peak period pricing would have a particularly negative impact on unaffiliated carriers serving the Cape and Islands, since charges could increase by up to 1000% for landing and take-offs during peak peak-travel times. Unaffiliated carriers would be forced to raise ticket prices by up to 50% or deal with a negative profit margin, which could lead to a reduction of service or even bankruptcy. Loss of airline service could further result in job loss, increased traffic congestion, and a crippled tourism industry for Cape Cod and the Islands. As such, peak period pricing should not be implemented.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. In the current environment, airline over-scheduling is not a significant contributor to Logan Airport delays and, therefore, PPP was not recommended for immediate implementation. In addition, PPP imposes significant costs on regional airlines and is expected to restrict access to certain markets. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This Exemption Program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

ANGUS S. KING, JR.
GOVERNOR

JOHN G. MELROSE
COMMISSIONER

April 20, 1999

LETTER 30

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

The State of Maine Department of Transportation (MDOT) supports Alternative 1A in the recommendations for airside improvements at Logan, but objects strongly to inclusion of Peak Period Pricing (PPP) as an alternative without adequate study of the regional impacts of that policy. While Alternative 1A specifically excludes PPP, the discussion in the second paragraph of the Operational Improvements section of page 8-11 in Volume 1, and the corresponding paragraph on page ES-32 of the Executive Summary, adds the option of implementing PPP at some point in the future. This effectively makes Alternative 1 and Alternative 1A the same. 30.1

MDOT objection is based on an inadequate evaluation of the regional implications of this option. As noted on page ES-6 of the Executive Summary, "Logan is the gateway to New England, providing a vital link to the national and international air transportation systems. The transportation services provided at Logan - both passenger and air cargo - are essential to the economic success of the entire New England region."

The selections shown in Attachment 1, excerpted from the Draft EIS, point out that PPP: 1) is untried and it's effectiveness is unknown, 2) unnecessary, 3) creates an economic burden to operators and passengers from regional markets, and 4) could potentially jeopardize the "transportation services ... essential to the economic success of the entire New England region".

Attachment 2 discusses some of the relevant sections from the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations, and Federal Aviation Administration (FAA) Order 5050.4A, implementing NEPA and the CEQ regulations for FAA which illustrate Maine's position on the inadequacy of the EIS in addressing the impacts of PPP.

The effects of PPP on air travel throughout the New England region must be thoroughly studied before any implementation. As noted in the Draft EIS previous attempts to implement this type of policy at Logan have met with resistance and legal action from regional air carriers and general aviation users. Appropriate study and discussion among the interested parties will provide the best possible solution to access problems at Logan, with the least impact to those affected.

Sincerely,

Ronald L. Roy, Director
Office of Passenger Transportation

Attachment 1, Excerpts from the Draft EIS

PPP is untried and it's effectiveness is unknown

Vol 1, Section 3.5 – "... At present, no airport in the U.S. has imposed such a pricing system." As no foreign operations were evaluated as part of the EIS, we assume no information was available supporting PPP.

PPP is unnecessary

Vol 1, Section 3.5 -- "Current flight activity levels at Logan do not exceed airfield capacity. Airline overscheduling has not been a significant factor in Logan delays since 1993 and is not projected to be a factor in the near-term."

Vol 1, Section 4.5.1 – "Alternative 1A (all actions except PPP) produces comparable delay savings under the Low Fleet scenarios which closely resemble current conditions at Logan. A comparison of Alternatives 1 and 1A indicates that the incremental contribution of PPP under near-term, low fleet conditions is only 2 percent ... (with a higher threshold than 110 operations the projected delay reduction benefits would be even lower)"

Vol 1, Section 4.6 – "PPP is designed to reduce delays resulting from airline overscheduling which occurs when flight demand exceeds Logan's normal three-runway capacity of 115 (average over all weather conditions) to 120 (VFR) operations per hour. Current and expected near-term demand patterns at Logan do not exhibit an overscheduling condition. In this environment, PPP would produce marginal delay reduction benefits while imposing economic costs on certain regional carriers and small communities."

PPP creates an economic burden to operators and passengers from regional markets

Vol 1, Section 4.4.5 – "A peak period surcharge will primarily affect airlines that operate small aircraft."

Vol 1, Section 4.4.5.3 – "... Regional operations at Logan are expected to be less profitable under the High Fleet scenarios because of greater airline competition"

Vol 1, Section 4.4.6 – "... The impact of the peak period surcharge will fall most heavily on airlines that operate small aircraft in highly competitive markets."

Vol 1, Section 4.4.7 – " ... The Cape and Islands were selected for special analysis because of the importance of air transportation to their tourist-based economy, their seasonal pattern of service, and their reliance on Boston for connections to the national and international air transportation network. The analysis indicated that the Cape & Island markets are particularly vulnerable to PPP due to their high seasonality and associated reliance on small aircraft. These findings are likely to be equally applicable to other seasonal markets in New England"

Appendix F, Introduction and Background – "... Carriers operating large jet aircraft would generally experience an overall net reduction in Logan operating fees, while regional carriers would incur an increase in Logan operating costs."

PPP could potentially jeopardize the "transportation services ... essential to the economic success of the entire New England region".

Vol 1, Section 4.4.7 – "... For Cape Air ... PPP is projected to eliminate its entire profit margin, even under the less severe Low Fleet scenario. The loss of Cape Air services could result in the loss of all scheduled air services for a community like Provincetown, and could produce significant service reductions at other ... markets."

Attachment 1, Excerpts from the Draft EIS (Cont'd.)

Vol 1, Section 4.4.5.3 – "A carrier's decision to cancel flights in response to PPP will depend on the magnitude of profit reduction. The greater the reduction in route profitability, the more likely the carrier will respond by canceling flights."

Vol 1, Section 4.6 -- "... Even after fare increases, the net profit impact is most severe on routes operated with small aircraft, resulting in the highest percentage of forecast cancellations for this market category."

Appendix F, Summary of Findings, Cape Air – " The magnitude of profit reduction associated with the tested pricing structure could jeopardize the viability of Cape Air's Boston services and, potentially, its entire operation."

Appendix F, Summary of Findings, Commutair – "The cost of impacts for Commutair are significant. Operating costs are expected to increase by $1.1 million to $1.7 million annually ... Commutair's profits are forecast to decline by approximately $625,000 to $935,000 annually ... Commutair is forecast to cancel 2 to 13 daily peak period operations ..."

Appendix F, Introduction and Background – " ... This change in the cost structure is forecast to produce a reduction in regional carrier flights at Logan during peak periods .... In markets experiencing a significant drop in profitability carriers are projected to cancel a portion of their remaining peak period flights."

Appendix F, Characteristics of Regional Carrier Services at Boston – "The historic context demonstrates the fragile operating economics that have characterized Logan's major regional carriers in the recent past. This history also indicates a legitimate basis for concern regarding the possible impacts of PPP on the financial health of Boston's regional carriers."

Appendix G, Potential Impacts of Peak Period Pricing – "... the PPP analysis demonstrates that the air services provided ... could be particularly vulnerable to the impacts of a potential PPP program. The low off-season passenger levels in these markets present difficulties for carriers attempting to provide year-round services with larger regional aircraft. The potential impacts of PPP are especially significant to (small regional carriers), given their high degree of reliance on Boston for access to the national and international air transportation systems."

Attachment 2, Relevant Selections from NEPA. the CEQ Regulations, and FAA Order 5050.4A

NEPA, Section 101 (a) -- Congress ... declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments ... to use all practicable means and measures ... to foster and promote the general welfare ... and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means ... to achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities ...

NEPA, Section 102 – ... all agencies of the Federal Government shall –

(C) include in every recommendation or report on proposals for ... major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on – (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, and (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity

(D) Any detailed statement required under subparagraph (C) ... for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient ... if: (iv) the responsible Federal official provides early notification to, and solicits the views of, any other State ... entity of any action or any alternative thereto which may have significant impacts upon such State ... entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts an views for incorporation into such detailed statement.

CEQ, 1501.2 – Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts. Each agency shall: (c) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources ...

FAA Order 5050.4A, Paragraph 10.a -- The environmental assessment and consultation process is to provide officials and decision makers, as well as members of the public, with an understanding of the potential environmental impacts of the proposed action.

Letter 30
State of Maine, Dept. of Transportation
Ronald L. Roy, Director,
Office of Passenger Transportation

Code	Topic 1	Topic 2	Comment	Response
30.1	Alternatives	Peak Period Pricing	The State of Maine Department of Transportation (MDOT) supports Alternative 1A in the recommendations for airside improvements at Logan, but objects strongly to inclusion of Peak Period pricing (PPP) as an alternative without adequate study of the regional impacts of that policy. The effects of PPP on air travel throughout the New England region must be thoroughly studied before any implementation. As noted in the Draft EIS previous attempts to implement this type of policy at Logan have met with resistance and legal action from regional air carriers and general aviation users. Appropriate study and discussion among the interested parties will provide the best possible solution to access problems at Logan, with the least impact to those affected.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

STATE OF VERMONT
AGENCY OF TRANSPORTATION
133 State Street, Administration Building
Montpelier, Vermont 05633-5001

April 21, 1999

LETTER 31

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

As directed in Massport's letter of March 4, 1999 and requested in the Joint Massport and FAA letter of February 19, 1999, I am providing the following comments and wish to inform you of our intent to play an active role in the Logan Airside Improvements "Draft EIS/EIR" in as much as it pertains to Peak Period Pricing (PPP).

As you know, the PPP issue has been addressed previously and the policy of pricing out smaller aircraft found to be discriminatory by a federal judge in a 1988 Department of Transportation Case Ruling. A second attempt, with a twist in how pricing was applied to get around the ruling, was also dropped along with last years Runway Plan for Logan Airport. Now, PPP appears again as an option in this Draft EIS/EIR. While it is not listed as the "Preferred Option", the discussion in the Operational Improvement Section in Volume I and the corresponding discussion in the Executive Summary does allow for addition of the PPP Option in the future. Also, I have to consider, as you must, that the very active and vocal local groups and politicians opposed not only to increased traffic, but the current level of operations at Logan, could easily move the selection to any of the other alternatives, all of which contain PPP as an option.

I understand the need to pay attention to the views of the residence around Logan, but PPP as an option brings along with it the same discrimination as in the past. The citizens of Northern New England still require convenient, timely and reasonably priced access to the nation's air transportation infrastructure. PPP, whatever the scheme, denies that access. Considering the EIR/EIS acknowledgment that, "Logan is the gateway to New England, providing a vital link to the national and international air transportation system," I find it ironic that PPP is still considered and listed as an option at all in this draft.

I recommend for closure in the Final EIS/EIR, that previous attempts and failures of PPP at Logan be discussed along with its discriminatory nature, and then dropped from alternative consideration in the Final EIS/EIR. In the long run, it is the most effective way to deal with PPP as an issue and would avoid further improvement delay through confrontation or follow on litigation. 31.1

Sincerely,

Gregory Maguire, Director
Rail & Aviation Division

cc: MDOT, Ron Roy
NHDOT, Jack Ferns
BTV Airport, J.J. Hamilton
Colgan Airlines, Charles Colgan
Business Express (Delta Connection)
USAIR

Letter 31
State of Vermont, Agency of Transportation
Gregory Maguire, Director, Rail & Aviation Division

Code	Topic 1	Topic 2	Comment	Response
31.1	Alternatives	Peak Period Pricing	I recommend for closure in the Final EIS/EIR, that previous attempts and failures of PPP at Logan be discussed along with its discriminatory nature, and then dropped from alternative consideration in the Final EIS/EIR. In the long run, it is the most effective way to deal with PPP as an issue and would avoid further improvement delay through confrontation or follow on litigation.	The impacts of the Program for Airfield Capacity Efficiency (PACE) are described and evaluated in Section 3.5.1 of the Supplemental DEIS/FEIR. The PPP program evaluated in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR was designed to comply with pertinent U.S.DOT and federal court precedent in the PACE proceedings and with existing federal regulations regarding airport rates and charges. Revenue neutrality was incorporated in the tested program for this reason. Massport's prior experience with the PACE landing fee structure demonstrates that changes to the existing weight-based landing fees will undergo thorough legal and regulatory review, and that the program must be carefully structured to withstand this process. This was examined in developing the illustrative program.

BARNSTABLE COUNTY COMMISSIONERS

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IN 1988

COUNTY COMMISSIONERS:
CHRISTINE DOLEN, Chairman
West Falmouth
MARY J. LECLAIR, Vice Chairman
Mashpee
ROBERT A. O'LEARY
Cummaquid

April 14, 1999

LETTER 32

John Silva
Manager, Environmental Program
Airports Division
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Silva:

The purpose of this letter is to provide comment on the Draft Environmental Impact Report/Statement (DEIR/S) for the Logan Airside Improvements Planning Project. The Barnstable County Commissioners represent the people on Cape Cod.

In response to environmental, economic, and other quality of life concerns, Barnstable County has adopted policies to increase year-round transportation options and reduce reliance on automobiles. The success of these policies is central to the quality of life on Cape Cod. It is also necessary for the sustainability of the Cape's tourism industry, as well as public and private efforts to broaden and diversify the regional economy and create year-round employment opportunities.

Access to Logan airport is an important element in the Cape's transportation network. Via Logan, visitors can reach the Cape without adding to the existing congestion along the southeast expressway, Route 3 or Route 6. Access to Logan is increasingly important to a growing number of businesses on the Cape which are helping to create quality employment opportunities for residents. 32.1

The safe and efficient operation of Logan is an important issue to residents of Barnstable County. The Commissioners agree that Alternative 1A., expressed by Massport as the Preferred Alternative, is a reasonable response to current and projected delay conditions at Logan and offers the greatest potential for maintaining a high level of operating efficiency. 32.2

It is our understanding that, although peak period pricing is not included in the Preferred Alternative, it is still presented as a policy for possible future use. The Barnstable County Commissioners continue to oppose peak period pricing because it would eliminate access to Logan by carriers now serving the region. Loss of air transportation would be contrary to the county's 32.3

transportation, economic development and environmental policies, and would result in significant losses of jobs and business opportunities and would cause hardship for residents who rely on frequent affordable access to Boston for business, medical care and other purposes. The loss of air travel would also force people to use their cars, thereby adding to congestion on roadways and degrading air quality.

Thank you for the opportunity to comment on the Logan DEIR/S. If you have any questions on our comments, please do not hesitate to call the County Commissioners Office (508) 375-6635.

Sincerely,

Christine Dolen
Chairman

Mary LeClair
Vice Chairman

Robert O'Leary
Commissioner

Copies to The Honorable A. Paul Cellucci
State Senator Henri Rauschenbach
State Senator Therese Murray
State Representative Eric Turkington
State Representative Shirley Gomes
State Representative Ruth Provost
State Representative Demetrius Atsalis
State Representative Thomas George
State Representative Nancy Caffyn

Letter 32
Barnstable County County Commissioners
Christine Dolen, Chairman
Mary LeClair, Vice Chairman
Robert O'Leary, Commissioner

Code	Topic 1	Topic 2	Comment	Response
32.1	Ground Transportation	Access to Logan Airport	Access to Logan Airport is an important element in the Cape's transportation network. Via Logan, visitors can reach the Cape without adding to the existing congestion along the southeast expressway, Route 3 or Route 6. Access to Logan is increasingly important to a growing number of businesses on the Cape which are helping to create quality employment opportunities for residents.	Comment noted.
32.2	Alternatives	Preferred Alternative	The Commissioners agree that Alternative 1A ... the Preferred Alternative, is a reasonable response to current and projected delay conditions at Logan and offers the greatest potential for maintaining a high level of operating efficiency.	Comment noted.
32.3	Alternatives	Peak Period Pricing	The Barnstable County Commissioners continue to oppose peak period pricing because it would eliminate access to Logan by carriers now serving the region. Loss of air transportation would be contrary to the county's transportation, economic development and environmental policies, and would result in significant losses of jobs and business opportunities and would cause hardship for residents who rely on frequent affordable access to Boston for business, medical care and other purposes.	The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This Exemption Program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

CAPE COD COMMISSION

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LETTER 33

April 22, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attention: Arthur Pugsley, MEPA Unit

EOEA #10458

John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Sirs:

The Cape Cod Commission has discussed the "Logan Airside Improvements Planning Project" draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). We concur with the findings and conclusions in the report that Peak Period Pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport. Peak Period Pricing should only be considered at airports when scheduling or capacity is the primary cause of delays. The aircraft delays at Logan Airport are usually due to wind, not airfield capacity. Therefore, any alternatives that include Peak Period Pricing should be eliminated from further consideration. 33.1

Air travel between Cape Cod and Logan Airport is a vital part of the Cape's transportation system. Peak Period Pricing, if implemented, would create a severe hardship on airlines such as Cape Air that use small aircraft. There is a strong possibility that Peak Period Pricing at Logan Airport would force Cape Air to discontinue operations. This would have a devastating impact on Cape Cod. It would further isolate towns such as Provincetown, where the only year-round alternative to a 25 minute flight to Boston is a 3 hour trip by automobile or bus. It would also increase automobile travel between Cape Cod and Boston, adding to congestion at the Bourne and Sagamore Bridges, on Route 3 and Route 6. In addition, we understand that scheduled air service to Provincetown Airport, within the Cape Cod National Seashore, is allowed by the National Park Service on the condition that continuous service be maintained. Therefore, once air service between Cape Cod and Logan Airport is lost, some of it may never be restored.

Ironically, although Cape Air stands to suffer the most from Peak Period Pricing, the airline has little impact on current and expected future operations at Logan Airport. That is because Cape Air's small aircraft are able to land on runway 15L/33R, which is too short for most other regional carriers and is under utilized.

If the analysis presented in the draft EIS/EIR is accurate, then it appears that Alternative 1A (all actions except Peak Period Pricing) could provide a benefit in terms of equitable noise distribution and relief in aircraft delay. We would support Alternative 1A if it does have these benefits. 33.2

Thank you for the opportunity to comment on this report.

Sincerely,

Herbert Olsen
Chairman
Cape Cod Commission

cc: Honorable A. Paul Cellucci, Governor
Mr. Peter Blute, Massachusetts Port Authority
Mr. Mark Robinson, Chairman, Massport Board of Directors
Massachusetts Congressional Delegation
Cape Cod Delegation to the Massachusetts General Court
Cape Cod Boards of Selectmen
Barnstable Town Council
Cape Cod Economic Development Council
Cape Ports

CAPE COD COMMISSION

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April 22, 1999

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100 Cambridge Street
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Attention: Arthur Pugsley, MEPA Unit

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Environmental Programs
Airports Division, ANE-600
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12 New England Executive Park
Burlington, MA 01803

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Thank you for the opportunity to comment on this report.

Sincerely,

Herbert Olsen
Chairman
Cape Cod Commission

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Massachusetts Congressional Delegation
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Cape Ports

Letter 33
Cape Cod Commission
Herbert Olsen, Chairman

Code	Topic 1	Topic 2	Comment	Response
33.1	Alternatives	Peak Period Pricing	The Cape Cod Commission ...concurs with the findings and conclusions in the report that Peak Period pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport. ...Any alternatives that include Peak Period Pricing should be eliminated from further consideration.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. This Exemption Program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
33.2	Alternatives	Preferred Alternative	If the analysis presented in the draft EIS/EIR is accurate, then it appears that Alternative 1A (all actions except Peak Period Pricing) could provide a benefit in terms of equitable noise distribution and relief in aircraft delay. We would support Alternative 1A if it does have these benefits.	Comment noted.

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LETTER 34

April 13, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attention: Arthur Pugsley, MEPA Unit

EOEA #10458

John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Sirs:

The Cape Cod Commission transportation committee has discussed the "Logan Airside Improvements Planning Project" draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). We concur with the findings and conclusions in the report that Peak Period Pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport. Peak Period Pricing should only be considered at airports when scheduling or capacity is the primary cause of delays. The aircraft delays at Logan Airport are usually due to wind, not airfield capacity. Therefore, any alternatives that include Peak Period Pricing should be eliminated from further consideration. 34.1

Air travel between Cape Cod and Logan Airport is a vital part of the Cape's transportation system. Peak Period Pricing, if implemented, would create a severe hardship on airlines such as Cape Air that use small aircraft. There is a strong possibility that Peak Period Pricing at Logan Airport would force Cape Air to discontinue operations. This would have a devastating impact on Cape Cod. It would further isolate towns such as Provincetown, where the only year-round alternative to a 25 minute flight to Boston is a 3 hour trip by automobile or bus. It would also increase automobile travel between Cape Cod and Boston, adding to congestion at the Bourne and Sagamore Bridges, on Route 3 and Route 6. In addition, we understand that scheduled air service to Provincetown Airport, within the Cape Cod National Seashore, is allowed by the National Park Service on the condition that continuous service be maintained. Therefore, once air service between Cape Cod and Logan Airport is lost, some of it may never be restored.

Ironically, although Cape Air stands to suffer the most from Peak Period Pricing, the airline has little impact on current and expected future operations at Logan Airport. That is because Cape Air's small aircraft are able to land on runway 15L/33R, which is too short for most other regional carriers and is under utilized.

If the analysis presented in the draft EIS/EIR is accurate, then it appears that Alternative 1A (all actions except Peak Period Pricing) could provide a benefit in terms of equitable noise distribution and relief in aircraft delay. We would support Alternative 1A if it does have these benefits. 34.2

Thank you for the opportunity to comment on this report.

Sincerely,

Kenneth Brock
Chair
Cape Cod Commission Transportation Committee

cc: Honorable A. Paul Cellucci, Governor
Mr. Peter Blute, Massachusetts Port Authority
Mr. Mark Robinson, Chairman, Massport Board of Directors
Massachusetts Congressional Delegation
Cape Cod Delegation to the Massachusetts General Court
Cape Cod Boards of Selectmen
Barnstable Town Council
Cape Cod Economic Development Council
Cape Ports

Letter 34
Cape Cod Commission Transportation Committee Kenneth Brock, Chair

Code	Topic 1	Topic 2	Comment	Response
34.1	Alternatives	Peak Period Pricing	The Cape Cod Commission transportation committee ...concurs with the findings and conclusions in the report that Peak Period pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport. Any alternatives that include Peak Period Pricing should be eliminated from further consideration.	The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program. Previous attempts at differential landing fee programs at Logan Airport and the analysis presented in the *1993 Strategic Assessment Report* are described in Section 3.5 of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This Exemption Program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
34.2	Alternatives	Preferred Alternative	If the analysis presented in the draft EIS/EIR is accurate, then it appears that Alternative 1A (all actions except Peak Period Pricing) could provide a benefit in terms of equitable noise distribution and relief in aircraft delay. We would support Alternative 1A if it does have these benefits.	PRAS was established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. During very high demand periods, the controllers have little or no flexibility for runway selection. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals by redirecting many flights to overwater routes. The addition of Runway 14/32 is the single most important mechanism to achieve equitable geographic distribution of aircraft operations and noise. Runway 14/32 and all other airside improvements would reduce current and future delays and enhance safety. The sooner that these improvements are implemented, the more long-term delay benefits will be realized.

Metropolitan Area Planning Council
60 Temple Place, Boston, MA 02111 617/451-2770 Fax: 617/482-7185 Internet: www.mapc.org
Serving 101 cities and towns in metropolitan Boston

LETTER 35

April 22, 1999

The Honorable Robert Durand, Secretary
Executive Office of Environmental Affairs
MEPA Unit
100 Cambridge Street
Boston, MA 02202

Project Name: **Logan Airside Improvements Planning Project**
MEPA #: **10458 DEIR/DEIS**

Dear Secretary Durand,

The Metropolitan Area Planning Council regularly reviews proposals deemed to have regional impacts. These proposals are reviewed for compliance with MetroPlan 2000, the regional plan for the Boston metropolitan area, as well as for their impact upon the environment. The Council encourages MEPA to ensure that proposed development scenarios and mitigation plans comply with MetroPlan 2000.

As Massport is not subject to local zoning regulations, MAPC suggests MEPA assume some of the responsibility of reviewing the full context of impacts to the region, beyond those associated strictly with the site-specific environmental impacts from the proposed activities. This is specifically important given the regional nature of airports, and the regional nature of the impacts associated with the operations of such a transportation hub used by millions of people annually.

Massport has prepared two separate MEPA documents: a GEIR which has focused primarily on landside development and impacts; and the more recent DEIS/DEIR for proposed airside development plans and associated impacts. Given the enormity of the impacts associated with any operational change at a regional airport such as Logan; economic, environmental quality, transportation, and even social, such an approach was acceptable. However, as the proposed improvements have become more specific and less generalized, the integral tie between airside and landside activities must be addressed. Only by viewing the landside impacts side by side with the correlating airside modifications, can decisions regarding costs and benefits as well as appropriateness of mitigation measures be made. This analysis should be a requisite part of any following FEIR.

It is immediately apparent that Logan Airport plays a vital role in the economy of Boston, and the New England area. The volume of people, goods and services moving to and through this facility is substantial, and the efficiency of this movement is key to the success of the operations of all subsequent and associated businesses. Furthermore, the dependability and reliability of air services plays an important role in where major businesses decide to locate. Accordingly,

changes in the operations of the airport must be seen in view of these far-reaching impacts. Setting aside the issue of the new runway, MAPC has focused its comments on the regional impacts stemming from the growing use of Logan Airport and its effects on the regional transportation infrastructures.

Given the projection that passenger use will increase from 29 to 45 million within 10 years, a 55% increase, it can be assumed that the movement of these people to the airport itself is as important as the movement of the passengers and planes through the airport system. The current roadway and transit systems available to move people to and through Boston often operate at capacity under today's conditions. It is vital that this situation be addressed – by Massport, by MassHighway, and by the MBTA. There must be a regional strategy developed which is both multi-modal and multi-airport. This comprehensive strategy needs to determine how much growth is going to occur in air traffic at each airport, how much ground traffic will be generated, and how this ground traffic will be accommodated by existing roadways, transit and even parking. 35.1

The two submitted documents (GEIR and the DEIS/DEIR) present the following noteworthy facts regarding the use of the airport facilities. This information indicates that Logan Airport is responsible for consuming much of the capacity of the existing transportation infrastructure.

- Logan Airport serviced 26.5 million passengers in 1998, and anticipates demand to reach 45 million passengers by the year 2010.
- Logan Airport is almost exclusively an origin and destination airport: almost 90% of Logan passengers begin or end their trip at Logan, with only 10% of passengers connecting between flights.
- Nearly 80% of Logan's demand is drawn from the region within the Route 495 corridor.
- Auto is, and will continue to be, the predominant mode of travel between the New England regional airport service areas and Boston.
- Nearly half of the 5,000,000 regional airport passengers that drive to Logan are closer to Manchester airport, and almost 1/3 are from the Worcester Airport service area.
- Passengers that might be served from a regional airport but instead drive to Logan for air service offer the greatest potential for Logan passenger diversion.
- While the regional alternatives alone cannot eliminate airside congestion, they can alleviate the delays experienced at Logan by achieving a better distribution of the region's intercity travel demand.
- 1 out of 3 people traveling to Logan get there by public transportation.
- For every 1% increase in HOV ridership, traffic on airport roadways goes down about 1,000 cars per day.
- The anticipated level of potential air passenger diversion to other airports or other methods of transportation (including video conferencing) represents 16-19% of Logan Airport's forecast demand.

Massport may be the greatest vehicle trip generator in the Boston area. The GEIR states that Massport is developing an Airport Intermodal Transit Connector (AITC), and anticipates that ridership of public transit will double due to the proposed improvements. Any future FEIR should specify the methods which Massport will use to guarantee this. It implies a considerable level of cooperation between the agencies responsible for managing the transportation infrastructure – Massport, MassHighway, MBTA, FHWA, and Amtrak. 35.2

Massport should be commended for their efforts in developing private vendor partnerships to improve access to/from areas such as Braintree and Newton. Massport's support of alternative

fuel vehicles and transportation demand management (TDM) is also laudable. The effectiveness of these transportation alternatives should be discussed in the FEIR, as should the possibility of beginning other public transit routes. The opening of the Woburn Intermodal Transportation Center is planned to coincide with the closing of the Mishawaum Commuter Rail Station and the neighboring Logan Express facility. The FEIR should include an analysis of ridership impact due to this closure on the northwest segment of the region, since travelers on Route 128 from the east and west will have to go north on I-93 to use the new Woburn service. We are also pleased to note that Massport will expand the Logan Express services to Cape Cod and encourage Massport to examine additional locations for Express services from current and planned park and ride lots. Efforts to limit/reduce the number of vehicles travelling to/from the airport proper should not only be explained in the FEIR, but the availability of adequate funding to support these efforts should be presented as well. 35.3

The work associated with the Route 495 Initiative should be incorporated in further documents prepared to address impacts and mitigation plans for the Airport plans. According to the Massachusetts Department of Revenue, the cities and towns along the 495 corridor exhibit the greatest amount of revenues attributable to new growth in 1996, 1997, and 1998. Furthermore, these areas exhibit the highest levels of employment and population change (1990-1995), and it is anticipated that this trend will continue in the future. The economic development around this area may be sufficient to support greater changes to the Worcester Airport than currently planned. Unfortunately, there are currently only five commuter rail trips to Worcester each day. As Massport plans to gain control of the operations of the Worcester Airport, they should consider modifications which would make this airport more accessible and convenient. For example, the existing transit schedule is insufficient to support growth at the Worcester airport. Such modification may include working with MassHighway and the MBTA to improve direct access to the airport, making the airport capable of supporting jet airplanes, and even encouraging airlines to relocate to this facility. As stated in the GEIR, the success of a multi-airport transportation system is dependent on equitable distribution of services – both air and ground related. Creating such equitable services would result in diverting considerable vehicular traffic away from the central Boston area and improving the efficiency of movement throughout the area. 35.4

The Boston Convention Center and the proposed Commonwealth Flats Development Area are only two of the proposed developments occurring in South Boston. Like the I-495 corridor, this area too is bound for considerable growth – business, commercial, residential and even industrial. The FEIR should address the applicability of the proposed South Boston Piers Transitway in providing access to this area. 35.5

In summary, MAPC requests the Secretary require the proponent to address the requirements of agency analysis under Executive Order 385, and that the FEIR include a full description of the impacts on the transportation infrastructure as well as identify the measures proposed to mitigate such impacts. More specifically, the following issues should be considered:

Impact Analysis:

- An indirect access (such as from Route 1A) permit should be required from the Massachusetts Highway Department. 35.6
- Massport should conduct a regional traffic analysis: including a passenger origination study which identifies locations at the regional/local level as opposed to the New England area level; a Level Of Service (LOS) analysis comparing resulting conditions to existing background conditions as well as to a background which includes known 35.7

development projects such as the Convention Center; an intersection analysis focusing on areas such as the ramp to the tunnel and several off-ramps from I-93; and a build analysis which examines the incremental changes in traffic flow resulting from incremental phases of the airport's improvement plan.

- A draft Section 61 finding from Mass Highway should be included in the FEIR. 35.8

Mitigation Analysis:

- Massport should identify its proposed passenger demand management/reduction and/or capacity improvement plans such as differential tolls for single occupancy vehicles at the tunnels and bridge; subsidized parking rates at peripheral sites and increased parking rates at the airport; increased assistance in existing regional airport corridor expansion; and increased assistance with and access to the passenger rail in the northeast corridor. 35.9
- Massport should identify their level of commitment to aiding in the management of the regional transportation infrastructure. For example – MBTA improvements such as the urban ring and station locations in an amount corresponding to the amount committed to the artery/tunnel project; locations for proposed new park-and-flys; and relocation of car rental facilities to off-site areas with corresponding shared transit to these areas. 35.10
- The FEIR should present any discussions regarding the effect of recent bond reauthorization legislation submitted by the administration which may reduce highway project dollars for projects in the Logan expansion impact area. 35.11

Comprehensive analysis of passenger delays is clearly a role of Massport. The fact that the delay often begins far from the airport should be just as relevant to Massport, and thus justify their involvement in managing the region's transportation infrastructure.

Thank you for the opportunity to comment.

Sincerely,

David C. Soule
Executive Director

Letter 35
Metropolitan Area Planning Council
David C. Soule, Executive Director

Code	Topic 1	Topic 2	Comment	Response
35.1	Regional Transportation	Regional Airports	There must be a regional strategy developed which is both multi-modal and multi-airport. This comprehensive strategy needs to determine how much growth is going to occur in air traffic at each airport, how much ground traffic will be generated, and how this ground traffic will be accommodated by existing roadways, transit and even parking.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 Environmental Status and Planning Report* (previously GEIR) and its subsequent annual updates (Environmental Data Reports).
35.2	Ground Transportation	Access to Logan Airport	The GEIR states that Massport is developing an Airport Intermodal Transit Connector (AITC), and anticipates that ridership of public transit will double due to the proposed improvements. Any future FEIR should specify the methods which Massport will use to guarantee this. It implies a considerable level of cooperation between the agencies responsible for managing the transportation infrastructure-Massport, MassHighway, MBTA, FHWA, and Amtrak.	Massport is working with the MBTA to improve transit access to Logan Airport via the Blue Line and the Airport Intermodal Transit Connector (AITC). Section 2.7 of the Supplemental DEIS/FEIR discusses the proposed MBTA improvements in transit access to Logan Airport. The *Logan Airport 1999 ESPR* (previously GEIR), reports on the status of these ground transit improvement projects.

Code	Topic 1	Topic 2	Comment	Response
35.3	Ground Transportation	Mitigation	Massport should be commended for their efforts in developing private vendor partnerships to improve access to/from areas such as Braintree and Newton. Massport's support of alternative fuel vehicles and transportation demand management (TDM) is also laudable. The effectiveness of these transportation alternatives should be discussed in the FEIR, as should the possibility of beginning other public transit routes. The opening of the Woburn Intermodal Transportation Center is planned to coincide with the closing of the Mishawum Commuter Rail Station and the neighboring Logan Express facility. The FEIR should include an analysis of ridership impact due to this closure on the northwest segment of the region, since travelers on Route 128 from the east and west will have to go north on I-93 to use thc new Woburn service. We are also pleased to note that Massport will expand the Logan Express services to Cape Cod and encourage Massport to examine additional locations for Express services from current and planned park and ride lots. Efforts to limit/reduce the number of vehicles travelling to/from the airport proper should not only be explained in the FEIR, but the availability of adequate funding to support these efforls should be presented as well.	The Logan Airside Supplemental DEIS/FEIR discusses impacts of the proposed airside improvements. Refer to the *Logan Airport 1999 ESPR* for a discussion of ground access options including the Woburn Intermodal Transportation Center and Logan Express services.
35.4	Regional Transportation	Regional Airports	As Massport plans to gain control of the operations of the Worcester Airport, they should consider modifications which would make this airport more accessible and convenient.	The MassHighway is analyzing alternative routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport. MassHighway is in the process of preparing the EIS/EIR for these highway improvements. Massport supports this project.
35.5	Ground Transportation	Access to Logan Airport	The FEIR should address the applicability of the proposed South Boston Piers Transitway in providing access to this area.	The Airside project does not result in additional demand for ground access services.
35.6	Ground Transportation	Access to Logan Airport	An indirect access (such as from Route 1A) permit should be required from the Massachusetts Highway Department.	The Airside project does not result in additional demand for ground access services.

Code	Topic 1	Topic 2	Comment	Response
35.7	Ground Transportation	Studies	Massport should conduct a regional traffic analysis; including a passenger origination study which identifies locations at the regional/ local level as opposed to the New England area level; a Level of Service (LOS) analysis comparing resulting conditions to existing background conditions as well as to a background which includes known development projects such as the Convention Center; an intersection analysis focusing on areas such as the ramp to the tunnel and several off-ramps from I-93; and a build analysis which examines the incremental changes in traffic flow resulting from incremental phases of the airport's improvement plan.	Massport, as a matter of course, has monitored and reported on the vehicle trip generating characteristics of Logan Airport in its various environmental filings including the annual GEIR/Annual Updates documents. It has also projected vehicle trip generation estimates for an annual airport activity level of 37.5 million air passengers, and has analyzed the impacts measured and projected airport-related traffic for three different study areas (on-airport, East Boston, and regional). The results of these analyses were presented in the Logan International Airport Generic Environmental Impact Report filed with MEPA in July of 1996 (EOEA #3247/5146). Since that time, Massport has monitored traffic activity levels at Logan Airport and have reported average annual daily traffic (AADT) and average annual weekday traffic (AWDT) annually. Level of service analyses have been conducted for many intersections in East Boston and Massport has worked with the community to identify potential improvements. Additionally, Airport-related trip generation estimates have been incorporated into the traffic models used by the Central Artery/Tunnel (CA/T) Project that were integral to the design of CA/T Project roadways including the I-90 extension (TWT) and the I-90/Route 1A connections in East Boston. Estimates of Logan Airport-related trip generation have also been included in the Boston Metropolitan Area regional transportation model maintained by the Central Planning Staff. Vehicle trip origins and destinations are assigned to the respective traffic zones based on town level origin and destination data collected through Massport tri-annual air passenger surveys. As a result, Logan Airport-related vehicle trips are included as part of the regional baseline and all future condition traffic analyses prepared by Central Transportation Planning Staff (CTPS) in a manner consistent with vehicle trip generation characteristics of the Boston central business district (CBD) and other distinct trip generators in the region. In addition to the comprehensive evaluation of Logan Airport-related traffic impacts presented in annual environmental filings by Massport, or other project sponsor, also prepares project-specific traffic impacts of on-airport actions that cross MEPA filing thresholds. Examples include Environmental Assessments (EAs) and Environmental Impact Reports (EIRs) for the West Garage project, the International Gateway project, the Terminal A project, Cargo Building 63, the Logan Office Center Garage, the Hilton Hotel, etc. Each of these projects assess the traffic impacts (including construction-related traffic impacts) of the proposed project and develops appropriate levels of mitigation that are included in the project's Section 61 finding. See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.
35.8	Ground Transportation	Mitigation	A draft Section 61 finding from Mass Highway should be included in the FEIR.	Draft Section 61 Findings are in Section 8.7 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
35.9	Ground Transportation	Traffic	Massport should identify its proposed passenger demand management/reduction and/or capacity improvement plans such as differential tolls for single occupancy vehicles at the tunnels and bridge; subsidized parking rates at peripheral sites and increased parking rates at the airport; increased assistance with and access to the passenger rail in the northeast corridor.	Massport has in place an extensive Ground Access Management Plan, the primary goals of which are to: increase the overall efficiency of the metropolitan transportation system through interagency coordination; increase annual air passenger HOV mode share to 35.2 percent by the time annual air passengers reach 37.5 million; reduce employee reliance on commuting alone by private automobile; provide adequate long-term parking within the limits of the Logan Airport Parking Freeze; and improve management of ground access and infrastructure through technology. Key achievements in reaching those goals include: Establishment of the Logan Airport Transportation Management Association (TMA). Massport provided subsidies for TMA members on Logan Express and MBTA. TMA members ride the Rowe's Wharf Water Shuttle for free; hired professional TMA firm to operate the Logan Airport TMA. Record ridership on the Logan Express bus service (exceeded over one million passengers in 1998 and 1999) and planning for a fourth Logan Express location. Construction of the Woburn Regional Transportation Center which will include 900 new parking spaces for Logan Express (construction completed in 2000) Planning for the Airport Intermodal Transit Connector which will provide a direct link between Logan Airport and South Station/Red Line. Initiation of the Logan DART bus service between Logan Airport and South Station. Participation with the MBTA in planning for the redesigned new Airport Station to include wide escalators, flight information monitors, and other air passenger amenities. Continued the operation of free shuttle buses between Airport Station, Water Shuttle dock, and terminals. Provided a dedicated DART bus dock at South Station with direct service to the airport. Implemented Logan Direct service from the South Shore. Continued marketing and advertising of HOV services through use of 1-800-23LOGAN telephone service and other media. Continued implementation of commercial vehicle lane, Neptune Road exit ramp peak period forced turnaround, local street closures, and traffic volume restrictions at Maverick Street. Continued traffic monitoring, curbside monitoring, and traffic control improvements. Continued development effort for Advanced Traveler Information Systems and Automatic Vehicle Identification (AVI) to monitor commercial vehicle activity. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan.

Code	Topic 1	Topic 2	Comment	Response
35.10	Ground Transportation	Access to Logan Airport	Massport should identify their level of commitment to aiding in the management of the regional transportation infrastructure. For example- MBTA improvements such as the urban ring and station locations in an amount corresponding to the amount committed to the artery/tunnel project; locations for proposed new park-and-flys; and relocation of car rental facilities to off-site areas with corresponding shared transit to these areas.	Massport is considering consolidation of car rental facilities, which will facilitate the consolidation of the courtesy vehicles serving the rental car companies. Massport is working with the MBTA to improve transit access to Logan Airport via the Blue Line and the Airport Intermodal Transit Connector (AITC). Section 2.7 of the Supplemental DEIS/FEIR discusses the proposed MBTA improvements in transit access to Logan Airport. The *Logan Airport 1999 ESPR* (previously GEIR), reports on the status of these ground transit improvement projects. Massport is constantly striving to make Logan Airport a more efficient transportation center with less impact on surrounding communities by improving mass transit access to Logan Airport. The Airside Project makes Logan Airport more efficient and will not affect vehicle traffic, transit systems or major roadway intersections. The Supplemental DEIS/FEIR discusses all the environmental impacts from the Airside Project. The ESPR/GEIR and its Annual Updates discuss Massport's efforts to lessen Logan Airport's total environmental footprint, especially impacts from ground access.
35.11	Ground Transportation	Mitigation	The FEIR should present any discussions regarding the effect of recent bond reauthorization legislation submitted by the administration which may reduce highway project dollars for projects in the Logan expansion impact area.	The Supplemental DEIS/FEIR responds fully to the EOEA Certificate of May 7, 1999.

CITY OF BOSTON • MASSACHUSETTS

OFFICE OF THE MAYOR
THOMAS M. MENINO

April 7, 1999

The Hon. Robert A. Durand
Secretary of Environmental Affairs
Attention MEPA Office
100 Cambridge Street, 20th Floor
Boston, MA 02205

LETTER 36

Dear Secretary Durand:

The Massachusetts Port Authority projects that passenger traffic at Logan Airport will grow from 26 million in 1998 to as many as 45 million by 2010, an increase of roughly 73 percent.

More passenger traffic at Logan Airport will only mean more cars, trucks and shuttle buses on our congested highways and urban road system. During peak travel times, this could make traffic congestion unbearable on the Southeast Expressway and Route 1A. It will also encourage more drivers to seek alternate routes, worsening congestion on roads such as Storrow Drive.

The majority of Logan's users actually come from beyond Route 128, according to Massport's 1996 data. These people are not getting to Logan via the Blue Line. They are driving long distances for great lengths of time on congested roads. As traffic at Logan expands, road traffic congestion will grow worse, more vehicles will slow to a crawl, and suburban travelers may not be able to get to Logan on time. 36.1

Putting more traffic on our urban road system during peak travel times raises the issue of whether residents near Logan Airport will be able to navigate their own communities and whether employees will be able to travel to and from work without further delays.

Finally, the addition of more vehicles to our roads raises concerns about environmental and economic impacts of traffic congestion, from air pollution to lost time and productivity. The region is already in "serious" non-attainment of the air quality standard for ozone, according to the U.S. Environmental Protection Agency.

Massport's Environmental Impact Statement/Report addresses none of this. It is incomplete, because it avoids the landside impacts of airport growth. Airside and landside impacts are related and inseparable. I therefore respectfully request that you require the Port Authority to provide a full and complete accounting of all the landside impacts of its improvement plan before proceeding any further. To do so would only deny the people of greater Boston the answers we deserve.

Sincerely,

Thomas M. Menino

Letter 36
City of Boston
Honorable Mayor Thomas M. Menino

Code	Topic 1	Topic 2	Comment	Response
36.1	Ground Transportation	Access to Logan Airport	More passenger traffic at Logan Airport will only mean more cars, trucks and shuttle buses on our congested highways and urban road system. During peak travel times, this could make traffic congestion unbearable on the Southeast Expressway and Route 1A. It will also encourage more drivers to seek alternate routes, worsening congestion and roads such as Storrow Drive. ... As traffic at Logan expands, road traffic congestion will grow worse, more vehicles will slow to a crawl, and suburban travelers may not be able to get to Logan on time. ...the addition of more vehicles to our roads raises concerns about environmental and economic impacts of traffic congestion, from air pollution to lost time and productivity.	Massport has in place an extensive Ground Access Management Plan, the primary goals of which are to: increase the overall efficiency of the metropolitan transportation system through interagency coordination; increase annual air passenger HOV mode share to 35.2 percent by the time annual air passengers reach 37.5 million; reduce employee reliance on commuting alone by private automobile; provide adequate long-term parking within the limits of the Logan Airport Parking Freeze; and improve management of ground access and infrastructure through technology. Key achievements in reaching those goals include: Establishment of the Logan Airport Transportation Management Association (TMA). Massport provided subsidies for TMA members on Logan Express and MBTA. TMA members ride the Rowe's Wharf Water Shuttle for free; hired professional TMA firm to operate the Logan Airport TMA. Record ridership on the Logan Express bus service (exceeded over one million passengers in 1998 and 1999) and planning for a fourth Logan Express location. Construction of the Woburn Regional Transportation Center which will include 900 new parking spaces for Logan Express (construction completed in 2000) Planning for the Airport Intermodal Transit Connector which will provide a direct link between Logan Airport and South Station/Red Line. Initiation of the Logan DART bus service between Logan Airport and South Station. Participation with the MBTA in planning for the redesigned new Airport Station to include wide escalators, flight information monitors, and other air passenger amenities. Continued the operation of free shuttle buses between Airport Station, Water Shuttle dock, and terminals. Provided a dedicated DART bus dock at South Station with direct service to the airport. Implemented Logan Direct service from the South Shore. Continued marketing and advertising of HOV services through use of 1-800-23LOGAN telephone service and other media. Continued implementation of commercial vehicle lane, Neptune Road exit ramp peak period forced turnaround, local street closures, and traffic volume restrictions at Maverick Street. Continued traffic monitoring, curbside monitoring, and traffic control improvements. Continued development effort for Advanced Traveler Information Systems and Automatic Vehicle Identification (AVI) to monitor commercial vehicle activity. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan.

CITY OF BOSTON • MASSACHUSETTS

OFFICE OF THE MAYOR
THOMAS M. MENINO

LETTER 37

April 22, 1999

The Hon. Robert A. Durand
Secretary of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Secretary Durand:

Please accept this letter and accompanying attachments, which represent the City of Boston's comments on the Logan Airside Improvements Planning Project, Draft Environmental Impact Statement/Report, EOEA #10458.

The City of Boston views the proposed project as a capacity enhancement plan. As the enclosed submission indicates, the expansion of Logan International Airport's capacity raises a number of serious concerns that the Massachusetts Port Authority's DEIS/R fails to address adequately.

Expanding Logan's capacity could harm Boston's environment and public health, due to: increased air pollution from additional aircraft, additional taxiway idling, as well as increased vehicles traveling to and from Logan, increased levels of noise pollution under proposed flight paths, soundproofing equipment which may reduce indoor air quality, and impacts on the quality of water in Boston Harbor. The DEIS/R fails to address these concerns adequately, if at all.

Expanding Logan's capacity will only increase traffic congestion at Logan and the routes to and from Logan. Adding another runway to this congested airport is like adding an extra lane to the Central Artery. It is not a serious long term solution to traffic problems. More traffic at Logan Airport will only mean more cars, trucks and shuttle buses on our congested highways and local roads. Traffic congestion is already nearly unbearable during peak travel times. The DEIS/R and Massport's previously submitted GEIR do not address the full landside impacts of these airside improvements, nor do they fully explore moving greater number of passengers to and from Logan via alternative modes.

The majority of Logan's users actually come from beyond Route 128. Adding another runway at Logan for more suburban traffic is a Band-Aid approach to a regional problem that requires a regional solution. Over the last decade, the Commonwealth has repeatedly rejected or ignored studies that have recommended increasing capacity elsewhere in Massachusetts, including: the

need to land bank a site for a second major airport at Fort Devens at the junction of I 495 and Route 2; the need to develop an existing Massachusetts regional airport or air base into a large regional reliever airport; the need to make better use of Massport's own Hanscom Field along Route 128; and the need to capture lost market share at regional airports in Worcester and New Bedford. The DEIS/R contains no strategy that projects diversion of traffic from Logan to any alternative airports. The City of Boston maintains that until the Commonwealth implements a serious strategy to divert traffic from Logan to alternative airports in Massachusetts, congestion at Logan will never be solved and the environmental impacts of Logan will never be relieved.

Furthermore, if the Commonwealth and the Federal Aviation Administration allow the Massachusetts Port Authority to diminish Boston's quality of life with increased air and noise pollution and weaken Boston's competitive advantage with increased traffic congestion, then economic growth in the region will occur unevenly, and the regional imbalances that have caused this problem will only grow worse over time.

As the Mayor who convened and staffed a regionalization commission to promote greater cooperation among governmental entities in greater Boston, I am proud of my consistent efforts to advance regional agendas. Many leaders in government and business recognize the need for regional cooperation, yet so few act. I trust that you will not deny greater Boston the opportunity to come together around an issue that affects so many people in so many places in so many ways. This issue is so comprehensive and complex that it begs to be examined, debated and decided in public forums on a regional level.

Finally, as the attached submission indicates, the City of Boston has a number of concerns on Massport's other plans to optimize Logan. These concerns are not adequately addressed in the DEIS/R. Missing from these plans altogether is an exploration of demand management strategies that could reduce flight delays, namely peak period pricing. As a relief strategy, peak period pricing could be implemented in far less time at far less cost to the taxpayers than a new runway.

Upon thorough review and evaluation of the DEIS/R, and for all of the reasons enumerated in the attached submission, I regret to inform you that the City of Boston finds the DEIS/R so deficient in so many respects that 1) the Massachusetts Port Authority must withdraw this document, and 2) the Commonwealth must convene a regional panel to evaluate the state of transportation in the region, develop comprehensive strategies to meet both short-term and long-term regional transportation needs, promote a greater variety of transportation options available for our citizens and our economy, and commit the Commonwealth to meet these goals in specific and feasible ways.

37.1

Sincerely,

Thomas M. Menino

Thomas M. Menino
Mayor of Boston

enclosures

Environmental Services
CITY OF BOSTON

THOMAS M. MENINO
Mayor

ANDREA d'AMATO
Chief of Environmental Services

EXECUTIVE SUMMARY
Logan Airside Improvements Planning Project
April 22, 1999

The City of Boston finds the Draft Environmental Statement/Report deficient and inadequate and respectfully requests that Secretary Durand of the Executive Office of Environmental Affairs and John Silva, Senior Project Manager of the Federal Aviation Administration reject the document. The document as presented does not adequately assess the environmental impacts of the proposed project or existing conditions. Further, it does not provide critical data about a surrounding regional transportation systems that can alleviate the volumes of traffic and impacts on the communities affected by Logan. The City has requested that Massport withdraw the document and that a regional planning and evaluation team be convened to assess the overall state of transportation, by all modes, airside and landside in the region. After this updated analysis is undertaken, both a short and long term transportation plan must be included in a comprehensive regional plan.

The following is a summary of issues not adequately analyzed and critical information not provided about the levels of impact:

Environment

- Air Quality

  Increase levels of VOC, CO and NOx emissions are projected as a result of anticipated growth at Logan. **37.2**

  Increase in auto and bus emissions will result from growth. **37.3**

  With the addition of the Centerfield Taxiway, there will be additional planes with idling engines adding to pollutant emissions near public beaches and residences. **37.4**

  Current Massport soot monitoring protocols are not sufficient to determine the effect on air quality. **37.5**

Current complaints about air quality, odor and soot emissions by affected residents continue and indicate current levels are not acceptable and have not been addressed. 37.6

- Noise

There will be additional noise from idling engines on the Centerfield Taxiway which will immediately impact residents of East Boston and Winthrop. 37.7

Current complaints by residents indicate that existing noise levels are not acceptable. 37.8

Massport has indicated that runway 14/32 is to be used primarily during periods of northwest winds and inclement weather. This will increase noise volumes in the flight path. 37.9

Lowering landing minimums on Runway 27 will increase noise for residents of Winthrop. Lowering landing minimums on Runways 22L and 15R will increase noise for residents of East Boston and Revere. 37.10

- **Water Quality**

Massport has not provided the Boston Conservation Commission with adequate information about its monitoring or its compliance with the Orders of Conditions to protect the harbor and the valuable remaining wetlands. 37.11

Massport is not in compliance with the National Pollution Discharge and Elimination Systems permitted outfalls at Logan. 37.12

No pollution treatment structures for the North, Porter and Maverick Outfalls, which serve 306 acres, are discussed as required. 37.13

Before its removal, alternatives to the Blast Fence that provides marginal protection from noise, fumes and blast effects from take-offs for residents must be identified and funded. 37.14

- **Public Health**

To date little or no analysis or study of the affects on public health from Logan operations has been conducted. 37.15

No analysis of federal Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 37.16

Transportation

- Landside Impacts of Runway 14/32

The DEIR/S does not address the link between air transportation supply and ground transportation demand. 37.17

The DEIR/S assumes that passenger traffic at Logan Airport will grow irrespective of airport capacity and resulting delay. 37.18

The DEIR/S does not present a reasoned Build vs. No-Build analysis of airport capacity with and without Runway 14/32, nor the resulting impacts on ground transportation (regional highways, local streets, transit modes). 37.19

- **Travel Demand Management**

The DEIR/S does not adequately justify some of its future projections of transit and HOV mode share. 37.20

The DEIR/S does not differentiate the various types of HOV travel, nor does it take into account the full impacts of certain types of travel that are considered HOV (e.g. taxi and drop-off trips, passengers who drive alone to park in Chelsea are considered HOV trips because they take a shuttle one mile to Logan). 37.21

The DEIR/S does not provide adequate information on Logan Transportation Management Association membership, participation, or plans for increasing participation. 37.22

The DEIR/S does not provide adequate proposals for improving utilization of the MBTA Blue Line by air passengers. 37.23

- Airside Transportation Impacts

The DEIR/S does not adequately justify construction of the Centerfield Taxiway. Adequate runway crossing opportunities and airplane queuing capacity currently exist, and the construction of the Centerfield Taxiway would result excessive aircraft idling. 37.24

Runway 14/32 would address weather-related delays, but these are only a portion of the airside delays. The DEIR/S does not provide information on the relative impact of different causes of delay: weather, mechanical, and delays originating from other airports. 37.25

The DEIR/S discounts peak period pricing because it is assumed to reduce regional air service. Massport should analyze a peak period pricing scenario, which considers a shifting of some service to other regional airports. 37.26

Regional Alternative

- There is no description of a regional plan that actually diverts traffic from Logan. 37.27
- There are no funding requests in the Transportation Bond Bill for upgrades at Worcester, Hanscom, or Fort Devens to improve infrastructure and public transit as part of a regional strategy. 37.28
- Peak pricing is not explored as a tool to divert flights in the region. 37.29

ATTACHMENTS

- Letter from Mayor Thomas M. Menino to Massachusetts Secretary of Environmental Affairs Robert A. Durand, April 22, 1999
- Letter from Mayor Thomas M. Menino to Federal Aviation Administration Environmental Programs Manager John C. Silva, April 23, 1999
- Letter from Mayor Thomas M. Menino to the Hon. Robert A. Havern, III, Chairman, and the Hon. Joseph C. Sullivan Joint Committee on Transportation, State House, March 26, 1999
- Mayor Thomas M. Menino's testimony at the State House, March, 23, 1999
- Letter from Mayor Thomas M. Menino to Hon. Robert Durand, Secretary, EOEA, April 7, 1999
- Letter from John Auerbach, Executive Director of the Boston Public Health Commission to Andrea d'Amato, Chief of Environmental Services, City Of Boston April 20, 1999
- Detailed comments of the Boston Redevelopment Authority to Secretary Robert Durand, EOEA and John C. Silva, FAA April 23, 1999
- City of Boston Environment Department Response to 1997 Annual Update to Secretary Trudy Coxe, EOEA, October 13, 1998
- City of Boston Environment Department Response to 1997 Annual Update to Secretary Trudy Coxe, EOEA, November 24, 1997
- City of Boston Environment Department Response to 1997 Annual Update to Secretary Trudy Coxe, EOEA , September 24, 1996
- Agreement between the City of Boston, Massport and the FAA regarding Minimum Approach Altitudes for Runway 15R, August 8, 1980

Environmental Services
CITY OF BOSTON

THOMAS M. MENINO
Mayor

ANDREA d'AMATO
Chief of Environmental Services

April 23, 1999

Honorable Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Arthur Pugsley, MEPA Unit

John Silva, Environmental Programs Manager, Airports Division
Federal Aviation Administration New England Region
12 New England Executive Park
Burlington, MA 01083

Re: Logan Airside Improvements Planning Project, Draft Environmental Impact Statement/Report, EOEA #10458

Dear Secretary Durand and Mr. Silva:

The City of Boston has reviewed the Draft Environmental Impact Statement/Report (DEIS/R) for the above referenced project and hereby submits the following comments. The City of Boston's Environment Department, the Boston Transportation Department (BTD) and the Boston Public Health Commission (BPHC) have reviewed the DEIS/R and the City offers the following response to the DEIS/R. Attached and incorporated herein are detailed comment letters from the Boston Public Health Commission and the Boston Redevelopment Authority (BRA).

The City of Boston views the proposed project as a capacity enhancement plan. The capacity issue at Logan International Airport (Logan) is only one part of a New England transportation system that must be addressed on a regional, inter- and multi-modal level. 37.30

The City of Boston finds the DEIS/R deficient in many respects and respectfully requests that:

1. Massport withdraw this document;
2. A regional panel of experts be convened to immediately assess the overall state of transportation in the region; 37.31
3. This panel develop strategies for both short- and long-term regional transportation needs and identify a variety of transportation options available for the traveling public and the movement of goods; and,

4. Communities in the region be fairly and adequately represented on such a panel along with public officials, economists, land use planners, and representatives of environmental and public health interests.

ENVIRONMENTAL CONSEQUENCES

Air Quality

Massport's 1996 Generic Environmental Impact Report (GEIR) indicates that while emissions of VOC and CO have decreased (as has NOx to a much lesser extent), these emissions are expected to increase in the future. This is a critical issues with Stage 3 aircraft emitting significant amounts of NOx and with the projected increase in aircraft operations over time. Massport is to be commended for its program to convert its ground service vehicle fleet to alternative-fueled vehicles. Similar efforts by tenants must be strongly promoted by Massport. The City has suggested in prior comments on Massport MEPA filings that important steps in mitigating the air quality impacts of Logan may include lease agreements with new or renewing tenants that contain requirements or incentives, such as reduced curb fees for private fleet operators, for use of low or no emission vehicles by tenants.* In addition, the City believes that additional measures are necessary and requests that Massport and a regional transportation task force investigate other available technologies, particularly from companies based in the region, for reducing air emissions. 37.32 37.33 37.34

For several years, Massport has indicated that it is evaluating the benefits of moving bus servicing and other operations to off-airport locations. This will add vehicle trips to current levels, a detriment to air quality. The City has twice requested that a detailed analysis and discussion be presented in a GEIR or Annual Update (AU) but Massport has never responded to this inquiry. 37.35

Massport has stated in prior environmental review documents that $PM_{2.5}$ data for aircraft are not currently available. This is surprising since aircraft engines have undergone emissions testing for many years. This should be a subject evaluated in scientific and technical detail by the regional panel of experts. Findings and recommendations on this issue should be a component of a regional transportation report. 37.36

*References to "previous comments" refer to written comment letters submitted to MEPA and other government entities regarding Massport GEIRs, Annual Updates and project-related environmental filings.

Massport cites in the DEIS/R two soot studies released in 1997 showing that deposition of particulates in surrounding neighborhoods was not the result of aircraft operations. At that time, the Boston Air Pollution Control Commission (APCC) raised several questions as to the reliability of those studies. In particular, the APCC questioned the use of "wipe" samples from jet engine housings as representative of actual particles generated by engine operation during take-off. It is reasonable to question whether the soot adhering to the engine cowling of a single Boeing 737 might not be physically and chemically different than a particle ejected from the engine during take-off. During take-off, when the engine is running at higher RPMs, the combustion process may produce different size particles with different hydrocarbon make-up than the particles that have condensed on or adhered to the side of the engine (presumably during taxiing or idling at the gate) and exposed to prolonged periods of high temperature.

Given the continued reporting of anecdotal evidence of soot deposition and the open issues as to the accuracy and robustness of the soot monitoring protocol, the City of Boston respectfully submits that this matter demands further study. Coupled with the continuing problem of odor from aircraft operations, the overall emissions from all airside operations should be the subject of a truly comprehensive, state-of-the-art monitoring and modeling study. Critical components of this study should include: 37.37

1. Compilation of a database on emission factors for aircraft engines typically found at Logan;
2. Detailed modeling for NOx, PM_{10}, $PM_{2.5}$, and VOCs based on emissions factors and number of operations/elapsed time of operations for each type of engine. The model should include both worst-case and averages based on meteorological data for the past 5 years; and,
3. A particulate deposition study using data from actual jet engine test cell sampling to provide more accurate particle speciation of soot collected from the surrounding neighborhoods.

The methodology for this study should be subject to public and peer review prior to implementation.

The proposed Runway 14/32, at a minimum, facilitates more aircraft operations per hour during certain weather conditions. This is especially of concern when 14/32 is used for departures (wind out of the southeast) and emissions from take-off are blown back into the neighborhood. The result is that the Jeffries Point neighborhood and surrounding areas may experience an increase in concentration of jet emissions during southeast wind conditions. Moreover, 14/32 is part of Logan Airport's overall program to increase passengers levels to a minimum of 37.5 million in 2010 and, as such, contributes to the increase in emissions generated by the new aircraft operations. For these reasons alone, the Secretary should find the air quality analysis in this DEIS/R inadequate and order a re-filing of a DEIS/R including a full air quality analysis based on data from the studies outlined above. 37.38 37.39

Noise

The City respectfully disagrees with the statement in the DEIS/R that the Centerfield Taxiway will reduce noise impacts from taxiing aircraft in the areas located north/northeast of the airport. 37.40

In our analysis, the Centerfield Taxiway will allow an increased number of aircraft to queue on the airport's taxiways with their engines running. A close inspection of Massport's Airport Layout Plan (ALP) clearly notes that the Bayswater Street neighborhood of East Boston is only about 1,500 feet from Taxiway November as it runs from Runways 22L and 22R. Residents living in the Orient Logan

Heights section of East Boston between the Winthrop and Scarpa Bridges experience daily the consequences of lengthy aircraft idling. This is especially notable during the warm summer weather when 22L and 22R are used simultaneously for large aircraft operations.

It is during the summer season that air and noise impacts are most severe for East Boston residents. The existing aggregation of departures and arrivals on 22R/L and taxi events on November Taxiway cause a great deal of discomfort for those who live in Orient Heights. The Centerfield Taxiway will increase these numbers, adversely impacting residents and beach users. The low frequency noise associated with departures and high frequency noise associated with arrivals and taxiing aircraft also substantially increase the irritation experienced by residents and beach-goers.

Other Boston neighborhoods will also experience elevated noise levels as a result of the proposed plan. The projected increase in take-offs from Runway 27 will affect, at a minimum, the Seaport, South Boston, the South End, Roxbury, the Fenway, Jamaica Plain, Roslindale, Mattapan, West Roxbury and Hyde Park. Charlestown will also experience substantial increases in aircraft-related noise.

Blast Fence

The Blast Fence at the Runway 22R/22L end of Logan, directly across from the Orient Heights Yacht Club and Bayswater Street, is briefly mentioned in the DEIS/R. The issue of this fence and the absence of related community process is another example of how the needs of East Boston residents are devalued. Further, it serves as an illustration of the conflicting interests faced by airport and federal decision-makers as demand at Logan increases. 37.41

East Boston residents view the blast fence as a device that partially mitigates fumes, noise and blast effects from takeoffs on Runway 22R. Massport believes that is has an obligation to take the fence down because it frangible, and would therefore present a hazard to flight personnel and air passengers in the event of a crash. Although residents are equally concerned with airline safety, the community feels strongly that the removal of the fence will negatively affect yacht club members, recreational users of Constitution Beach and those who live in Orient Heights. The safety of air passengers, flight and ground personnel should not be accomplished at the expense of members of the public. Noise, fumes and the jet blast may present a hazard to residents, boaters and other uses of the beach. An alternatives analysis, prior to the filing of environmental documents, should include the results of a detailed investigation of a non-frangible barrier and other methods to ensure that the quality of life in and adjacent to Orient Heights is not further degraded.

Reduced Approach Minimums for Runways 15R, 22L and 27

The City does not agree with the FAA's assertion that lowering landing minimums will result in noise benefits for residents under the approach path to the runways in question. As the City understand the policy used by air traffic controllers in the Boston Tower when a pilot performs a missed approach because he/she cannot see the runway, the FAA will close that particular runway and choose a secondary runway or, in a serious weather situation, close the airport until there is an improvement. Lowering the landing minimums is likely to result in the use of these runways more often during poor the weather conditions exposing nearby residents to noise levels which they currently do not experience. 37.42

The City of Boston believes that lowering the landing minimums will only serve to expose already overburdened residents to additional noise impacts. Aircraft operations during inclement weather tend to expose nearby residents to **higher** noise levels than under normal operating conditions. The reasons for this are twofold. First, during severe weather conditions involving heavy winds and rain, a pilot must apply a greater level of thrust and adjust the aircraft's flap setting to maintain stable flight. This results in higher noise levels

and increased impacts for residents under the flight path. Second, a low cloud cover is usually present under the weather conditions that dictate the use of these lower landing minimums. When this situation occurs, noise levels from aircraft events are amplified in intensity and tend to last longer than on a clear day.

The DEIS/R indicates that the reduction of approach minimums is consistent with the minimums in effect at other major commercial airports. Current industry practice for major commercial airports allows for greater use of the four runways under certain weather conditions. However, Logan is not a typical airport. It is located in a densely populated residential area, near scarce open spaces and other sensitive receptors. This makes noise a very real problem, one that will be exacerbated by the increased thrust necessary to abort a landing at lower minimums. The City questions if the referenced "major commercial airports" are located in similar areas. When other major commercial airports are referenced in environmental review documents, the locations and characteristics of these airports should be detailed. 37.43

The approach to Runway 15R positions arriving aircraft over the heavily populated Eagle Hill section of East Boston while the approach pattern to Runway 22L results in overflights in the Orient Heights neighborhood. Lowering the landing minimums on Runways 22L and 15R will increase the noise impacts on East Boston residents. As noted in the DEIS/R (Volume I, p. 3-36), the City of Boston entered into an agreement with the FAA and Massport not to decrease the landing minimums on Runway 15R. It is our intention that this agreement should be respected and honored. The City's concerns are based on the premise that an arrival is the most difficult and challenging portion of a flight and that the poor the weather conditions that usually trigger the use of these lower landing minimums only serve to heighten the workload for pilots during this segment of a flight. With the high number of residents living alarmingly close to the touchdown point of these two runways, the lowering of the landing minimums will place these residents in additional peril. 37.44

Water Quality

Logan was constructed in wetlands at a time when the value of wetlands was neither recognized nor acknowledged. Over the years, the airport has expanded further into the wetlands and coastal resources of the City. Issues such as the regional economy and transportation have overshadowed the protection of the remaining wetlands. Although Massport has committed to protecting the bordering resource areas and complying with permit conditions, contaminants continue to enter Boston Harbor.

There are four Environmental Protection Agency (EPA) National Pollution Discharge and Elimination System (NPDES) permitted outfalls at Logan Airport: North, West, Porter and Maverick. According to the 1997 GEIR Annual Update (AU), only the North and West outfalls are equipped with advanced oil/water separator treatment systems. As described in the AU, the North Outfall "improved its compliance record for oil and grease, was in full compliance for pH, and compliance for settleable solids was slightly lower than in previous years." The West Outfall "achieved near-full compliance for oil and grease, and 100 percent compliance for pH levels and settleable solids." The Porter Street Outfall was in "complete compliance" with the NPDES permit requirements for oil and grease and pH. The Maverick Street Outfall achieved "full compliance" for oil and grease and "near-full compliance" for pH. The City finds this reporting imprecise and misleading and it is apparent that discharges are not meeting the EPA's NPDES limits. 37.45

Massport's DEIS/R description of its present drainage system describes four NPDES outfalls that drain terminal areas and portions of the airfield, approximately 50 perimeter outfalls and reliance on infiltration over pervious grasslands for the main airfield. The West Outfall, with a 557 acre drainage area, employs pollution control devices, including a mechanically cleaned bar screen, oil skimmer, grinder pump, sedimentation tank and an oil/water separator. The DEIS/EIR does not identify any pollution treatment structures for the North, 37.46

Porter and Maverick Outfalls that, combined, serve a 306 acre drainage area. It is also unknown if the 50 perimeter outfalls treat pollutants and if they are monitored and maintained.

Since 1989, the Boston Conservation Commission (BCC) has issued to Massport eleven Orders of Conditions requiring protection of bordering wetland resources. These special conditions issued by the BCC relate not only to the construction periods of projects but to the perpetual operation and maintenance of new structures.

In 1994, 9,000 square feet of wetlands (salt marsh) were lost due to construction of an FAA-mandated safety ramp at the end of Runway 22L. The U.S. Army Corps of Engineers (USACOE), the Commonwealth of Massachusetts Department of Environmental Protection (DEP) and the BCC required that Massport replicate 56, 250 square feet of salt marsh on the grounds of Logan Airport in the Wood Island Marsh area of Boston Harbor. The fifth and final annual monitoring report issued for the salt marsh in 1998 states that the vegetative cover across the created marsh is at the 70% level. ***The full value of the lost wetlands is hard to establish and there are serious questions as to whether created wetlands truly replicate the full functions of a natural wetland.***

While Massport identifies its existing drainage structures, there is no information describing drainage plans for 14/32 runoff. Pervious vegetated areas and infiltration are mentioned numerous times as beneficial to reducing water quality impacts and include a statement that "the combination of overland runoff and a large number of small discharge locations tends to attenuate and disperse the de-icing compounds used on the airfield" (DEIS/R Volume I, p. 6-94). The proposed airside improvements will result in the conversion of 39.4 acres of vegetation to paved surface. Massport anticipates the need to use more de-icing agent with the proposed improvements. If overland dispersion is presently a method of treating these compounds, how will the loss of 39.4 acres be addressed? . How will Massport mitigate this loss of pervious area? 37.47

It is obvious when one reviews Logan AUs that Massport is experiencing difficulty in complying with the BCC Orders of Conditions and EPA NPDES permits conditions. Although the AUs note that some improvements are being made, the BCC will find it difficult to permit the creation of additional impervious surface and the construction of additional facilities that may impact Boston Harbor and bordering wetland resources. The City concludes that Logan has reached its maximum development level or may have surpassed its capacity for this parcel, bordered by fragile natural resources. 37.48

Billions of taxpayer dollars are being spent to clean and maintain Boston Harbor. Federal, State, and local environmental agencies permit and regulate facilities that discharge into the Boston Harbor Watershed. New permits or amended permits for increased size or capacity of facilities that discharge are conditional upon compliance with existing uses. The City asks that Massport review its permits, including all perpetual Orders of Conditions, and provide evidence that these conditions are being met.

Furthermore, the City asks that Massport provide documentation that these commitments are being met: 37.49

DEP File No. 6-464, March 13, 1991
Logan Landscaping Improvements Special Conditions

14. Where relevant, all facilities and equipment will be continually operated and maintained so as to comply with the conditions and the Act. Maintenance conditions are ongoing and do not expire at the end of one year or with the issuance of the Certificate of Compliance. The applicant, owner successor or assignees shall be responsible for maintaining all on-site drainage structures and outfalls, assuring the lasting integrity of the surface cover on the site

and site activities so as to prevent erosion, siltation, sedimentation, chemical contamination or other detrimental impact to the on-site and/or off-site resources areas.
19. All surface drains on the project site must have a legible stencil painting within one foot of the structure indicating that the drain drains to the Boston Harbor.

DEP File No. 6-467, June19, 1991
Massport Employee Parking and Associated Roadway Special Conditions

37.50

16. Where relevant, all facilities and equipment will be continually operated and maintained so as to comply with the conditions and the Act. Maintenance conditions are ongoing and do not expire at the end of one year or with the issuance of the Certificate of Compliance. The applicant, owner successor or assignees shall be responsible for maintaining all on-site drainage structures and outfalls, assuring the lasting integrity of the surface cover on the site and site activities so as to prevent erosion, siltation, sedimentation, chemical contamination or other detrimental impact to the on-site and/or off-site resources areas
18. Signage on the site shall indicate that the drainage drains to the Boston Harbor.
20. All catch basins and other drainage structures shall be cleaned and maintained regularly. A plan and schedule shall be submitted to the Boston Conservation Commission prior to the issuance of a certificate of Compliance. This maintenance condition shall continue in perpetuity.

DEP File No. 6-516, July 22, 1992
Massport Test Borings/Logan

37.51

16. During and after work on this project, there shall be no discharge or spillage of fuel, oil or other pollutant into any area of statutory interest. The proponent shall have an emergency spill management plan prior to work start up, a copy shall be sent to the Conservation Commission.

DEP File No. 6-544, May12, 1993
Logan Safety Ends

37.52

14. Where relevant, all facilities and equipment will be continually operated and maintained so as to comply with the conditions and the Act. Maintenance conditions are ongoing and do not expire at the end of one year or with the issuance of the Certificate of Compliance. The applicant, owner successor or assignees shall be responsible for maintaining all on-site drainage structures and outfalls, assuring the lasting integrity of the surface cover on the site and site activities so as to prevent erosion, siltation, sedimentation, chemical contamination or other detrimental impact to the on-site and/or off-site resources areas
34. All newly constructed or relocated catch basins for runoff from the perimeter access road or other paved surfaces shall include oil/water separators to meet the needs of appropriate control of the paved drainage area. Enclosed are BWCS oil/water separator standards.

Wildlife Habitat

Massport minimizes the importance of wildlife habitat areas at Logan Airport claiming that the urban environment hampers the establishment and/or viability of any natural habitat. The City accepts that the wildlife, a variety of birds and mammals, take second place to the functioning of the airport. At the same time, the Boston Conservation Commission serves to protect and enhance the City's natural resources. The established habitat, including the presence of the upland sandpiper (a state-listed endangered species) is proof

that there is a viable habitat at the airport and that Logan is not and cannot be segregated from the Boston Harbor and Belle Isle Marsh ecosystems. 37.53

The DEIS/R Conservation and Management Plan has three sections:

- alteration of existing airfield grassland mowing procedures to encourage the uses of non-construction areas;
- implementation of a pre-construction and an on-going pre-mowing upland sandpiper reconnaissance program; and,
- off-site mitigation.

The City strongly objects to the suggestion that off-site mitigation should occur outside of the Boston Harbor area.

Public Health

The Boston Public Health Commission (BPHC), believes that Massport, the FAA and the U. S. Department of Transportation (DOT) have failed to take the health of Boston residents into consideration in planning the proposed project. This is of particular concern because of the potential impact on some of the City's most vulnerable populations, disproportionately affected by negative environmental factors. In addition, the failure to consider such matters appears to be out of compliance with federal Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This Order requires every federal agency to identify and address the environmental and health effects of its programs that particularly burden minority and low-income communities. The City asks that the FAA and DOT comply with this Order and provide documentation and all relevant data to that effect. Additional detail is provided in the attached letter from the BPHC. 37.54 37.55

The City notes that Massport was a contributor to a South Boston air quality study conducted by the Harvard School of Public Health on behalf of the South Boston Community Health Center. The study gathered important information on various sources of air contaminants including apportioning sources of PM_{10} and $PM_{2.5}$. There would be considerable value in gathering such information and monitoring particulate matter levels in other Boston neighborhoods impacted by Logan. This information will allow public health officials to build on the information gathered thus far.

TRANSPORTATION

Ground Transportation

Massport has consistently framed projects based upon a premise that landside and airside issues are independent of each other. The City of Boston has long maintained that the two are inextricably linked. 37.56

The City of Boston requests that the Secretary find this DEIS/R inadequate on the grounds that there is no analysis of the landside transportation impacts of the proposed Runway 14/32. The DEIS/R's reliance on analysis included in the GEIR is unacceptable, since the GEIR does not include specific impacts related to Runway 14/32. In addition, the City finds that many of the GEIR's assumptions related to HOV and transit modes are questionable, and that these assumptions should be re-examined.

The DEIS/R's neglect of landside transportation issues is based on the premise that Runway 14/32 will not add capacity, only relieve delay. The City strongly questions the premise that passenger demand at Logan Airport is inelastic with respect to delay. The DEIS/R states that passenger demand will grow from approximately 25 million per year to 37.5 to 45 million per year, irrespective of the levels of delay, whether or not Runway 14/32 is built. Under this assumption, the only impact is on delay, which more than quadruples from an estimated 37.57

143,000 hours in 1998 to 596,000 hours in 2010 with no new runway. It is illogical to suggest that such an increase in delay would not result in a shift in air service to New England's other airports or other services to substitute for air travel to and from Logan Airport. Such a shift in activity would result in divergent Build and No-Build conditions.

This demands that Massport analyze the difference between the Build and No-Build conditions, for both airside and landside impacts. Massport should be required to examine runway operational capacity, landside trips by mode, impact on roadway and transit capacity, and unfulfilled passenger and cargo demand that could be accommodated at other regional airports and transportation facilities. 37.58

Further, the GEIR's traffic analysis sections have consistently been fraught with unsupported assumptions and questionable methodologies. For instance, in calculating high-occupancy vehicle trips (HOVs), Massport includes employees who come in by shuttle bus from the 1,550-car parking garage in Chelsea and from parking facilities in Revere. Most employees have driven in single occupant vehicles (SOVs) to these facilities and ride in an HOV for about one mile to the airport. It is specious to suggest that a one mile ride in a shuttle van or bus from a parking lot to the airport constitutes HOV commuting. Such a perspective could conceivably allow for reports of increased employee HOV use while the 7,100 on-airport employee spaces and a substantial increase in employee parking in areas surrounding the airport would allow for ample, unconstrained SOV commuting. 37.59

According to the 1997 GEIR Annual Update, 1997 scheduled and non-scheduled air passenger HOV ridership increased by 6.8% and 7.0% respectively over 1996 levels. While the City is pleased to see HOV increases, the question remains how single party transportation by an unscheduled commercial provider is considered an HOV service. A means of transit should not be considered high occupancy unless there are three or more air passengers in the vehicle for the majority of the trip. A private, on-demand service that transports one passenger to Logan is not an HOV, but functions as does a taxi.

Again, future air passenger surveys, information asked of registered providers and Transportation Services Unit statistics should distinguish between the use of vehicles containing less than three air passengers and those containing three or more air passengers (true HOVs). Current and projected mode share statistics should then be modified as necessary to reflect the difference. A distinction must also be made between carpoolers and drop-off/pick-ups. The Boston Transportation Department (BTD) suggests that Massport re-think traffic impact analysis in terms of vehicle-miles traveled and passengers per vehicle trip.

Massport appears to rely on additional passenger and employee parking facilities just outside the East Boston parking freeze area to get employees and passengers within shuttle range of the airport. This puts an increased burden on private sector carriers and nearby communities to accommodate potentially dramatic increases in vehicle trips. This would certainly seem to work against the goals of the Transportation Management Association (TMA). 37.60

The 1997 Annual Update indicates that TMA membership is now 20% of all airport employees and that one TMA member is offering subsidized MBTA passes. No information is provided about the number of employees who belong to the TMA or who receive an MBTA pass subsidy. No explanation is offered for the TMA estimate that a reduction of only 250 to 300 employee commuter vehicle trips may result from Transportation Demand Management (TDM) measures. With 15,000 individuals employed at Logan, this trip reduction estimate is particularly questionable. 37.61

Completion of the MBTA's Blue Line Modernization Program is described as a project that, in conjunction with the Airport Intermodal Transit Connector (AITC) and other transit projects will help increase the number of airport passengers using transit. Although the MBTA has not announced a final project schedule for the Blue Line project, it has been progressing at a slower than anticipated pace. This situation must be taken into account in assessing the impacts of increased operations and passenger levels. 37.62

Centerfield Taxiway

The DEIS/R claims the Centerfield Taxiway will reduce taxi delay for 4R arrivals trying to cross 4L at the 33R/4L intersection, permitting simultaneous crossings of 4L at multiple points and moving activity away from communities. There are currently three (3) access points available to cross Runway 4L for arrival traffic on Runway 4R enroute to the terminal area: 37.63

- the high speed turn-off Taxiway R to Taxiway N;
- the high speed turn-off Taxiway Y to Runway; and,
- for smaller jets and commuter aircraft, Runway 33L to Taxiway Q.

It is not clear why three (3) crossing points to Runway 4L are insufficient to handle most, if not all, capacity situations. Based on Massport's assertion that three crossing points are in adequate, specific information is lacking to substantiate the claim, such as:

- the number of crossing points for Runway 22R/4L that Massport believes and the FAA requires to reduce taxiing delays for Runway 4R arrivals;
- a description of scenarios under which there would there be more than three (3) aircraft on various taxiways waiting to cross Runway 4L with Runway 4R in use for arrivals; and,
- a description of the delay benefits to an aircraft landing on Runway 4R, and holding short of Runway 4L under current conditions, in comparison to an aircraft landing on 4R and using the Centerfield Taxiway to seek an additional point to cross 4L.

The Runway 4R scenario fails to justify the benefits of the Centerfield Taxiway. The City disagrees on the issue of simultaneous crossings of Runway 4L at multiple points. Additionally, Massport's claim that the Centerfield Taxiway will move this type of activity away from the community lacks merit. While it may move aircraft taxiing to the terminal area further from the Harborview section of East Boston, it would move taxiing aircraft closer to both the Bayswater section of East Boston and the town of Winthrop. Even if the Centerfield Taxiway is constructed, a pilot must still hold short of Runway 4L prior to crossing, regardless of the point of approach, until he or she receives FAA ground control clearance.

While the Centerfield Taxiway would provide an additional taxiing route to both Runways 22L and 22R, the City believes that the delay benefits may be exaggerated. The issue of Runway 22L departures is overstated as demand for departures on this runway is minimal. Further, the City question the delay benefits of a Centerfield Taxiway. During peak periods, the current number of aircraft on Taxiway November, approximately 3,800 feet in length, enroute to Runways 22R/L for departure, usually totals 10 to fifteen. The Centerfield Taxiway will be 9,300 feet in length. Since both the FAA and Massport will not agree to limit the number of aircraft allowed to queue on the Centerfield Taxiway, this will result in the potential for FAA ground controllers to approve permission for 40 to 50 aircraft to taxi to either Runway 22R or 22L. The City finds it difficult to comprehend how any aircraft located in the rear of this enormous queue would depart any earlier than if the pilot 37.64

was waiting at a gate with the plane's engines off. *Delays would remain*, with the only difference being in the location of the aircraft at the airport. Furthermore, additional information and clarification are necessary on the environmental benefits, both from a noise and air quality perspective. It is difficult to comprehend how environmental improvement can occur when there will be a dramatic increase in the number of aircraft on the airfield with engines running. The great majority of these aircraft will operate much closer than they do now to both the Bayswater Street and Court Road neighborhoods. 37.65

The City of Boston believes that possible delays on Echo Taxiway from arrivals on Runway 22L also fail to justify the construction of the Centerfield Taxiway. Massport claims the Centerfield Taxiway would allow simultaneous crossings of Runway 22R at multiple points. This issue must be clarified as the City understands that multiple crossings of 22R currently exist at Taxiways Echo, Charlie and Sierra for large jet aircraft and Taxiways Echo, Charlie, Sierra, Fox Trot and Quebec (via Runway 33L) for smaller aircraft. How many crossing points are required in order for the air traffic controller to have a safe and efficient set of options? Also, what are the environmental benefits related to the Centerfield Taxiway if a pilot enters the Centerfield Taxiway and heads back towards the community seeking a place to cross Runway 22R? 37.66

Although there may be times when an aircraft taxiing on the Inner Taxiway (Alpha) is required to hold short for an aircraft push-back, this event should only occur at Terminal C, Gates 29, 30, 32 and 34. Any delays that occur in this small area are infrequent and do not necessitate the construction of a 9,300 foot taxiway. Also, Massport has listed as one of its criteria for the construction of the Centerfield Taxiway the concern about wing-tip clearance conflicts on Taxiways Alpha (Inner) and Kilo (Outer). Should the Inner Taxiway remain in service subsequent to the construction of the Centerfield Taxiway, what is to prevent this potential conflict from remaining a concern? 37.67

Massport claims the Centerfield Taxiway will enhance the general safety of airside operations and facilitate more efficient movement of aircraft between terminal areas and runways during takeoff and landing procedures. While it may facilitate aircraft movements on the airport surface, the City questions how it would enhance the general safety of airside operations, since the dramatic increase in the number of simultaneous aircraft ground movements could increase the potential for ground incursions on Logan's complex taxiway system. 37.68

The location of the Centerfield Taxiway will be between Runways 22R and 22L, separated from the runways by 1,500 feet. Taking into consideration its length (9,300 feet) and the proposed location, a pilot not familiar with the airport may experience an identification problem while on approach to either 22L or, for small aircraft, 22R. Although surface lighting differentiates taxiways and runways, there exists the potential for a pilot to land his or her aircraft on the wrong runway or on the taxiway itself. While this may not be a daily difficulty, it has transpired at Logan without the existence of the taxiway between the runways. As evidence is the event that occurred on July 12, 1987, when a jet transport landed on Runway 22R rather than 22L as assigned. 37.69

The November Taxiway will remain in operation. Therefore, the City would like to request clarification on how the air quality and noise benefits will be achieved? In our opinion, it appears that 37.70

November Taxiway will continue to impact the East Boston Yacht Club, Constitution Beach and the western portion of Bayswater Street, while the Centerfield Taxiway will place taxiing aircraft closer the Court Road section of Winthrop and to the center of the Orient Heights / Bayswater Street Neighborhood.

The DEIS/R also claims that the Centerfield Taxiway will reduce delays for aircraft enroute to Runways 22R/L for departure. Although this could occur if a minimal number of aircraft on the field, the City questions how this benefit would be accomplished during peak periods of operation, when the number of aircraft movements on the airfield increases substantially? Construction of the Centerfield Taxiway could literally allow more than double the number of aircraft ground movements occurring simultaneously on Logan's taxiway and runway network, than currently possible. Although there would be two routes for aircraft enroute to Runways 22R/L for departure, all the City can deduce from this scenario is the more than doubling of the current level of delays and the associated increase related to both noise and air quality impacts. 37.71

If the motivation behind this taxiway is to open gate space by increasing queues on taxiways, allowing Massport to reduce the so-called "delays" occurring now, then this plan is clearly a capacity enhancement program for Logan. 37.72

Delay

The City questions Massport's representations of delays. Massport asserts in the DEIS/R that delays at Logan are primarily caused by the drop in airfield capacity that results from wind and the weather conditions forcing use of a two runway configuration. However, there is no hard data provided to sustain this conclusion and the DEIS/R discussion fails to comply with the Certificate issued by the Secretary in 1995 on the ENF. Missing from any discussion or evaluation of delay is the role of other airports in delaying flights destined for Logan and problems with equipment or personnel, both at Logan and other airports. Airlines with older fleets may be particularly subject to mechanical difficulties and other delay-prone airports likely contribute to the identified problem at Logan. Delays due to cargo and small commercial and private aircraft must be a significant factor in delay. This suggests to us that delay must be evaluated in a regional context as these are the types of flights most easily accommodated at other airports. 37.73

Future air passenger surveys should include questions about the passenger's origin and the timeliness of the flight(s) leaving the city of origin or that they traveled on prior to reaching Logan.

Peak Period Pricing

Massport's recommended project alternative does not include peak period pricing. Such a program would raise the price of using Logan during hours where the level of demand exceeds available runway capacity.

In its analysis of this administrative option, Massport assumes that some existing aircraft operations would be discontinued by a shift to off-peak hours or cancellation of the service altogether. A scenario in which airlines would move service to a regional airport is not mentioned, as if it were not a viable option. Also neglected is a plan in which airlines would continue to offer flights at peak times but 37.74

would add a surcharge to the fare to make up for the peak assessment. In short, peak period pricing need not result in reduced regional air service. Massport's rejection of this alternative is unsupported by the arguments outlined in the DEIS/R. What is clear is that diversion of service to regional airports, not owned by Massport, will hurt Massport's bottom line.

Finally, Massport considered a revenue neutral peak period fee structure in 1992 and decided to publicly examine that option as part of an overall airside improvements plan. This represents the loss of six years in which such a program might have helped regional airports attract service.

REGIONAL ALTERNATIVES

The DEIS/R asserts that Massport's overall planning strategy for managing congestion and improving Logan's operational efficiency includes the use of regional air, rail and videoconferencing (telecommunications) alternatives. Ensuring the efficient use of the region's transportation infrastructure is described as the collaborative function of a range of transportation entities including the FAA, Massachusetts Aeronautics Commission, New England State Aviation Directors and regional airports. Participation in long-term regional planning studies is also identified as part of Massport's long-standing recognition of the importance of discussions on intermodal, regional transportation projects.

Background

The City of Boston sees the proposed Runway 14/32 as a stop-gap approach to a truly regional transportation problem. The most serious delays at Logan are caused by a lack of appealing alternative airports in greater Boston for airlines and consumers. Without attractive options, traffic to Logan will continue to increase. The City of Boston cannot absorb additional growth in capacity.

According to Massport's own documentation, the opportunities for Logan's growth are limited. Massport's Director of Aviation stated that "Ultimately, there will be a ceiling that will be hit" (Boston Globe, June 19, 1994). As far back as four years ago, Massport staff noted that "Logan can't continue to handle it anymore" (Boston Globe, November 28, 1995). An FAA-funded report further stated that "regardless of the author or methodology, everyone agrees that Logan will soon be unable to meet demand" (New England Regional Air Passenger Service Study, Executive Summary, 1995).

The DEIS/R states that the majority of Logan's users come from beyond Route 128. This indicates that growth is occurring at the metropolitan edge while Logan remains greater Boston's only major airport. As more travelers fight traffic on urban roadways to get to Logan, the people who live and work beyond Route 128 will be unable to get to Logan on time. In the final analysis, attracting more passenger traffic to Logan will only aggravate delays. According to a 1995 Boston Globe report, this fact has been recognized by Massport officials. In a December 24, 1995 article, an official stated that a new runway at Logan "won't ease the congestion that now ranks Boston as the nation's fifth worst city for flight delays. This record undoubtedly will get worse,...if Logan's passenger traffic grows as expected, from 25 million people this year to a projected 45 million in 2010." The Strategic Assessment Report (SAR), conducted in 1993 for the Massachusetts Aeronautics Commission (MAC) by Arthur D. Little, Inc., agreed: "Simply improving the capacity of Logan will not solve the transportation capacity problem" in the region (SAR, Volume 1, ES-6).

The FAA's Airports Division of the New England Region determined that decentralizing airport usage patterns is critical to meet the region's future high speed transportation needs (Issues in Developing a New England Service Plan, April 28, 1994). Massport's planners voiced the same conclusion. "Diverting travelers from Logan, they say, is about the only way that they can see to relieve growing congestion and delays in Boston"

(Boston Globe, December 24, 1995). Any further concentration of traffic at Logan Airport contradicts these policy statements.

Table 4-8 in the 1996 Annual Update (AU) to Massport's Generic Environmental Impact Report (GEIR), contained a list of Regional Planning Studies and the implications of those studies for Logan. The City found that the information Massport chose to highlight from two of the cited studies, the SAR and the Second Major Airport Siting Study (SMA), did not fully represent the conclusions of those studies as they would affect Logan. The same is true for the way in which Massport now portrays the motivations for and conclusions of these studies in public Airside Improvements presentations. 37.75

The SMA study was undertaken because the 1989 Massachusetts Airport System Plan (MASP) concluded that even with operational and capacity improvements at Logan there would be a need for a second major airport by 2010. The SMA study did not contain a specific recommendation about the type of airport necessary (international, short-haul or long-haul domestic). The SMA study recommended that the state land bank a suitable site for a potential second major airport, most preferably at the decommissioned Ft. Devens in Ayer, near the junction of Interstate 495 and Route 2. This policy recommendation was eventually discarded by the Weld administration.

After the Weld administration decided against pursuing plans for a second major airport in the region, the Strategic Assessment Report (SAR) was conducted and rested upon baseline assumptions that were different from the 1989 MASP and 1990 SMA study. The primary differences were in demand forecasting for Logan and in the potential effects of telecommunications and new travel technologies on passenger numbers. Significant reductions in air travel demand were forecast due to projected growth in telecommunications (including videoconferencing), vertical take-off and landing (VTOL), magnetic levitation (maglev) and high speed rail. While high speed rail will be a reality along the Northeast Corridor this year, the cost of service may not provide a sufficient incentive for a change from air travel. The effect of the other technologies on transportation demand is not well understood or documented and the City believes that passenger diversion conclusions were vastly overstated. For example, the SAR claimed that telecommunications could divert up to 10 million passengers from air travel by the year 2010. Stephen P. Tocco, when Executive Director of Massport, noted in November 5, 1993 comments on the SAR that Massport did not believe that "teleconferencing and other telecomm technologies will have the impact of easing demand for travel services by 2.5 million in 2010 and 7.2 million passengers in 2030" (SAR, Vol. III, p. B-4).

While telecommunications may play a role (as yet undetermined in scope) in changing business air travel, it will have no impact on pleasure travel. The potential for widespread use of VTOL is unknown and issues such as noise, safety, terminal locations and ground access are unaddressed. Maglev technology has not yet been tested in commercial use in the U.S. and the City is aware of no plans for such testing.

It was determined through data evaluation for the SAR that, "The demand forecast identified the potential need for a facility smaller than the originally envisioned SMA, but larger than that offered by current or potential regional airports" (SAR, 2-11). This report considered the option of a "large regional reliever airport" (LRRA) instead (SAR, ES-7). It urged the state to "reconsider expanded use of one of the air bases or the existing regional airports not as a regional airport, but as a regional reliever airport, with special consideration given to Hanscom Field due to its proximity to the demand" (SAR, ES-5).

According to the SAR, "based on location alone, the Hanscom Field site was more attractive to travelers than the SMA and any other non-Logan site." The report said that initially Hanscom could accommodate 720,000 passengers a year and ultimately take 4.1 million passengers a year away from Logan, compared to an

estimated 3.95 million passengers that could be served at a new second major airport at Ft. Devens (SAR, 3-94 and 5-16). Use of Hanscom as a reliever airport "provides the largest diversion from Logan of any scenario in this study" and "would appear to have a very beneficial effect on the noise and surface traffic impacts on the communities surrounding Logan" (SAR, 5-86).

In addition, the SAR urged Massport to pursue options to raise Logan's "weighted average peak hour capacity" (see section entitled, "Logan International Airport Capacity Enhancement," SAR, Vol. II, p.4-12). According to the SAR, renewed interest in the long dormant Runway 14/32 proposal grew out of a "Capacity Delay Task Force." But Michael Dawson, a private aviation consultant, in a letter to Massport correcting errors in the report, claimed that the correct name for this group was actually the "Airport Capacity Enhancement Task Force." This is an important distinction, because if Runway 14/32 is in reality a capacity enhancing measure, then the rationale for the runway contradicts Massport's recent statements. It may also violate the Supreme Judicial Court injunction that prohibits the airport's expansion. 37.76

Clearly, as the recommendations of both the SAR and SMA were ignored by state officials, Logan now finds itself in a severe capacity crunch and the most obvious target for expansion. 37.77

Peak hour travel time at Logan is a limited resource. Adding another runway is like adding another lane to the Central Artery. It is not a long term solution. Until Massport and a consortium of other public entities can expand capacity at alternative airports within the region, the immediate solution for relieving delays at Logan is to ration the existing resource through demand management policies. As noted in the SAR (Volume II, p. 2-8), "Demand management could prove to be a necessary tool for managing the utilization of the existing capacity if no consensus can be reached on making improvements or additions to existing high-speed inter city transportation infrastructure." The SAR put Logan's "practical capacity" at an average of 95 operations per peak hour. "An unpublished re-assessment by the FAA's New England Region Office in 1992 placed this value at approximately 93.6" (1993 SAR, Volume II, p. 4-11).

The Proponents contend that Runway 14/32, on its own, does not generate any additional aircraft operations or increase in passengers, it merely reduces delays (see DEIS/R 7.0 at 7-3). At the same time, Massport expends considerable effort to argue that the excessive delays at Logan Airport make Boston and Massachusetts less competitive for business and tourism (DEIS/R p. 1.0). However, the proposed new Runway 14/32 will precipitate increased passenger volumes with consequent increases in vehicle-miles traveled. In the past, Massport has cloaked airside improvements under the veil of improved management of existing aircraft operations. But clearly, 14/32 is different and will facilitate a new round of added air service and increases in vehicle traffic on the roads, both locally and regionally. 37.78

Massport claimed that it can seek to remove the injunction against capacity enhancing improvements for "reliever" purposes (Wall Street Journal, April 19, 1999). If this is actually the case, the City questions why Massport has not pursued demand management policies such as peak hour pricing for relief. Unlike an additional runway or alternative airport development, such a solution could be implemented much more quickly at a much lower public cost. 37.79

Massport has indicated that delays at Logan will continue to grow over time whether or not Runway 14/32 is constructed. Constructing a new runway is only a short-term approach and will do little to solve the expanding regional transportation issues that must be addressed through a comprehensive, regional, inter/multi-modal solution. 37.80

In Section 2.5.1 of the DEIS/R (Volume I, p. 2-38), Massport claims to be "actively engaged in promoting the use of alternative travel choices to provide relief to Logan." Massport talked about relieving congestion at Logan by expanding use of the state's regional airports in Worcester and New Bedford. Yet, after years of talk and so-called plans, Worcester and New Bedford carry the lowest number of passengers of the eight New England regional airports examined in the Regional Air Service Study.

The airport in Worcester, New England's second largest city, retains only nine percent of its service area traffic. This is not much better than Manchester's airport, which retains only 25 percent (DEIS/R, p. 2-18). Together, these two airports lose 4 million passengers a year to Logan (NEC Study, paper #1, p. 2). These travelers represent almost all of the five million passengers who bypass regional airports to drive to Logan every year. And, these five million passengers who bypass regional airports make up roughly 20 percent of Logan's annual passenger traffic (DEIS/R, p. 2-19). 37.81

A Worcester airport study issued in 1995 estimated Worcester's service area demand at 2.2 million, many times more than the 160,000 annual users at the time (NEC Study, paper #1, Table 7). Massport states, "Aggressive service development at the regional airports is the key to recapture the traffic they now lose to Logan." Yet there has been no aggressive service development at Worcester, Hanscom or any other regional airport in Massachusetts, even though Massport claims that "The regional alternatives to Logan airport are an important component of Massport's plan for reducing delays at Logan" (EIS/R 2-48).

According to the New England Regional Air Passenger Service Study conducted by the New England Council in 1995 (NEC Study), the keys to making regional airports more attractive are increased air service at competitive fares and improved ground access as well as shorter drive times and less traffic congestion than the ground routes to Logan (NEC Study, paper #1, p. 6). The NEC Study also found New England's existing regional airports were "capturing less than their full potential demand" and pointed to "significant potential for increased jet service at each of the regional airports" (NEC Study, paper #3, p. 2). This study estimated Logan's total annual operations capacity at 500,000; Hanscom's at 322,000; and Worcester at 282,000.

The City reminds you that Massport's Logan revenues must remain at certain levels to maintain current infrastructure and programming and to provide a return to bondholders. As such, the promotion of other modes of travel or other airports for travel is the promotion of competition for Massport. Massport's unsuccessful record in diverting traffic to other airports makes the City doubt Massport's claim of promoting regional alternatives.

Furthermore, the City notes that the DEIS/R does not include any discussion of the diversion of cargo to off-airport alternatives and, thus, does not comply with the Secretary's Certificate on the ENF. 37.82

Although the DEIS/R states that "The regional alternatives to Logan airport are an important component of Massport's plan for reducing delays at Logan" there has been no aggressive service development at Worcester, Hanscom or any other regional airport in Massachusetts (DEIS/R, p. 2-48).

Essential to the success of distributing air traffic within the region is the development of a comprehensive, inter- and multi-modal transportation system. Such a system should address not only the diversion of passengers from air service but should ensure that travelers have convenient vehicular, private and public transit access to regional transportation hubs. Transit options may include shuttle buses, rail, subway and bus access. In order to minimize air quality impacts, incentives should be offered for the use of alternative fueled vehicles. 37.83

37.84

Logan and Worcester Airport survey figures do not distinguish between commuter, charter and other regularly scheduled non-commuter flights. Given the steady growth in small commuter flights to Logan, the City believes that such information is needed so that other airports may examine whether or not there is a commuter market to be captured for their facilities. Overall, this kind of information from regional sources is necessary for long-term planning and strategizing. The City recommends that data yielding this information be part of the evaluation or regional air transit.

Providence and Manchester airports have not diverted traffic from Logan. As for other out of state airports, Massport admits that from 1997 to 1998, "Despite strong growth at T.F. Green [near Providence] and Manchester, passenger traffic was not diverted from Logan. Rather Logan's passenger traffic numbers grew by 3.8 percent in 1998, the highest since 1992" (DEIS/R ES-11).

Laurence G. Hanscom Field

37.85

Hanscom Field (Hanscom) is currently the only airport other than Logan owned and operated by Massport. It has been underused as a part of the regional air transport system. In comments on Massport GEIRs, Annual Updates and project filings, the City has long advocated for improvements to Hanscom that would make it an attractive alternative to Logan for both airlines and passengers. Its potential as a regional facility has been ignored in the DEIS/R and should have received substantial attention in the alternatives analysis.

The DEIS/R notes that no regional carriers have successfully served Hanscom in the past 15 years. As the City has noted in numerous past comment letters, Massport has not invested the funds necessary for infrastructure improvements that would attract cargo and regional service.

General Aviation (GA) activity (private and corporate aircraft) at Logan represents 6.2% of total airport operations. For the four quarters ending in December, 1998, Logan GA activity numbered 31,712 flights. GA flights now landing at Logan could easily be redirected to Hanscom since these are private and corporate, rather than commercial, aircraft. These planes are generally very small and delay larger commercial planes carrying many more passengers. Hanscom could be upgraded into a first-class destination for GA with facilities that would entice many private entities to make the switch. In combination with Peak Period Pricing at Logan, Hanscom could well become a convenient option for many travelers.

Hanscom could also be developed into a Northeast hub airfield offering service to major destinations such as New York, Washington D.C., Philadelphia, Pittsburgh, Cleveland and Detroit. This regional focus would allow suburban business people and residents the opportunity to fly to regional destinations as an end trip or as a connecting point to other destinations. The seven regional destination sites respectively rank 1st, 2nd, 8th, 22nd, 29th and 18th of the top domestic Origin and Destination markets in the U.S.

A problem for Logan is that Boston serves as a regional hub for most of the smaller cities of New England such as Burlington (VT), Portland (ME), Martha's Vineyard, Provincetown and Nantucket. Such cities are served exclusively by small regional and commuter aircraft. Such flights accounted for 40% of all flight operations out of Logan in 1998. Developing Hanscom as a feeder facility for flights within the Northeast could result in a reduction in Logan's flight operations significantly.

Finally, extending the MBTA's Red Line from Alewife to Hanscom should be considered as an access option as should a connection with the Fitchburg Commuter Rail line that now stops in Lincoln and Concord.

Worcester Airport

A December, 1995 Final Supplemental Environmental Impact Statement/Report (FSEIS/R) outlined improvements planned for the Worcester Airport (Worcester) and presented a section (2.0) titled Worcester Airport's Role and Potential for Growth. Worcester is designated by the FAA as a Primary Commercial Service Airport and, under the National Plan of Integrated Airport Systems (NPIAS), as a Transport-Short Haul Airport. It was designated for priority improvement funding by MAC in the 1989 Massachusetts Airport System Plan (MASP) and determined to be not capable of becoming a major hub airport. Its primary mission was identified as service to its own geographic market based upon regional business and economic needs and not to duplicate or handle the overflow from Logan.

A number of factors contributing to the limited potential for airport growth in Worcester were cited in the FSEIS/R. The airport is surrounded by steep topography and the wetlands that border tributaries to a public water supply reservoir, leaving little developable land. The airport's high elevation (1,009 feet above sea level) can limit operations by aircraft equipped to fly only under Visual Flight Rules (VFR) and cloud cover causes Instrument Flight Rules (IFR) traffic about 15 percent of the time. Lack of direct highway access and airspace constraints as a result of FAA safety regulations further restrict the potential for expansion.

The Worcester FSEIS/R cites a 1984 Massport survey of Logan passengers showing that about 238,000 enplanements came from outside of Route 495 with the Worcester Airport market generating approximately 256,000 total enplanements. The number of Logan enplanements represented a loss of one-half of Worcester's potential market to Boston. No information was provided regarding the destination of Worcester area passengers and the City questions if such data was gathered during the Massport passenger survey and might be useful in regional planning.

The Sabre Report, undertaken for MAC, claimed that at Worcester "a reasonable case can be made for initiating scheduled jet aircraft service into some of the more attractive northeast hubs" such as Newark, Philadelphia, Cincinnati, Detroit and direct service to four destinations in Florida (Sabre Report, p. 1-2). The study identified an advantage for Worcester because of "air traffic congestion and mounting ground access problems in getting to Logan." As for cargo, it found that much of the Worcester market's freight was trucked to Logan, even though truck drivers complain of problem traffic en route to and from Logan. It identified Federal Express and United Parcel Service (UPS) as having potential interest in Worcester. Yet, the report noted that, "The major problem for this airport is access. The airport does not have direct access to any interstate highways or other major limited access highways" (Sabre Report, p. 5-6). The study indicated that the maximum acceptable drive time from the highway to the airport would have to be no more than 5-15 minutes (Sabre Report, p. 8-25). The report further stated that the MBTA's Commuter Rail service to Worcester from South Station may siphon off more of Worcester's air travelers because the rail line does not extend from downtown Worcester to the airport, four miles away (Sabre, p. 5-50.)

37.86

Although Worcester may not serve as a primary reliever for Logan, it is fundamental that improved access, preferably off Interstate 90, be addressed first and foremost when planning to expand operations at this facility. In addition, heavily discounted Landing Fees, Gate Fees and a limited tax exemption for airlines serving Worcester Airport may help to attract service.

The discussion of Worcester's regional role in Section 2.3 of the FSEIS/R indicates MAC's acknowledgment in the MASP that capacity at Logan is a problem. It also appears that the issue of duplicating Logan's mission has been discussed. This recognition by MAC is significant and, once again, confirms the City of Boston's conclusion that increasing capacity is the guiding motivation behind Runway 14/32.

Fort Devens

37.87

It is our understanding that decisions have not yet been made regarding the use all of the land at Fort Devens. The City believes that evaluation of the site's potential role in a regional transportation system should be assessed. Data on land availability, ground access, suitable types of aircraft and infrastructure should be assembled and examined to determine if this site is a viable option for a reliever airport.

QUALITY OF LIFE: IMPACTS ON COMMUNITIES

37.88

The DEIS/R, like other Massport project documents, does not adequately address the very real problems and needs of those most affected by airport operations on a daily basis. The safety of Massport and airline staff and air passengers and the quality of passenger service is always accounted for. However, the quality of life of those who live and work in Logan's zone of impact is clearly not acknowledged. For example, the DEIS/R states that this five-year construction program will be conducted up to seven (7) days per week with frequent night work. This aggressive schedule reflects FAA and Massport priorities at the expense of neighbors. The DEIS/R also maintains that service levels at regional airports are primarily based upon the state of the economy and airline decisions, not community impacts. As another example, while the cost of delay for air passengers and airlines is estimated, there is no acknowledgment or discussion of the landside loss of personal and work-related time or the costs of impacts on residents and businesses.

37.89

The DEIS/R states that, due to the airside improvements project, areas such as parkland, farmland and cultural resources will not receive impacts or will receive insignificant impacts. This is inaccurate and one example is the projected increase in flights over Franklin Park. This parkland is an important resource in a dense urban area populated by many people of color and is on the National Register of Historic Places.

BASE YEAR AND FORECAST PLANNING PERIOD

Finally, as further evidence that this DEIS/R is insufficient, the City notes two issues fundamental to conscientious local and regional transportation planning: the choice of a base year for modeling and the forecast planning period.

37.90

The base year in the DEIS/R for modeling and forecasting is 1993, six years ago. Given the changes in fleet mix and other baseline conditions, 1993 is an inappropriate base year.

Projections for 1999 are inappropriately called "near-term" rather than 'current activity' and the year 2010, only 11 years in the future, is called the "long term." The DEIS/R short- and long-term time horizons do not conform with generally accepted planning practices or with FAA standards.. The result is an analysis that relies upon outdated information and inadequate forecasting. At a minimum, planning and forecasting for this project should carry through the year 2020.

In summary, the City of Boston believes that Massport's withdrawal of this document and the formation of a regional transportation panel is the most responsible way to enhance regional capacity. It will also ensure that the impacts inherent in accommodating economic growth are evenly distributed.

Thank you both for the opportunity to offer comment. The City look forward to contributing to the solution to our region's transportation needs.

Sincerely,

Andrea d'Amato
Chief of Environmental Services

Antonia M. Pollak
Director of The Environment Department

Attachments

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CITY OF BOSTON · MASSACHUSETTS

OFFICE OF THE MAYOR
THOMAS M. MENINO

March 26, 1999

The Hon. Robert A. Havern III
Chairman
Joint Committee on Transportation
State House, Room 513
Boston, MA 02133

The Hon. Joseph C. Sullivan
Chairman
Joint Committee on Transportation
State House, Room 443
Boston, MA 02133

Dear Mr. Chairmen:

Thank you for allowing me to testify before your Committee last Tuesday on the proposed runway expansion at Logan Airport.

I endorse the proposal for the Commonwealth to create an independent commission to study the runway expansion at Logan Airport. And I would charge the commission to undertake a regional air traffic improvement plan.

I also suggest that the Commonwealth place a moratorium on the runway expansion project until this plan can be completed. There are far too many unanswered questions to allow the runway to proceed:

37.91

1) there are questions about Logan Airport's long term capacity to serve growing air traffic demand in the region, particularly the growing territory beyond Route 128; according to a recent New England Regional Air Service Study prepared for the Massachusetts Aeronautics Commission and the Massachusetts Port Authority under a grant from the Federal Aviation Administration, "Regardless of author or methodology, everyone agrees that Logan will soon be unable to meet demand"; another runway at Logan will not solve this problem if this is the case;

2) there are questions about whether already congested urban highways can absorb larger volumes of suburban traffic; in 1998, for the very first year, more than half of Logan's passengers came from beyond Route 128; the long term trend of growth at the metropolitan edge shows the Port Authority needs a strategy to serve businesses and passengers in the growing suburban market, without inviting more suburban vehicles onto congested urban roads; 37.92

3) there are questions about the environmental and economic impacts of more congested highways; the Port Authority projects Logan will soon serve 45 million passengers a year, up from 26 million in 1998; commuters who will share the roads with Logan's passengers and residents of surrounding communities who will share the air deserve an accounting of the environmental and economic costs of more traffic congestion and delays on urban roads; 37.93

4) there are questions about genuine causes of delays at Logan other than northwest winds, such as the inability of airlines to find attractive alternative airports in the region; if delays actually stem from airlines scheduling far more flights than Logan is capable of handling, then adding capacity will not solve the problem, it will only allow the problem to grow worse; in fact, the Port Authority projects delays of 59 minutes per flight by 2010; the only real solution is to improve other airports as more attractive alternatives for the airlines; 37.94

5) there are questions about Logan's high volume of small planes that could be accommodated at smaller, regional reliever airports; some 45% of Logan's flight capacity is planes with 40 passengers or less; small planes are inefficient users of airport capacity at peak travel times; without adding a runway, Logan can reduce this percentage through market mechanisms geared to relieve congestion, such as peak pricing; 37.95

6) there are questions about the suitability of alternative airports or the readiness of alternative regional airports to handle increased traffic and meet demand projections; the effects of physical improvements to existing airports, ground access infrastructure, as well as improvements to Logan Airport need to be studied in a regional context, not in isolation; 37.96

7) there are questions about the need to preserve available sites for potential air fields; with Logan at capacity, the state needs to reexamine the suitability of Ft. Devens for a new regional reliever airport to serve growing demand along the I495 and 128 corridiors; Ft. Devens is sited near I495, Route 2, and I195 to Worcester, as well as existing commuter rail lines; the advantages of existing ground access infrastructure at this site should not be overlooked; 37.97

8) there are questions about the regional economic benefits of airport expansion and infrastructure improvements at all facilities in the region, especially Worcester Municipal Airport; Hanscom Field in the Route 128 corridor; and the Ft. Devens site and its proximity to the I495 corridor, Fitchburg, Leominster and Lowell; and 37.98

9) there are questions about whether prohibiting a new runway at Logan would actually have any undesirable consequences to the efficiency of Logan's operations or the region's economy; Logan Airport is growing mightily without the runway anyway; when a new runway was proposed 25 years ago by Massport director Ed King, supporters said the region's economy would suffer if the runway did not open; in fact, the region's economy has exploded and traffic at Logan Airport went from 8 million passengers to 26 million a year. 37.99

I endorse your proposal for the creation of an independent commission, because a regional air traffic improvement plan is the only way for the Commonwealth and our neighboring New England states to study all of these issues in a regional context.

This region's economy, transportation networks, environment, and quality of life cut across too many boundaries to be addressed in isolation or by piecemeal approaches. That is why I call upon the Commonwealth to declare a moratorium on the new runway at Logan Airport until a regional air traffic improvement plan can be completed.

Sincerely,

Thomas M. Menino
Mayor of Boston

CITY OF BOSTON • MASSACHUSETTS

OFFICE OF THE MAYOR
THOMAS M. MENINO

For Immediate release
March 23, 1999

Contact: Press Office
635-4461

MAYOR MENINO SAYS MASSPORT RENEGING ON COMMITMENTS AND LACKS REGIONAL PLANS FOR GROWING AIR TRAFFIC

The following is Mayor Thomas M. Menino's testimony prepared for delivery at the State House on Tuesday, March 23, 1999:

"Mr. Chairman, I come here this morning on behalf of the citizens of Boston to declare my strong opposition to the runway expansion at Logan Airport. And I voice my support for legislation that will prevent that runway from opening.

My reason for doing so is simple. The runway is a violation of Massport's commitments that traffic at Logan would not grow.

I submit for the record testimony to that effect made by former state transportation secretary Frederick Salvucci in last week's *Boston Globe*. Mr. Salvucci said the state agreed to a cap on Logan traffic. He said, and I quote, "The commitment was clear." Now, in just a matter of years, Massport is reneging on that commitment.

37.100

I also submit for the record a report in this week's *Boston Business Journal*. I refer to comments made by former Massport executive director Al Raine, who served under the Weld-Cellucci administration. According to this report, and I quote, "Raine said the commitments were crucial in persuading East Boston residents not to mount what he believes would have been a successful legal and political fight..."

Mr. Chairman, there is a fight today because Massport said it would abide by a cap in air traffic. But now, Massport says there is no cap. That is how Massport deals with the people of Boston. They have pushed us before. They have pushed us time and time again. But this time, the people of Boston will not be pushed without a fight.

The only solution Mr. Chairman, is for the Commonwealth to get serious about a regional solution to a regional problem. 37.101

The runway is not a regional solution. It is a short term band aid, a temporary crutch, a quick fix for an agency that shows an incredible lack of regional vision. An agency with no long term plans for what to do after Logan fills up again.

Relying on other states to improve their airports is not a smart strategy for the Commonwealth. It leaves too much to chance. And worse, it gives those states a chance to capture the economic growth that will be drawn to an alternative airport. The Commonwealth could capture those benefits only if it builds another major airport to serve the region, or expand existing airports like Hanscom Field. Hanscom is in the best position to serve growing businesses along Routes 128 and 495. Not Logan. 37.102

Business people at the edge of the metropolitan region will not be well served by a new runway at Logan. Because the runway will put more airport traffic on the Expressway and the Massachusetts Turnpike. A new runway at Logan will only mean more congestion and delays on our highways. Those delays will mean lost time, lost productivity, and a loss of quality of life. 37.103

Mr. Chairman, I'm not anti-business. I'm not anti-development. I'm pro common sense.

The quality of life in Boston is what keeps our economy strong. Every business leader knows that greater Boston cannot compete with other regions based on the cost of living. We beat the competition because our quality of life ranks among the highest in the nation.

Adding more traffic to congested highways will only weaken our quality of life – and our regional economic advantage. Without an alternative airport, greater Boston has no regional advantage when it comes to air travel.

Yet, Massport has no serious plans for what to do when Logan reaches its new capacity. And until Massport gets serious about a regional solution to a regional problem, the people of Boston cannot take Massport's commitments seriously at all. 37.104

For the sake of our regional economy, and for the sake of our quality of life, I suggest that the Legislature stop the new runway at Logan Airport, and take all necessary steps to explore alternative ways of handling the growing air traffic in our region.

Opening another runway at Logan Airport is a band-aid approach to a problem that requires surgery. The most serious delays at Logan are caused by the lack of attractive alternative airports in greater Boston for airlines and consumers. Without appealing alternative options, more traffic will continue to go to Logan. But Logan can only accommodate so much. 37.105

According to Massport aviation director Thomas Kinton, "Ultimately there will be a ceiling that will be hit." (Boston Globe, 6/19/94) As far back as four years ago, Kinton said, "Logan can't continue to handle it all any more." (Boston Globe 11/28/95) As a Federal Aviation funded "New England Regional Air Service Study" put it, "Regardless of author or methodology, everyone agrees that Logan will soon be unable to meet demand."

More traffic at Logan will only mean more cars, trucks and shuttle buses on our congested highways and urban road system. Logan now serves 26 million passengers a year. Massport expects up to 45 million a year by 2010, an increase of nearly 80 percent. Imagine the impact on traffic on the Expressway or the Mass Pike during rush hours. 37.106

The majority of Logan's users came from beyond Route 128 in 1996. (Massport data.) Why? Growth is occurring at the metropolitan edge. And Logan remains greater Boston's only major airport. As more and more travelers fight traffic on urban roads to get to Logan, the people who work and live beyond Route 128 won't be able to get to Logan on time. Attracting more traffic to Logan will only make these delays worse.

Even Massport admits the new runway won't solve the airport's problems. According to a 1995 report in The Boston Globe, Massport's aviation director Thomas Kinton said the new runway at Logan "won't ease the congestion that now ranks Boston as the nation's fifth worst city for flight delays. This record undoubtedly will get worse, he said, if Logan's passenger traffic grows as expected, from 25 million people this year to a projected 45 million in 2010." (Boston Globe, 12/24/95)

For years, Massport planners have talked about relieving congestion at Logan by building a second major airport or expanding the use of the state's regional airports in Worcester and New Bedford. "Diverting travelers from Logan, they say, is about the only way that they can see to relieve growing congestion and delays in Boston." (Boston Globe 12/24/95) Yet, after years of talk and so-called plans, Worcester and New Bedford carry the lowest number of passengers of all of New England's ten largest regional airports. 37.107

Talk of a new runway has been around for 25 years. But Boston's economy and traffic at Logan Airport have grown without it. Even without a new runway, Boston's economy will continue to grow. And so will congestion at Logan – until the region comes up with a seriously overdue plan to meet its long term needs.

CITY OF BOSTON • MASSACHUSETTS

OFFICE OF THE MAYOR
THOMAS M. MENINO

April 7, 1999

The Hon. Robert A. Durand
Secretary of Environmental Affairs
Attention MEPA Office
100 Cambridge Street, 20th Floor
Boston, MA 02205

Dear Secretary Durand:

The Massachusetts Port Authority projects that passenger traffic at Logan Airport will grow from 26 million in 1998 to as many as 45 million by 2010, an increase of roughly 73 percent.

More passenger traffic at Logan Airport will only mean more cars, trucks and shuttle buses on our congested highways and urban road system. During peak travel times, this could make traffic congestion unbearable on the Southeast Expressway and Route 1A. It will also encourage more drivers to seek alternate routes, worsening congestion on roads such as Storrow Drive.

The majority of Logan's users actually come from beyond Route 128, according to Massport's 1996 data. These people are not getting to Logan via the Blue Line. They are driving long distances for great lengths of time on congested roads. As traffic at Logan expands, road traffic congestion will grow worse, more vehicles will slow to a crawl, and suburban travelers may not be able to get to Logan on time.

Putting more traffic on our urban road system during peak travel times raises the issue of whether residents near Logan Airport will be able to navigate their own communities and whether employees will be able to travel to and from work without further delays.

Finally, the addition of more vehicles to our roads raises concerns about environmental and economic impacts of traffic congestion, from air pollution to lost time and productivity. The region is already in "serious" non-attainment of the air quality standard for ozone, according to the U.S. Environmental Protection Agency.

Massport's Environmental Impact Statement/Report addresses none of this. It is incomplete, because it avoids the landside impacts of airport growth. Airside and landside impacts are related and inseparable. I therefore respectfully request that you require the Port Authority to provide a full and complete accounting of all the landside impacts of its improvement plan before proceeding any further. To do so would only deny the people of greater Boston the answers we deserve.

Sincerely,

Thomas M. Menino

BOSTON

April 20, 1999

Andrea d'Amato
Secretary
Boston Transportation Department
Boston City Hall
Boston, Massachusetts

Dear Secretary d'Amato:

As the Executive Director of the Boston Public Health Commission (BPHC), the City's health department, I am concerned that the Massachusetts Port Authority, the US Transportation Department and the FAA Logan Airside Improvements Planning Project, DEIR/DEIS, have not taken into consideration the health of Boston residents in their Logan Airport expansion plan. This is particularly worrisome because of the potential impact on some of the City's most vulnerable subpopulations who are already disproportionately affected by negative environmental factors. Furthermore, the failure to consider such matters appears to be out of compliance with President Clinton's Executive Order 12898 entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", which requires each federal agency to identify and address the environmental and health effects of its programs that particularly burden minority and low income communities. 37.108

Our recently released 1999 Health of Boston Report to the Mayor documents the ten leading causes of morbidity and mortality which include cancer, heart disease, respiratory disease, asthma and homicide among others. When these data are broken down by neighborhood, they show that some of the worst rates for these health problems are present in the low income/minority neighborhoods of East Boston, Dorchester, Roxbury, South Boston, Mattapan and South End. Because of the proposed redirecting of airport landings and take-offs as well as the increased automobile traffic, these very communities may be the ones most affected by the proposed changes.

Many of the most serious health outcomes in our Report have been shown to be related directly or indirectly to factors associated with outdoor/indoor air pollution (such as that produced by aircraft/and traffic emissions), noise and odor problems. The DEIR/DEIS claims that environmental impacts resulting from emissions, noise and odor are negligible or within established state and federal guidelines/standards. We questions this conclusion. Because many of the vulnerable demographic subpopulations are 37.109

already overburdened and susceptible to public health problems, any incremental insult from the environment, regardless of size, is potentially of significance.

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The DEIR/DEIS proposes to use soundproofing to mitigate noise impacts in certain neighborhoods. The process of soundproofing residences and businesses can create indoor air-quality problems. And this would occur just at the time the BPHC is launching a campaign to identify and reduce contributing factors to high asthma/respiratory disease rates in the city. There is no acknowledgement of such secondary impacts in the DEIR/DEIS.

Furthermore, noise and odor impacts have been associated in some studies with decreased learning and increased aggression. In Boston's neighborhoods affected by the redirection and new traffic which will result from this project, decreased learning and increased aggression are issues of concern which should also be addressed.

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The BPHC, strongly recommends that Massport, the US Transportation Department and the FAA commission the appropriate studies that will document whether or not there are real **health impacts** on affected Boston neighborhoods associated with the proposed Logan project. The BPHC is available to participate in the design and implementation of such an effort.

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If you have any questions about this matter, please call me or John Rich, MD, MPH, our Chief Medical Officer, at 617-534-5264 or Ngozi Oleru, Ph.D., the Director of the Office of Environmental Health, at 617-534-5966.

Sincerely,

John Auerbach
Executive Director

cc: John Rich
Ngozi Oleru
Lise Fried

Boston Redevelopment Authority

Boston's Planning & Economic Development Office

Thomas M. Menino, *Mayor*
Clarence J. Jones, *Chairman*
Thomas N. O'Brien, *Director*

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COMMENTS OF THE BOSTON REDEVELOPMENT AUTHORITY ON THE LOGAN AIRSIDE IMPROVEMENTS PLANNING PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT (EOEA #10458)

Pursuant to regulations implementing the Massachusetts Environmental Policy Act (M.G.L., Chapter 30, Sections 62-62H and the National Environmental Policy Act of 1969, as amended (40 CFR, Part 1500) the Boston Redevelopment Authority has review the above referenced Draft Environmental Impact Statement/Report and is pleased to submit the following comments.

The Draft Environmental Impact Statement/Report (Draft EIS/EIR) for the Logan Airside Improvements Planning Project evaluates seven airside improvement concepts for Logan International Airport, including both physical improvements and administrative options, which have been packaged for analysis into four improvement alternatives, plus a no-action alternative. The preferred alternative, denoted as Alternative 1A, consists of the following improvements:

(1) Construction of a new 5,000 foot unidirectional runway 14/32 along the southwestern edge of the airport,
(2) Construction of a 9,300 foot centerfield taxiway located between Runways 4L/22R and 4R/22L,
(3) Several taxiways improvements, including reconfiguration of the southwest corner taxiway system, the extension of Taxiway Delta to Runway 4R/22L, and the realignment of Taxiway November between Runway 15L/33R and Runway 33L/15R, and
(4) Reduction of the approach minima for Runways 15R, 22L, 27, and 33L

Not included in the Preferred Alternative is peak period pricing, an improvement concept evaluated in some of the alternatives. The stated purposes of the Airside Improvements Project are to reduce current and projected levels of aircraft delay at Logan and to maintain and enhance safe operating conditions at the airport.

The Massachusetts Port Authority (the operational authority for Logan Airport) and the Federal Aviation Administration have presented a very detailed document identifying and evaluating the operational and environmental implications of various alternatives for reducing the aircraft delay problems at Logan. An extensive, and sometimes overwhelming, amount of information and data are presented for review. Although seemingly cogent arguments are presented to support the recommended actions, we nonetheless do have serious disagreements with much of the analyses and resulting proposals, some of which

admittedly are highly controversial. In our comments below we have, inter alia, attempted to suggest alternative solutions to the recognized transportation difficulties which presently exist and are projected to increase at the airport.

REGIONAL CONSIDERATIONS

To begin, we strongly support the position of Mayor Thomas Menino and the City of Boston that there needs to be a regional approach to resolving the current problems at Logan Airport. We firmly believe that the solution to these problems cannot be solved solely by improving conditions only at the Logan. The problems are considerably more complex and extensive, involving the entire New England region, and are compounded by the fact that only a single major airport is available to serve the region's principal city. A significant and growing proportion of travelers who use Logan live in outlying areas to the north, west, and south of Boston and could be far better served by existing regional airports such as Manchester, Worcester Municipal, and T.F. Green if these airports were as substantially developed as Logan. In our opinion, both the State and Federal governments have the obligation to devise a strategy to encourage and to ensure that a much higher percentage of the burden at Logan is relieved by regional commercial airports, which we are confident would welcome increases in regularly-scheduled passenger service. The dramatic growth at Manchester Airport in New Hampshire and at T.F. Green in Rhode Island – both of which reportedly grew at more than 50 percent this past year – clearly demonstrates that people are willing to use alternative airports to Logan if there is a choice for a particular market segment. Were the same level of effort devoted to improving the attractiveness and the facilities at these and other regional airports as Massport has put into the present proposals for Logan, a more realistic regional share of the air traffic burden should be able to be achieved.

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We also want to express our support of the proposal of Mayor Menino that an independent commission, or "blue ribbon panel"' be established to study objectively the opportunities for regional air traffic improvements and the environmental and economic impact of further expansion at Logan. This commission should explore, along with the greater use of the existing regional airports, the possibility of developing a second major airport (which could be one of the regional airports) to serve the region's growing economy and demand for service. Until such a panel has had the opportunity to devise a feasible and acceptable regional aviation transportation strategy, we would recommend a moratorium on any new airside construction or expansion at Logan, save for those actions needed to ensure the safe operation of the airport itself. We likewise support the Mayor's suggestion that a regional New England Port Authority be established to implement a regional transportation strategy, replacing the limited focus of Massport.

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REGIONAL AIRPORTS

Manchester/T.F. Green

Regional airports offer a highly feasible resource to attract a large proportion of demand from Logan. Manchester and T.F. Green Airports, for example, already are demonstrating their ability to act as major alternatives to Logan.

Manchester Airport in Manchester, New Hampshire handled 1.94 million passengers last year, compared to just 108,000 in 1984 and 700,000 in 1990 (an astounding 1,685% increase); and an estimated 2.5 million are expected to use the airport this year, growing to 3.2 million people in the year 2000, making Manchester the fastest growing airport in the country. Between 1992 and 2004, Manchester Airport will have been entirely rebuilt, including the lengthening of its two runways and ILS upgrades to accommodate its growing demand, and plans are proceeding to construct a toll-free access road connecting Route 3 with the airport's terminal. Three new airlines have begun service at Manchester in the past year, and just recently airport officials announced that at least three additional airlines are considering starting flights at the airport.

T.F. Green Airport in Warwick, Rhode Island, just south of Providence, has a new $225 million, 19-gate terminal and also is growing rapidly. In 1990, the airport served about 2.25 million passengers, which more than doubled to 4.5 million in 1998 as a result of affordable fares and convenience. Studies have shown that about 30 percent of Green's traffic comes from Massachusetts, traffic that otherwise most likely would have gone to Logan. This number is expected to grow dramatically in the next few years due to plans (noted in the Draft EIS/EIR) of the Rhode Island Department of Transportation to build a new MBTA commuter rail station at Green, effectively linking Boston to the Warwick airport with as many as eight trains daily. The project also includes a moving sidewalk to take passengers from the trains to the terminal.

Worcester Municipal Airport

Worcester Municipal Airport, currently mostly underutilized in spite of significant marketing, technical, and planning assistance by Massport in recent years, offers another excellent potential for capturing a large share of air traffic from Logan. Worcester Airport has four jetways, with new lighting to ease a frequent fogging problem, and additional improvements are planned within the next few years. In 1989, approximately 380,000 passengers passed through the airport, but that number has declined to 76,000 today. At peak capacity, Worcester reportedly could handle 1 to 2 million passengers a year and this easily could serve the estimated 1.5 million people from central Massachusetts who fly out of Logan annually. Critical to its success is improved highway access from the Massachusetts Turnpike and from Interstate 290, and possibly even a link to the Worcester commuter rail service. We are especially pleased that Massport

recently announced plans to take over operations, and eventually ownership, at Worcester Municipal Airport. This is a first step in the right direction to develop a regional solution to Logan's capacity and delay problems. In the meantime, we strongly urge Massport to put the same energy in promoting and developing the use of Worcester as an alternative to Logan as it has in developing the Airside Improvements Project.

Pease International Tradeport

Curiously, little attention was given in the Draft EIS/EIR to the opportunity offered by Pease International Tradeport just outside of Portsmouth, N.H. Pease has an unusually long 2-mile runway and recently completed a $5.6 million international terminal, including custom facilities. According to airport officials, Pease currently handles approximately 30,000 general aviation , cargo, and military operations per year, but expects to increase that number to 100,00 by 2010, with more than 40,000 passenger flights. The airport is actively soliciting charter flights, cargo service, and in particular international flights and has the capacity to expand its services substantially. While its single runway may be a drawback, Pease, along with Manchester, deserves to be considered as a feasible alternative to Logan for those passengers living and working north of Boston.

DELAY ANALYSIS

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As numerous commenters have stated, we believe that the delay data and analysis used by Massport to support its proposals, especially the new Runway 14/32, is highly questionable and overstates the actual problem. While we do, of course, acknowledge that aircraft often are delayed at Logan, this is a situation that is no different than what occurs at any major airport. In fact, it has been reported that even Denver's new state-of-the-art Centennial Airport had 29 percent of its flights delayed last year, higher that Massport's claim of 25 percent for Logan.

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We believe that Massport's analysis basically is flawed for several reasons. First Massport chose to develop its own model (DELAYSIM), rather than an accepted FAA model to determine delay. Further, Massport based its model on data from 1993, a peak year for delay at Logan, rather than averaging several years of data (as it did for the weather data, arguing that use of a single year would misrepresent normal conditions. Thus, there is an obvious inconsistency in Massport's use of data to support its position.) In fact, FAA statistics on delay at Logan since 1993 have indicated an approximate 19 percent decrease in delays between 1993 and 1998, information not included in the Draft EIS/EIR. As a result, we feel that Massport's delay projections are unrealistically inflated.

In addition, in contrast to Massport's estimates of an approximate 25 percent delay at Logan, FAA data indicate the problem to be substantially less, with only slightly over 3 percent of operations delayed at Logan in 1998. This difference is

due to the fact that the FAA considers any flight arriving or departing within 15 minutes of the published schedule to be on time, whereas Massport considers any flight which does not arrive or depart as scheduled to be delayed. We believe that the FAA methodology is more realistic of actual operating conditions, due to the many uncertainties involved in air travel (changes in weather conditions, conditions at connecting airports, etc.) and that air travelers generally expect slight delays. Also missing from the equation are the times when aircraft arrive ahead of schedule.

Further, by considering only the scheduled time of departure or arrival at Logan as the sole determinant of delay, Massport's methodology ignores situations which are entirely external to Logan, such as delays at originating or destination airports due to adverse weather conditions, over-scheduling, or other reasons (a flight which is delayed in arriving at Logan because of delayed departure from another airport due to adverse weather at the airport, for example, is not a delay problem for which Logan is responsible). Since the Draft EIS/EIR does not present any comprehensive analysis of the several potential causes for delay, the conclusions are misleading.

In sum, then, we feel that the data and methodology used by Massport to calculate existing and future delay do not realistically portray the normal operation of a major U.S. airport and overstate a problem in order to support a pre-conceived program of airside improvements.

PART 150 STUDY

Prior to the construction of the proposed improvements, we recommend that Massport conduct a Federal Aviation Regulations (FAR) part 150 noise compatibility study, which would set forth measures to be taken by Massport to reduce incompatibility in land uses and prevent additional incompatible land uses in the vicinity of Logan Airport. A Part 150 study, in turn, would trigger an FAR part 161 study for a program of noise abatement and restriction, which could provide for a voluntary control of the number of flights to Logan through agreements between Massport and the airlines serving the airport. 37.119

We believe that limiting or restricting uncontrolled growth of operations at Logan is imperative and could serve as an alternative means to reduce the current and projected future flight delays. We note again that although Logan (in 1997) was the 17th busiest airport in the U.S. in terms of passenger traffic, it was 11th in aircraft operations and that generally over the past fifteen years, the number of flight operations have increased at a higher rate than the growth of air passengers. Because the growth in flights exceeded the growth of air passenger traffic, passengers per flight at Logan have actually declined (from 58 to 56 passengers). The result is a tendency for an increasing number of aircraft to carry a lesser number of passengers. Rather, the goal for Massport should be to establish a demand management policy which could encourage airlines to 37.120

maximize load factors. Eliminating or consolidating flights to provide higher load factors than presently exist would, in turn, not only reduce the number of operations and maximize airline revenue, but also result in delay reduction.

RUNWAY 14/32

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The major element of the Logan Airside Improvement Planning Project is the proposed construction of Runway 14/32, a new 5,000 foot runway to be located along the southwestern edge of the airport. According to the Draft EIS/EIR, Runway 14/32 would be designed as an unidirectional runway, with all arrivals over Boston Harbor to the Runway 32 approach and all departures from the Runway 14 end out over the harbor. His new runway has been proposed to address the principal cause of delay at Logan – the substantial drop in airport capacity that occurs when moderate to strong northwest/southeast winds force the airport to operate with fewer than three runways – by providing a second effective parallel runway in the northwest/southeast orientation.

The City of Boston has consistently opposed this proposal, which was originally included in the 1970 Airport Layout Plan. Construction of this runway actually began in 1974 but was halted as a result of an injunction successfully obtained by the City and East Boston residents. The injunction remains in effect to this day. While we acknowledge the fact that construction of Runway 14/32 could, to some extent, reduce the occurrence of delays at the airport – although delay would only minimally be reduced; by Massport's own analysis, future projected delay would be reduced by only approximately 20 percent – and could help the FAA to achieve better compliance with the runway use goals set forth in the Preferential Runway Assignment System (PRAS), we feel that a fair and equitable distribution of aircraft operations can be achieved through alternative measures and without the construction of a new runway. In particular, we would recommend that Massport officials work together with FAA tower personnel to thoroughly examine the PRAS program to determine whether there may be appropriate changes to the program that would result in a superior noise abatement policy to that currently in place. In addition, as detailed earlier in this letter, we believe that taking a more long-term regional approach to resolving the delay/capacity problem at Logan would be far more environmentally beneficial to further runway construction at Logan.

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In examining the extensive data presented in the Draft EIS/EIR, we conclude that the alleged benefits of constructing Runway 14/32 may be highly overrated by Massport. In fact, according to Table 4.5-1, total annual delay hours for the 2010 High Fleet scenarios would be greater with the implementation of Massport's Preferred Alternative 1A (which includes Runway 14/32 but excludes Peak Period Pricing) than for Alternatives 2 and 3. Massport predicts that in a 37.5 million High Fleet passenger scenario, there would be 249,600 total hours of delay with the implementation of Alternative 1A, whereas with implementation of Alternative 2, which omits construction of Runway 14/32 but includes Peak

Period Pricing, total delays would drop to 208,300 hours. With implementation of Alternative 3, which excludes any infrastructure changes but includes Peak Period Pricing and the reduction in approach minima, total annual delays are reduced to 213,200 hours. Similar percentages in the total annual hours of delay occur under the 45 million High Fleet scenario. Presumably, the same conditions would occur under a 45 million Low Fleet scenario, because of its similarity to the 37.5 million High Fleet scenario. Only under the 37.5 million Low Fleet scenario, where non-jet , commuter operations represent a smaller share of the fleet serving Logan, would construction of Runway 14/32 alleviate a greater share of the delay. Thus, if a High Fleet scenario develops at Logan, the construction of Runway 14/32 becomes more of a hindrance and is no longer effective without additional mitigation measures. This analysis also points to another problem. Since the High Fleet assumes a fleet mix with significant regional operations at Logan, an improvement could only occur if there is a substantial transfer of the regional operations from Logan to other airports, as we have recommended above.

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Implementation of Runway 14/32 will result in substantial noise impacts on many of the greater Boston area communities. Although operation of the runway would cause a shift in flight tracks and the volume of flights over certain communities, lessening the intensity of noise, it would increase the noise impacts, in some areas dramatically, in several other neighborhoods. Overall, implementation of Runway 14/32 would widen the scope of communities exposed to noise levels equal to or greater than 65 db by 2 percent, over the other alternatives.

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Although Massport claims that Runway 14/32 would be unidirectional only and that conditions would be placed on its use to restrict any future change to unidirectional use, there can be no guarantee that a change would, in fact, not happen. It is our understanding that Massport will not agree to any legally-binding agreement to maintain the unidirectionality of this runway in perpetuity. Should bidirectional use of this runway be implemented sometime in the future, this would result in significant, and potentially dangerous, impacts, particularly on the Jeffries Point neighborhood of East Boston, in terms of noise, air quality, odor, and safety issues. Adverse impacts also could seriously affect the now-developing South Boston Seaport community and could hinder future plans for this area.

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We also have some concerns with the type of aircraft that would use Runway 14/32. Although Massport states that the primary users of the runway would be the smaller regional jets and turbo prop commuter aircraft, the runway would be provided with a larger safety area to accommodate "occasion use by larger jets" (pg. 3-24). Moreover, Massport has selected an Airport Reference Code (ARC) of C-III, which would allow use of the runway by larger jet aircraft such as the Airbus, Boeing 727 and 737, and MDC DC-9 series. In addition, the Runway 32 NAYAIDS is to consist of a localizer and glide slope for precision guidance, again serving larger aircraft. Thus it appears that Massport intends greater use of

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Runway 14/32 for larger jets than it has presented in the Draft EIS/EIR, having categorized the runway as essentially a commuter runway.

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Another issue is that of airfield capacity. Although according to Massport the maximum available capacity is 120 operations per hour (with a 3-runway configuration), this capacity is available only about 80% of the year. With Runway 14/32, actual capacity, and thus the number of operations, would increase to more closely approach 100% utilization. Furthermore, the inducement factor needs to be considered; a reduction in delay could result in an attraction for a greater number of flights at Logan. Correspondingly, under both of these conditions, there would result an increase in noise and air quality impacts.

CENTERFIELD TAXIWAY

The proposed Centerfield Taxiway would be a new 9,300 foot taxiway located between Runways 4L/22R and 4R/22L. This runway is designed to reduce taxiway congestion and to facilitate a more efficient movement of aircraft between terminal areas and runways during take off and landing procedures.

We have two major concerns with this proposal.

1. Safety Issues - Parallel runways 42/22R and 4R/22L, which are among the most heavily-utilized runways at Logan,[1] are separated by only approximately 1,300 feet. The proposed Centerfield Taxiway would be located between these two runways, and much closer to 4L/22R than to 4R/22L. We seriously question the safety of proposing a taxiway between these two busy runways, which we believe could be a problem for a pilot who, on approach to either runway, is not familiar with Logan Airport or when there is extremely low visibility. Although the surface lighting would be different, there does exist the potential for a pilot to mistake the taxiway for a runway and to land an aircraft on the taxiway itself, rather than on a runway. (On at least one occasion recently, a pilot did land his aircraft on the wrong runway, rather that the assigned runway, because of the confusion of the two parallel runways.) With this potentially dangerous situation, we believe that implementing the Centerfield Taxiway could be a recipe for disaster, especially if there are airplanes waiting on the taxiway.

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2. Environmental Issues - The addition of Centerfield Taxiway would provide an alternative route to Taxiway November to approach Runways 22L or 22R. Since neither the FAA nor Massport would agree to limit the number of aircraft which could use this taxiway, the number of aircraft which could approach this end of the airport would be very high, and would be added to

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[1] In 1997, 38% of all arrivals at Logan occurred on Runways 4L/R and 11% on Runways 22L/R; 37% of all departures occurred on Runways 22l/R.

those aircraft using Taxiway November. (Currently, at peak periods, the number of aircraft on Taxiway November enroute to runways 22L/R for departures usually total 10 to 15. Since Taxiway November is 3,800 feet in length, the number of aircraft requesting permission to use the Centerfield Taxiway, could nearly triple.) With a large number of aircraft using the Centerfield Taxiway, there obviously would be a substantial increase in noise, air pollution, and odor impacts on the Bayswater section of East Boston, which is located opposite the proposed alignment of this taxiway. These impacts especially would occur during the summer months, when southwesterly winds are the most common in Boston. Accordingly, we would seriously question Massport's claim of air quality and noise benefits of constructing the Centerfield Taxiway.

REDUCED MINIMA

This proposed operational improvement would reduce the approach minima of Runways 22L and 27 to ILS Category I values and on Runways 15R and 33L to Category III values, consistent with current industry standards at other major airports, to allow for greater use of these runways under certain unfavorable weather conditions. Reducing the minima would lower the decision height at which a pilot must make a decision to land or to execute a missed approach procedure at times when visibility is low.

For Runways 22L and 27, the proposed decision height would be lowered from the existing 420 feet and 460 feet respectively to 217 feet. For Runway 15R, the proposed decision height would be reduced from the current 268 feet to only 18 feet and for Runway 33L, from 217 feet to 17 feet. [We note that the figures in Appendix D showing the existing and proposed ILS minima (Figures 1-3) are very misleading, since the glide path angle is only 3.0 degrees, but the figures show an angle of approximately 40 degrees (due to the difference in vertical and horizontal scales), which leads to a distortion of the height an aircraft is over a particular neighborhood.]

With the exception of the proposal to lower the minimum for Runway 33L, the approach to which is over Boston Harbor,[2] we do have serious concerns with the other proposed reductions, especially in light of the minimal benefits achieved, and therefore we are opposed to this proposal. Our concerns relate to safety considerations, as well as increased noise impacts.

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[2] In fact, the City of Boston originally proposed that Massport work with the FAA to consider installing a Category II or Category III loading system on Runway 33L, in order to offer some relief to residents of South Boston and Dorchester from excessive noise impacts during inclement weather. It also would increase the margin of safety to these neighborhoods by transferring some flights to an over-the-water approach.

1. Safety Considerations – For the most part, the approaches to these runways are located over heavily-populated residential neighborhoods. The approach end of Runway 15R is located approximately 3,000 feet from the Eagle Hill neighborhood and the Day Square section of East Boston, as well as over the Mobil Oil farm. For Runway 22L, the approach passes closely over homes located in the Orient Heights section of East Boston, some 30 of which are located in the Runway Protection Zone (an area designated by the FAA as one which should be clear of any structures, especially residential). The approach to Runway 27 is over the Port Shirley neighborhood of Winthrop. Reducing the visibility minima for these runways could have serious safety consequences for these residences. Since arrival is the most difficult and challenging portion of a flight, our safety concerns are based on the premise that the poor weather conditions and reduced visibility, which would trigger the use of these lower landing minima, would only serve to exacerbate a pilot's work load during the landing procedure. With the high number of residents living in close proximity to the touchdown points of these runways, we believe that lowering the safety standards would leave these residents in peril and could result in a tragedy at any time (especially with the reduced decision height of only 18 feet for Runway 15R). 37.131 37.132

2. Noise Impacts – We disagree with the assertion of Massport that lowering the landing minima would result in noise benefits for the residents living under the approach paths to the subject runways. At the present time, if visibility conditions are such that it becomes difficult for a pilot to see a particular runway, the FAA will close down that runway and assign a secondary runway, if available, or depending on the severity of the situation, close down the airport entirely until there is an improvement in weather conditions. Lowering the landing minima potentially could result in greater use of these runways during poor weather conditions, exposing nearby residents to greater noise levels and more frequent disturbances than they currently experience.

   Aircraft operations during inclement weather tend to expose nearby residents to higher noise levels than under normal operating conditions. The reasons are two-fold. First, during severe weather conditions involving strong winds and rain, a pilot must apply a greater level of thrust to maintain stable flight, resulting in higher noise levels and thus increased adverse impacts for residents under the flight path. Secondly, since a low cloud cover usually is present under conditions which would trigger lower landing minima, noise levels from aircraft events would be amplified in intensity and would tend to last longer than on a clear day, further affecting residents under the approach path.

   In addition, should it be necessary for a pilot to execute a missed approach procedure, the lowered decisions points (as low as 17 feet) would require the pilot to apply a much greater level of thrust than at the current decision point

level in order to gain the necessary height to resume flight, resulting in much higher noise levels and further exacerbating the adverse impacts on nearby residents.

Therefore, based on the above considerations, we believe that lowering the landing minima will not serve to reduce the noise burden but rather will tend to increase the impacts that residents already have to endure.

However, even granting the possibility of some noise reduction, though slight (as described in Appendix D), we believe that the benefits are extremely minimal, especially when compared to the substantially increased safety concerns. Table 2 in Appendix D indicated an insignificant gain of only 8 hours in total airport runway availability with the proposed minima, and Table 3 indicates a reduction in average delay per operation of a mere 0.7 minutes. Table 3 also reveals an increase in total annual hours of dwell exceedence of 86 with implementation of the reduced minima, as well as an increase of total hours of persistence exceedence of 186, hardly an improvement in noise conditions for affected residents.

TAXIWAY IMPROVEMENTS

A number of taxiway improvements also are proposed to improve taxiway improvements, in order to reduce taxiway congestion, enhance airfield safety and facilitate operating efficiencies. These improvements include:

1. The reconfiguring of the Southwest Corner Taxiway System to streamline taxiway flow in a very complex area for ground operations and to improve access by isolating lines of traffic flow from each other;

2. The extension of Taxiway Delta to Runway 4R/22L by constructing an additional 2,000 feet of taxiway between Runway 33L and Runway 4R; and

37.133

3. The realignment of Taxiway November between Runway 15L/33R and Runway 33L/15R to eliminate an existing complex intersection and simplify the crossing of Taxiways Alpha and Kilo.

Since these improvements are designed to enhance airfield safety by eliminating confusing or problematic alignments and intersections, we support their implementation at this time.

PEAK PERIOD PRICING

37.134

The concept of "peak period pricing", originally proposed by Massport as an element of the Logan Airside Improvements Planning Project, has been rejected by Massport, in spite of its overwhelming support. Peak period pricing is designed to reduce delay by eliminating flights during periods when demand

exceeds an airfield's capacity for a sustained period of time, and to induce a shift in aircraft operations to less congested hours of the day. Massport has eliminated this improvement based on a claim that airline over-scheduling is not currently a problem at Logan (although it was in 1993, which is used as the base year by Massport for modeling future delays) – again an example of the lack of consistency in the use of data by Massport to support its proposals) and is not projected to be a problem in the near future, in addition to projected economic impacts to certain regional airlines. We do not agree with these conclusions, particularly since the Draft EIS/EIR itself (page 4-2) acknowledges that under long-term High Fleet scenarios "peak period pricing could provide meaningful delay benefits by reducing airline over-scheduling that emerges as a contributor to Logan delays within these flights" (emphasis added).

We strongly support the concept of peak period pricing and believe it can be a key mitigation measure to reduce congestion, and thus delay, at Logan and that it can be a feasible alternative to new runway construction at the airport. This proposal, originally but forth by Massport itself in 1993,[3] was projected to reduce peak hour activity by approximately 10%, producing a very substantial reduction in the expected amount of delay at the airfield (during the peak period, Massport estimated that a 5% reduction in the use of the airport would cause at least a 20% drop in average expected flight delays). According to the Massport report, this reduction in delay would be expected to come mainly from a reduction in commuter activity during peak hours, and especially from markets with ready commuting alternatives. Further, Massport estimated that 7% of the peak period weekday flights, representing only 3% peak period weekday seats, would be cancelled,[4] with a smaller percentage rescheduled to non-peak hours. Thus Massport concluded that adopting of peak hour pricing would have minimal adverse impact but would benefit the passengers and airlines using Logan Airport during peak hours.

Peak period pricing also was endorsed by a National Jury convened at an August, 1994 conference (the Boston Conference-Shaping the Accessible Region) held in Boston to lay out priorities for transportation, economic development, and the environment in the metropolitan Boston region in the first decades of the 21st century. The Jury recommended that the Commonwealth adopt "congestion pricing'...to mitigate bottlenecks and delays at Logan that would impede the region's future economic growth" and further stated that it believed "that this approach offers a relatively inexpensive and flexible demand

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[3] Massachusetts Port Authority "Peak Hour Pricing at Logan Airport", April, 1993

[4] Massport, "Logan Airport Peak Hour Pricing Plan-Briefing to DOT and FAA," June 9, 1993

management strategy, prolonging the use of Logan as its present location without requiring controversial runway expansion."[5]

We further note that the U.S. Environmental Protection Agency, in its comment letter on the proposed scope for the Draft EIS/EIR, (Volume II, Letter 1, pp. 2-3) strongly supported the concept of peak period pricing and recommended that Massport and the FAA institute such a pricing policy at Logan, noting that it had been applied effectively in the utility and telephone industries to mitigate the effects of peak period volume and to roads to alleviate congestion, with resulting environmental and economic benefits.

Massport claims, based on case studies included in the Draft EIS/EIR (Appendices F and G), that institution of peak period pricing would result in serious economic impacts on smaller regional airlines, such as Cape Air, which serve Cape Cod and the Islands. However, we seriously question the analyses and conclusions of substantial flight reductions. According to data presented in the studies, the projected cost increases would range from approximately $4.50 to approximately $13.00, which are hardly substantial increases and most likely would be recovered, at least partially, in the form of slightly higher fares. At the same time, the analyses lack some vital information by which Massport's conclusions can be evaluated. The studies do not indicate the current fares from the several originations. Therefore, we cannot determine the percentage of an existing fare that a potential increase would involve and whether it would be minimal, and thus well within a customer's ability to absorb, or not. Further, the studies do not indicate alternative costs to flying from these locations, such the cost of a ferry and automobile trip from the Islands to Boston, by which one could compare the costs of air transportation. Nor is there any analysis of the potential to use other airports, such as T.F. Green near Providence, to reach one's destination. Thus without sufficient comparative information, we cannot concur with the economic analysis presented by Massport.

In addition, we note that, according to the Summary of LAIPP DELAYSIM results table in Appendix H, Massport's selected Alternative 1A (all actions except peak period pricing) would result in considerable more hours of delay, particularly for the 2010 37M and 2010 45M High projections, than Alternative 1 (all actions), clearly indicating the significant delay reduction potential of peak period pricing.

In conclusion, therefore, we strongly believe that Massport should institute a program of peak period pricing at Logan, at least on an interim basis, to determine its actual effect on reducing delay before deciding to proceed with the more controversial, and questionable, runway or taxiway expansion proposals and reduced minima, all of which we feel require further study.

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[5] Harvey B. Gauth, et al, "The Boston Conference: Final Report – National Jury Recommendations, August 24, 1994, page 5.

ADDITIONAL POINTS FOR CONSIDERATION

1. Page 5-34 (top paragraph) – One could question the use of modelled runway use rather than actual effective runway usage in the noise analysis; does this not distort the analysis? 37.135

2. Page 5-61 – Construction of the Centerfield Taxiway will displace the nesting sites of the upland sandpiper, a State-listed endangered species. The Massport mitigation plan proposes to relocate these birds off-site to Cape Cod. One could question whether a more local site would be more appropriate. 37.136

3. Page 6-43 (Tables 6.2-14 and 6.2-15) – The differences between alternatives are not significant or are imperceptible. (Similarly with Tables 6.2-22 to 6.2-29) 37.137

4. Page 6.81-6-83 (Tables 6.3-10-6.3-14) – The air quality differences among the alternatives is not significant. 37.138

5. Page 6-100 (Table 6.6-1) – There are errors in the mean for arsenic, chronium, and lead (see Table 5.6-2, page 5-74). 37.139

6. Page 6-117 (Nighttime construction) – Nightime construction is scheduled for Runway 14/32, the Centerfield Taxiway, Taxiway November, and possibly elsewhere. The impact on the adjacent East Boston community (Jeffries Point, etc.) needs to be addressed (should construction proceed). 37.140

7. Page 123 – Barging, rather trucking, should be considered for the removal of earth from the airport (also, barging in soil and construction materials) to reduce construction vehicle traffic. 37.141

8. Page 8.5 (Figure 8.2.1) – This figure is incorrect (actually it is the same as Figure 8.2-2). 37.142

RBM/313RPT
042399/14

October 13, 1998

Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Arthur Pugsley - MEPA Unit

Re: EOEA #3247/5146 - Boston Logan International Airport
1997 Annual Update

Dear Secretary Coxe:

The City of Boston Environment Department has reviewed the above referenced 1997 Annual Update (Update) and hereby submits the following comments.

The Update prepared for the Massachusetts Port Authority (Massport) indicates that Logan International Airport served 25.6 million passengers in 1997, a 1.7 percent increase over 1996. Domestic passenger activity increased by 1.2 percent, international passengers by 4.7 percent, general aviation passengers by 18.1 percent, aircraft operations by 5.8 percent and air cargo volume by 7.1 percent. General aviation (unscheduled) flights increased by 12.7 percent. Such flights are generally executive transportation and delivery of medical and financial products. The airport was the 11th busiest in the United States and the world ranked by number of aircraft operations.

This department has compiled, and attached to this letter, a set of guidelines for both the construction and operating periods of projects. These guidelines are designed to protect the environmental health of those who live and work in Boston in both the short and long term. We ask that Massport follow these guidelines and include them in the Guide to Tenant Construction referenced in previous environmental filings. This tenant guide should be reproduced in the next Generic Environmental Impact Report (GEIR).

Air Quality

Massport has clearly taken seriously the benefits of alternative fuels in equipping its shuttle bus fleet. The Update also notes, as did the 1996 document, that incentives are offered for private fleet and airside service vehicle owners who use alternative fueled vehicles (AFVs). How many of these owners have taken advantage of the incentives and what percentage of the total do they constitute? Is the 25 percent discount a sufficient incentive? Would a greater discount or free curb access for AFVs significantly increase their use without severely impacting Massport's revenues?

Bio-diesel is identified in Table ES-5 as a "clean" fuel. However, this designation is still very much in dispute. We recognize that some experts consider it a transitional technology to cleaner operations. However, CNG and other alternative fuel technologiess are well established, bringing

into question the need for a transitional technology. For this reason, we are concerned about the expenditure of substantial funds to purchase AITC Red Route vehicles that use bio-diesel.

We encourage Massport to seize this opportunity to fully and aggressively promote truly clean vehicles.

While Stage 3 aircraft are more fuel efficient and provide some decrease in noise levels over Stage 2 aircraft, they increase NOx emissions. We concur with the Boston Transportation Department (BTD) that it is important that Massport and the Federal Aviation Administration (FAA) make the aircraft industry aware of the pressure to produce quiet engines that do not increase pollutant emissions. In addition, as Ground Service Equipment (GSE) is projected to be the future source of most CO increases, Massport and the FAA must work with manufacturers of such equipment to improve rates of emission.

As this and other City departments have stated in prior letters, we strongly support a consolidated car rental facility at Logan. We also restate our concern that Massport continues to examine the possibility of moving bus servicing and other operations to off-airport locations. As the air quality implications are potentially significant, this issue must be discussed with the community. In addition, information must be provided to the community and reviewers regarding the number of vehicle trips this would add to current levels and the potential new uses for space now occupied for car rental and bus servicing.

We thank Massport for posting "no idling" signs at the bus/limo and taxi pool areas. Once again, we ask that permanent signs be posted at all service areas, loading docks, and other areas where vehicles are likely to idle advising vehicle drivers of the law and Massport's expectation of compliance.

We question Massport's statement that "$PM_{2.5}$ data for aircraft do not exist at this time." This is surprising since aircraft engines have undergone emissions testing for many years. We request that the GEIR contain a comprehensive literature search on this issue.

Energy/Resource Conservation Recycling

We are concerned about the estimated volume of fuel released during spills in 1997 as the amount spilled in 1996 was reported to be the result of lack of attention by a fuel provider and customer allowing for the leakage of a very substantial amount of fuel. Massport first notes in this Update that the number of fuel spills is down. However, it is then explained that the volume spilled has increased but that regardless of the amount spilled, it was less than the average annual volume spilled since 1990. When annual volumes are averaged and they include the 18,000 gallons spilled in 1995, the overall average number of gallons spilled for the last eight years is skewed and the analysis makes individual yearly spills pale in comparison.

It would appear that airport tenants require continuing education on spill prevention and that Massport must monitor this issue more closely.

There is currently limited recycling at Logan and we encourage its expansion to include glass containers, metal containers, cardboard, newsprint, white paper, milk cartons, juice boxes and plastic containers designated from 1 to 7. Increased recycling rates are likely to be required in the future in order to slow the demand for additional landfill space and incineration facilities both in and outside the Commonwealth. Massport should consider the long term in this area, particularly when facilities are being renovated or replaced. Light ballast recycling can easily be added to Logan's current program. We refer Massport to the enclosed guidelines for information on WasteCap of Massachusetts and the Recycling Service Directory and Markets Guide for Massachusetts.

We thank Massport for recycling water used during fire fighting training activities.

Again, we request that future GEIRs and Annual Updates contain distinct sections devoted to the issues of energy/resource conservation and recycling.

Ground Transportation

We congratulate Massport on the success of the Logan Express high occupancy vehicle (HOV) service for passengers and employees (a 29 percent employee increase) and we expressed our support for the Woburn Regional Transportation Center in our comments on the recent draft Transportation Implementation Plan (TIP). The Update indicates that the South Station bus dock dedicated to trips to Logan was a success but ridership numbers were not provided. This should be fully reported in the GEIR.

In 1997, scheduled and non-scheduled HOV ridership reportedly increased by 6.8 and 7.0 percent respectively above 1996 levels. While we are pleased to see HOV increases, we question as we did in response to the 1996 Update how single party transportation by an unscheduled commercial provider is considered an HOV service. A means of transit should not be considered high occupancy unless there are three or more air passengers in the vehicle. A private, on-demand service that transports one passenger to Logan is not an HOV, but functions as does a taxi. Again, future air passenger surveys, information asked of registered providers and Transportation Services Unit statistics should distinguish between the use of vehicles containing less than three air passengers and those containing three or more air passengers (true HOVs). Current and projected mode share statistics should then be modified as necessary to reflect the difference.

On a related matter, from a regional transit and air quality perspective, shuttling about 2,000 employees to the airport who have driven to a parking lot in Chelsea in single occupant vehicles should not be included in HOV numbers. It is specious to suggest that a one mile ride in a shuttle van or bus from the parking lot to the airport constitutes HOV commuting. Such a perspective could conceivably allow for reports of increased employee HOV use while the 7,100 on-airport employee

spaces and a substantial increase in employee parking in areas surrounding the airport would allow for ample, unconstrained single occupant vehicle (SOV) commuting.

We have not asked for an increase in the HOV mode share goal of 35.2 percent at 37.5 million passengers but it is tempting when we see both passenger and employee trips counted under the HOV category that truly do not meet the criteria for such a designation. This would certainly seem to work against the goals of the Transportation Management Association (TMA). Ridership levels should distinguish between employees who utilize an HOV for only part of their trip to work and those who use an HOV for the entire commute. A distinction must also be made between carpoolers and drop-off/pick-ups.

Once again, use of the Massachusetts Bay Transportation Authority's (MBTA) Blue Line by air passengers is down. We believe that this number can be increased through education and marketing to air passengers. Unfortunately, Massport and the MBTA have been discussing the trial installation of a token machine in Terminal C for more than two years now. The GEIR should contain a detailed explanation as to why this subject has not moved beyond the discussion stage. As we have said before, token machines should be available in a highly visible location at every terminal along with subway maps and bus and subway schedule information. We suggest that Massport consider locating token machines and informational displays at shuttle bus stops.

The Update indicates that TMA membership is now 20% of all airport employees and that one TMA member is offering subsidized MBTA passes. How many employees are TMA members? How many employees receive a T pass subsidy? Why does the TMA estimate that a reduction of only 250 to 300 employee commuter vehicle trips may be a result of Transportation Demand Management (TDM) measures?

We are concerned that Massport is sending some mixed messages to air passengers about travel to Logan. Recent radio advertising stressed the number of parking spaces available with the garage opening but did not also note that there are many other ways to reach Logan. Also, a local newspaper and the Wall Street Journal reported several months ago Massport's plan to provide automobile repair and detailing services to air passengers who drive to the airport. This would seem to indicate a disconnect in planning on some level.

Laurence G. Hanscom Field and Regional Airports

Why is there no air cargo service to and from Hanscom Field? While the Update mentions developing a plan that satisfies the needs of Hanscom, there is no discussion of Boston's need for the use of Hanscom. And, again, Massport makes no effort to address the issue of offering incentives to airlines to operate scheduled passenger flights at Hanscom.

We agree with the suggestion of the BTD that cargo flight distribution be examined from a regional perspective in order to ease the burden on Logan.

Health

The issue of Logan and health related impacts continues to be a prevailing concern of this department and inhabitants of neighborhoods adjacent to and affected by Logan. Residents continue to question the potential tie between individual and cumulative airport impacts and cancer, respiratory illness, hearing damage, headaches, emotional distress, neurological complaints, violence and stress-related disorders. We once again ask for a literature search to be reported in the next GEIR.

Land Use

The design of landscaping for the relocated Park n Fly should provide an effective visual buffer for the community. Replacement sites for the gas station, ground service equipment facility, hanger support facility and cargo facility should be chosen so that they shield the community, reduce existing impacts and create no new impacts.

Noise

While the 1997 cumulative noise index fell by .3 EPNdB, the population within L_{dn} contours greater than or equal to 65dBA grew by 5,995, a 29 percent increase. Increased noise levels were experienced in East Boston and South Boston and calls to the Noise Complaint Line rose by 16 percent, from 3,913 in 1996 to 4,663 in 1997. This expansion of noise contours is disturbing and, it would appear, is partially the result of continuing problems with Runway 27 and the lack of success in reaching Preferential Runway Advisory System (PRAS) goals. We believe that actual operations of Stage 2 aircraft between 11:00 p.m. and 7:00 a.m. (due to unscheduled delays and necessary equipment substitution) may have contributed to this increase. However, despite prior requests, we have not succeeded in getting Massport to provide data on the number of Stage 2 aircraft arriving or departing annually between 11:00 p.m. and 7:00 a.m. We have also been unable to determine how often nighttime runway restrictions and late-night over-water flight operations were actually accomplished in a given year. We understand from the Update that NOMS data, referenced at 3.20 in Responses to Comments, will provide such information. This should be fully reported in the GEIR, providing information about actual, rather than scheduled, flights.

Please note that, given the increased noise contours and decisions to guide flight paths over urban open and recreational space, this department considers the increased use of Hanscom Field part of a comprehensive effort to equitably distribute noise (page 5-35).

How does the designation of the Harbor Islands National Recreation Area change the way Massport will analyze noise impacts? There will be increased use of the islands for camping and other recreational activities that will be adversely affected by overflights.

This department supports Massport's initiation of a study of the Hill Effect. We hope that this study will help to change the requirement that a resident must experience a flyover for soundproofing eligibility. The existing criteria leave many Boston residents subject to oppressive noise without mitigation.

We encourage Massport to advocate that the FAA include low frequency noise in its criteria for residential mitigation.

Southwest Service Area

East Boston residents do not agree with Massport's assertion that most users of the Maverick Gate are actually East Boston residents with a sticker. This remains an issue. Again, we ask that signage be installed to warn non-authorized vehicles that they will not find an exit on this route.

Please note that a hotel has been proposed for an area very close to this part of Logan. The potential impacts on hotel guests must be considered as development planning for the SWSA continue.

Water Quality

Staff of the Boston Conservation Commission (BCC) find that Massport rates its NPDES compliance with statements that are somewhat confusing and misleading. Descriptions such as "near full" to quantify the level of compliance is not specific or helpful. The GEIR should contain precise language that provides clear compliance information.

Massport plans to connect the Porter Street Drainage Area to the West Outfall during period of low flow. The existing treatment at Porter Street is already in complete compliance with NPDES levels for oil, grease and pH. What is the rationale for connecting Porter Street to this outfall? Won't the facility be overburdened by additional flow? We suggest that Massport use funds designated for the Porter Street connection be used to bring the West and North outfalls into complete compliance.

The Update notes that Massport audits its own and tenant facilities periodically for environmental compliance. Does this auditing involve enforcement and penalties?

We hope that Massport will find it appropriate to help educate the public and further improve the water quality of Boston Harbor by permanently installing at all storm drains plaques that bear the warning "Don't Dump - Drains to Boston Harbor." The enclosed guidelines contain information on obtaining these plaques.

Thank you for the opportunity to offer comment.

Sincerely,

Patricia A. Malone
Acting Director

Andrea d'Amato
Chief of Environmental Services

Enc.

November 24, 1997

Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Arthur Pugsley - MEPA Unit

Re: EOEA #3247/5146 - Boston Logan International Airport
1996 Annual Update

Dear Secretary Coxe:

The City of Boston Environment Department has reviewed the above referenced 1996 Annual Update (Update) and hereby submits the following comments.

Air Quality

We support Massport's efforts to provide an incentive to tenants to use alternative-fueled vehicles.

We restate our concern that Massport continues to examine the possibility of moving bus servicing and other operations to off-airport locations. This issue must be discussed with the community and information provided to the community and reviewers regarding the number of vehicle trips this would add to current levels.

We continue to understand from East Boston residents that vehicles waiting the in the taxi pool do not comply with MGL C. 90, Section 16A and 310 CMR 7.11, laws that prohibit vehicles in Massachusetts from idling for more than five (5) minutes unless the engine is required to operate lifts or refrigeration units. Massport indicates in response to our comment coded 4.4 that the problem of taxicab drivers trying to stay warm in their idling vehicles has been addressed. How?

Again, we ask that permanent signs be posted at all service areas, loading docks, the Bus/Limo Pool and other areas where vehicles are likely to idle advising vehicle drivers of the law and Massport's expectation of compliance.

Airside Improvements

While we understand Massport's position that the airside improvements project soon to be filed with MEPA is necessary to reduce delay, increase efficiency and improve airfield safety. We fail to understand why Massport continually refuses to disclose the passenger and operations capacity that would be possible at Logan if the Airside Improvements project was to proceed. This should be a detailed component of environmental filings on the proposal. We reserve further comment until we have had an opportunity to review the proposal in detail.

Community Response

Has the nature of the noise and odor complaint line changed so that a response to noise complaints, such as those from nighttime construction, are not addressed until the next business day?

Energy and Resource Conservation, Waste Reduction and Recycling

Again, this department requests that Massport and its tenants plan, design and operate new and improved facilities consistent with the concept of "*sustainability*." Building design should maximize the use of natural light, interior lighting systems should respond to fluctuations in ambient light and the potential for use of passive solar energy for heat and light should be evaluated for each new or renovated structure. Energy efficient heating and HVAC systems should be installed, regardless of who is paying the utility bill, and plumbing fixtures should include low-flow toilets and faucets with water conserving aerators. Some rooftop air conditioning units with electric cooling and gas-fired heating are equipped for hot air bypass for reheat of supply air, have dual path systems for separate conditioning of outdoor and return air streams and utilize outdoor air for cooling under suitable ambient conditions. The Federal Environmental Protection Agency's (EPA) "Green Lights" and "Energy Star" programs can provide additional information on environmentally sustainable and economically profitable measures. The address for these programs is 401 M Street, SW, Washington, DC 20460. The Energy Star fax line system can be reached at 202-233-9659 and the Green Lights/Energy Star Hotline is available at 1-888-782-7937 (fax 202-775-6680). A free subscription to the Green Lights & Energy Star Buildings Update can be ordered through the toll-free hotline number. Related Websites are: **http://www.epa.gov/greenlights.html** and **http://www.epa.gov/appdstar/buildings/**. We suggest that Massport use the EPA as a resource for itself and tenants.

We encourage Massport to provide close oversight on these issues, provide substantial direction to tenants and require as a standard part of construction contracts that contractors recycle or reuse, on-site or off-site, construction debris to the maximum extent possible. Some material not appropriate for reuse may be suitable for donation to The Building Materials Resource Center (100 Terrace Street, Roxbury, 02120, 617-442-8197). The Guide to Tenant Construction should include specific requirements for conservation and sustainability as well as sections regarding construction worker transit, approved truck routes and sanctions for route violations. In addition, Massport should consider the development of incentives for tenants to use environmentally sustainable practices.

Again, we request that future GEIRs and Annual Updates contain distinct sections devoted to the issues of energy and resource conservation, waste reduction and recycling.

Ground Transportation

The Update notes numerous times Massport's conclusion that non-airport related traffic using the Ted Williams Tunnel is responsible for the increase in Average Weekday Traffic (AWDT) and Vehicle Miles Traveled (VMT). While we understand that increased use of the tunnel may be a contributing factor, we believe that the Update understates the relationship of 'First Hour Free' parking, a policy in effect during eight months in 1996.

While the Logan Express high occupancy vehicle (HOV) service for passengers and employees has been a particular success, the same cannot be said for air passenger use of the

Massachusetts Bay Transportation Authority's (MBTA) Blue Line. As we have said before, token machines should be available in a highly visible location at every terminal along with subway maps and bus and subway schedule information. Massport continues to reply that there will be a trial installation of a token machine at Terminal C. This trial was mentioned in the 1994-95 Generic Environmental Impact Report (GEIR) (filed by Massport in July 1996) and was reportedly held up as a result of damage to token machines from the October 1996 flooding. Thirteen (13) months later a token machine is still not installed at Terminal C and 1996 activity in this regard is listed as "planning" for installation. When will this extended planning result in the actual installation of a token machine?

The Update indicates that there are presently 700 registered private bus, van and limousine operators providing private High Occupancy Vehicle (HOV) transit to the airport from areas underserved by convenient HOV services. It is estimated that these services may reduce trips to Logan by 4,500-5,000. No distinction is made between scheduled and unscheduled service. On page 5-36 single party transportation by an unscheduled commercial provider is considered an HOV service. We disagree. A means of transit should not be considered high occupancy unless there are three or more air passengers in the vehicle. A private, on-demand service that transports Logan one passenger to Logan is not an HOV. Future air passenger surveys, information asked of registered providers and Transportation Services Unit statistics should distinguish between the use of vehicles containing less than three air passengers and those containing three or more air passengers (true HOVs). Current and projected mode share statistics should then be modified as necessary to reflect the difference.

We are not convinced, as stated on page 5-39, that "Massport will not be in a position to revisit its passenger HOV mode share until well into the next decade when the airport and its access systems have stabilized."

We continue to support the consolidation of rental car services into one on-airport facility.

From a regional transit and air quality perspective, shuttling to the airport employees who have driven to parking lots from Chelsea and Revere in single occupant vehicles should not count as HOV use. Ridership levels should distinguish between employees who utilize an HOV for only part of their trip to work and those who use an HOV for the entire commute. A distinction must also be made between carpoolers and drop-off/pick-ups (see the "Other" category under HOV/Alternative Modes in Table 5-20, Employee HOV Mode Share).

Health

This issue continues to be a prevailing concern of inhabitants of neighborhoods adjacent to Logan. Residents have questioned the potential tie between individual and cumulative airport impacts and cancer, respiratory illness, hearing damage, headaches, emotional distress, neurological complaints, violence and stress-related disorders. We again encourage Massport to make a commitment to not only work with residents and local and state health agencies to develop a scope and procedure for study but to fund the chosen process. We believe that a good start would be a literature search to be reported in the next Annual Update.

Noise

The Annual Update provides no explanation for the problems in effectively implementing the Runway 27 jet departure procedures. Also, PRAS statistics show an uneven record and a substantial gap between goals and actual runway use.

References to the Noise Complaint Line fail to speak to nighttime construction noise complaints and how they are handled. Are they simply recorded, to be dealt with on the next business day?

How does Massport determine the level of compliance with the reduced engine idling recommendation?

Unfortunately, because a flyover is required for resident eligibility for soundproofing, many Boston residents are subject to oppressive noise without mitigation. In spite of Massport's noise rules for Logan, Stage 2 aircraft sometime land and take off between 11:00 PM and 7:00 AM due to unscheduled delays or the necessary substitution of equipment. In order to accurately and completely document the noise impacts of airport operations, the FAA flight strips collected from controllers each day should be used to determine the **actual**, rather than scheduled, number of nighttime flights into and out of the airport and the type of engine employed in each aircraft. This information should be provided in each Annual Update and GEIR.

Please note that we are concerned that noise impacts will increase if lower ceilings/visibility minimums are established.

Terminal A should be designed to shield the Jeffries Point neighborhood from noise impacts.

Regional Planning and Use of Regional Airports

Table 4-8 contains a list of Regional Planning Studies and implications of those studies for Logan. We find that the chosen implications for two of the cited studies do not fully represent the conclusions of the SMA and SAR that would affect Logan. The Second Major Airport Siting Study (SMA) was undertaken because the 1989 Massachusetts Airport System Plan (MASP) had concluded that even with operational and capacity improvements at Logan there would be a need for a second major airport by 2010. The SMA did not contain a specific recommendation about the type of airport necessary (international, short-haul or long-haul domestic). The Strategic Assessment Report (SAR) was based upon baseline assumptions that were different from the 1989 MASP and SMA, mainly regarding the future roles of communications and travel technologies. As stated in the document itself, the SAR was not meant to be a policy document nor was it designed to recommend a specific course of action. It did, however, conclude that the only necessary airport option, based upon projected demand, would be a large regional/reliever airport (LRRA). The SAR concluded that, given the many uncertainties in forecasting demand and mode type, a conservative risk posture would call for the landbanking of a potential site. Clearly the major discrepancies in these two planning documents must be reconciled. The lack of full accounting of implications and the noted discrepancies cause us concern about the usefulness of the *New England Regional Airports Passenger Service Study.*

Why have no regular carriers had success in serving Hanscom? The reasons for this lack of success should be outlined in the next Annual Update.

Water Quality

We hope that Massport will find it appropriate to help educate the public and further improve the water quality of Boston Harbor by permanently installing at all storm drains plaques that bear the warning "Don't Dump - Drains to Boston Harbor." This would be a very modest expense for Massport.

We request that, in the next Annual Update, Massport thoroughly compare the effects of potassium acetate and other deicing compounds that are more sensitive to the marine ecosystem than glycols.

It is encouraging to see Massport's attention to the large salt marsh system at Wood Island Bay. Currently, this major ecological resource has no official protection. Over the past several years, this department has advocated that Wood Island Bay Marsh be formally designated a conservation area. The next Annual Update should include a detailed discussion of why a conservation restriction is a threat to safety and security.

Clearly, a lack of attention by a fuel provider and customer allowed for the leakage of a very substantial amount of fuel. While this will not be a problem once the Jet Fuel Distribution project begins operating in 1999, we are believe that a mechanism for the detection of fuel leaks must be implemented immediately. It would seem that the fuel customer should have noticed a vast discrepancy between the amount of fuel for which they were billed and the amount actually used for operations. We request that Massport require that tenants adhere to a method of analysis that will detect a leak before it reaches the proportions reported in the Update.

Are all tenants co-signatories on Massport's NPDES permit?

Southwest Service Area

Airport Road (also known as Venice Street)is the sole access for traffic to the taxi pool and for trucks delivering automobiles to car rental agencies. This route abuts a residential area and the residents have noted the increased traffic, noise and odor. Signage should be installed to warn non-authorized vehicles that they will not find an exit on this route.

On a related topic, the Update includes only a brief reference to the Airport Edge Buffer Program. Is the Venice Street area included in this program? If not, Massport should begin a process with the community to identify an appropriate barrier or other mechanism to mitigate the effects of this trouble. We suggest that the redesign of this area take the needs of residents into account and locate access in egress in a place that does not cause such impacts.

Thank you for the opportunity to offer comment.

Sincerely,

Lorraine M. Downey
Director

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September 24, 1996

Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Arthur Pugsley - MEPA Unit

Re: EOEA #3247/5146 - Boston Logan International Airport
Generic Environmental Impact Report

Dear Secretary Coxe:

The City of Boston Environment Department has reviewed the above referenced Generic Environmental Impact Report (GEIR) and hereby submits the following comments.

Massport has requested that the GEIRs be filed every five years, rather then three, with Annual Updates to be filed by July 31 in years when a GEIR is not prepared. Massport did not file an Annual Update in 1994 and the 1995 Annual Update is a part of this GEIR. We oppose Massport's request at this time and believe that the three year schedule is appropriate given the history of filings and continuing work on the Central Artery/Tunnel and projects of Logan 2000.

Massport has also asked to be relieved of the requirement to file an ENF for new entrant airlines seeking to serve Logan, arguing that a GEIR and Annual Updates provide more meaningful data on overall operations. We do not agree and ask that this request be denied.

Air Quality

The GEIR indicates that while emissions of VOC and CO have decreased, (as has NO_x to a much lesser extent), these emissions are expected to rise in the future. With Stage 3 aircraft emitting significant amounts of NO_x and the projected increase in aircraft operations over time, this is a critical issue. Massport is to be commended for its program for conversion of its ground service vehicle fleet to alternative-fueled vehicles. Similar efforts by tenants must be strongly promoted by Massport. As an important step in mitigating the air quality impacts of Logan Airport, new lease agreements should include requirements or incentives, such as reduced curb fees for private fleet operators, for use of low or no emission vehicles by tenants. In addition, we believe that additional measures will be necessary and request that Massport investigate other

available technologies, particularly from Massachusetts-based companies, for reducing air emissions. Findings should be reported in the next Annual Update.

The GEIR indicates that Massport is evaluating the benefits of moving bus servicing and other operations to off-airport locations. The Annual Update should include a discussion of this issue, including the number of vehicle trips this would add to current levels.

It is our understanding from East Boston residents that vehicles waiting the in the taxi pool do not comply with MGL C. 90, Section 16A and 310 CMR 7.11, laws that prohibit vehicles in Massachusetts from idling for more than five (5) minutes unless the engine is required to operate lifts or refrigeration units. Massport should report on the level of compliance in the next Annual Update and, if the current organization of the taxi pool does not promote such compliance, efforts to ensure adherence to the law be detailed. Permanent signs should be posted at all service areas, loading docks and other areas where vehicles are likely to idle advising vehicle drivers of the law and Massport's expectation of compliance. In addition, the next Annual Update should include an analysis of potential additional odor impacts on residences near the taxi pool when the Post Office is demolished.

The issue of particulate emissions (PM) and their relationship to public health was a subject of discussion at the MEPA Scoping Session on August 27, 1996. Because aircraft and ground vehicles emit PM, we request that Massport initiate a monitoring program for $PM_{2.5}$ and PM_{10} to determine baseline levels and the manner in which they are distributed.

Massport is currently a contributor to the on-going South Boston air quality study being conducted by the Harvard School of Public Health on behalf of the South Boston Community Health Center. The study is gathering important information on various sources of air contaminants including apportioning sources of PM_{10} and $PM_{2.5}$. Funds for this study will soon run out and there is considerable value to the information being gathered. Massport, as well as other contributors, should continue to fund this monitoring program to build on the information gathered thus far.

The GEIR shows that a combination of ambient temperature, time of day, the type of aircraft operations, wind direction and runway use cause residents to file odor complaints with Massport. There is general agreement that such complaints are seriously under-reported by those affected. Community residents believe that there is a lack of widespread knowledge about how to file an odor complaint. Massport officials and their consultants note that there can be high levels of odor from very low concentrations of jet fuel. We recommend that Massport initiate a community education effort to inform residents of the way to file odor complaints. We also request that, with the Annual Update, Massport identify the ways in which odor impacts can be mitigated.

Airside Improvements

The GEIR contains minimal information on this consequential plan and it is noted that an Environmental Impact Report (EIR) will provide detail. At MEPA Scoping Sessions, public meetings and Massport-sponsored technical sessions it has been consistently stated that Runway 14/32, a center taxiway and lower minimums are necessary for efficiency at existing passenger and operations levels and are not geared toward expansion of the airport. There is no reference in

the GEIR to the capacity that might be possible at Logan should Massport's preferred changes be implemented. Due to this lack of detail, we request that you require the Airside Improvements EIR to include an analysis of the potential for these improvements to increase the number of passengers that could be served and the number of new operations that Logan would be capable of sustaining. The impacts of this capacity should then be detailed for: air quality, particularly for levels of CO and NO_x, $PM_{2.5}$ and PM_{10}, and for odor and soot impacts; ground access and transportation, with potential HOV and public transportation mode shares, vehicle trip per passenger (VTPP) and vehicle miles traveled (VMT) expectations, anticipated employee transit characteristics and overall parking needs; noise, including the number of city residents living within the expected L_{dn} 60 dBA and L_{dn} 65 dBA contours and projected low frequency noise impacts; and water quality, especially related to projected fuel spills and deicing activities. The number of aircraft that could be queued on taxiways should be detailed.

Blast Fence

It is our understanding that Massport will be submitting an Environmental Notification Form (ENF) for removal of the blast fence across from the Orient Heights Yacht Club. There appear to be several significant issues surrounding this controversy and we begin by observing that the manner in which Massport informed the community of its intent to remove the fence has further reduced trust and may make community process on any project more contentious.

East Boston residents view the blast fence as a device that mitigates noise, fumes and blast effects from Runway 22R. Massport feels an obligation to take the fence down because it frangible, and would therefor present a hazard to flight personnel and air passengers in the event of a crash. Residents feel that Massport is only concerned with the well being of airline and airport personnel and air passengers and that removal of the fence will negatively affect yacht club members, recreational users of Constitution Beach and those who live in Orient Heights. It is easy to appreciate each perspective. While we have no desire to compromise the safety of air passengers or flight and ground personnel, we also wish to ensure that members of the public are protected from noise, fumes and the jet blast that may present a hazard to boaters. We request that the alternatives analysis for the ENF include the results of a detailed investigation of a non-frangible barrier and other methods to ensure that the quality of life in and adjacent to Orient Heights is not further degraded.

Energy and Resource Conservation, Waste Reduction and Recycling

This department requests that Massport and its tenants plan, design and operate new and improved facilities consistent with the concept of "*sustainability*." Building design should maximize the use of natural light, interior lighting systems should respond to fluctuations in ambient light and the potential for use of passive solar energy for heat and light should be evaluated for each new or renovated structure. Energy efficient heating and HVAC systems should be installed, regardless of who is paying the utility bill, and plumbing fixtures should include low-flow toilets and faucets with water conserving aerators. Some rooftop air conditioning units with electric cooling and gas-fired heating are equipped for hot air bypass for reheat of supply air, have dual path systems for separate conditioning of outdoor and return air

streams and utilize outdoor air for cooling under suitable ambient conditions. The Federal EPA's "Green Lights" program is a good source of information on energy conservation.

When drafting plans for landscaping, vegetation should be chosen that does not require extensive irrigation so that there is minimal use of potable water for this purpose.

One of the goals outlined in the City's 1996 Environmental Blueprint is to promote reduction, reuse and recycling of wastes. Items accepted for recycling by most recyclers include glass containers, metal containers, cardboard, newsprint, white paper, milk cartons, juice boxes and plastic containers designated from 1 to 7 and they can be co-mingled. All airport facilities should include space for the separation of recyclable items from trash and for the storage and pick-up of items. We suggest that Massport talk with staff from the Department of Public Works Recycling Program to discuss how airport-wide recycling can be made efficient and effective.

We encourage Massport to provide close oversight on these issues, provide substantial direction to tenants and require as a standard part of construction contracts that contractors recycle or reuse, on-site or off-site, construction debris to the maximum extent possible. Some material not appropriate for reuse may be suitable for donation to The Building Materials Resource Center (100 Terrace Street, Roxbury, 02120, 617-442-8197). The Guide to Tenant Construction should include specific requirements for conservation and sustainability as well as sections regarding construction worker transit, approved truck routes and sanctions for route violations. In addition, Massport should consider the development of incentives for tenants to use environmentally sustainable practices.

In an on-going effort to support the clean-up of Boston Harbor, we request the permanent installation of plaques at storm drains that bear the warning "Don't Dump - Drains to Boston Harbor." Information on these plaques is available at the Boston Water and Sewer Commission.

We request that future GEIRs and Annual Updates contain distinct sections devoted to the issues of energy and resource conservation, waste reduction and recycling.

Ground Transportation

We congratulate Massport for its commitment to employee demand management, evidenced by work to initiate a Transportation Management Association (TMA) and an East Boston shuttle service. As we have commented before, it is this department's strong belief that construction employees, abundant in number, should be affiliated with the TMA and that such a requirement be part of Massport's contract with construction firms. We hope that the next Annual Update will detail the incentives to join the TMA that Massport offers to tenants. In addition, an explanation should be offered regarding the recent service reductions by the on-airport #44 shuttle.

The planned consolidation and relocation of auto rental facilities and locations for park and fly lots should be thoroughly analyzed for a various potential locations with a goal to reduce impacts on residents of surrounding communities. We ask that the Annual Update contain a complete discussion and evaluation.

Some preliminary data on the "First Hour Free" parking program, aimed at reducing both curb use and the number of vehicles circling airport roadways while waiting to pick up passengers, show an increase in vehicle trips to Logan. Both Massport and area residents have noted that there was increased curb use when the one hour parking rate was increased from $4.00 to $5.00 in January 1996. Massport must substantiate, when filing supplemental information, the

claim that free parking causes no increased traffic generation and reduces curbside congestion. We also request, given Massport's willingness to forgo some parking revenue, that the supplemental information include an evaluation of reinstituting a charge for first hour parking with those revenues dedicated to trip reduction, congestion mitigation and open space development and maintenance in East Boston. Existing commitments and the funding of mitigation for approved projects should not be affected by any new sources of mitigation revenue. This evaluation would require examination of a range of first hour pricing options and calculations of the revenue generation by each.

Recognizing that Massport is attempting to address both safety and environmental issues regarding parking, area residents suggested several options at the August 29, 1996 Technical Session. They included a barrier toll at the airport entrance, rescission of the taxi surcharge and a pricing policy that makes the first hour the most expensive. These and other alternatives should be evaluated in the next "First Hour Free" filing.

Should Massport receive approval to continue with the "First Hour Free" policy, it seems sensible that they must reevaluate parking analyses for airport projects, including the West Garage, that are based on a substantially different pricing schedule.

While the Logan Express high occupancy vehicle (HOV) service for passengers and employees has been a particular success, the same cannot be said for air passenger use of the Massachusetts Bay Transportation Authority's (MBTA) Blue Line or buses from the North Shore. To increase awareness of public transit options, token machines should be available in a highly visible location at every terminal along with subway maps and bus and subway schedule information. Travelers should also be able to purchase the MBTA's short-term visitor transit passes at the airport. When Blue Line trains are expanded from four to six cars, one car on each train should be equipped with baggage racks or platforms and the MBTA should advertise this accommodation. Some MBTA buses from the North Shore will make a detour for Logan passengers at their request but this is not widely known and it increases trip time for commuters to downtown. The MBTA should examine use of Wood Island Station as a transfer point with Massport providing shuttle service for both employees and air passengers. Shuttles from Maverick Station should also be considered.

Another option for deliberation, particularly if the People Mover project does not go forward, may be extension of the Blue Line through the airport to Gloucester on an existing right of way (ROW) near the water tanks on the north side. Escalators and elevators at MBTA stations serving the airport and downtown are particularly important for travelers with luggage and a dedicated effort should be made to ensure that they are operable or re-started as quickly after a shut-down as safety permits. An air passenger who finds that they must carry bags up a long stairway because the escalator is not functioning is unlikely to use this mode again if they have other choices. Turnstile configuration at the same stations should be designed with slide-throughs or other ways for the comfortable movement of suitcases, other luggage, carts, strollers and parcels. Providing flight information screens and areas for luggage storage at major downtown subway stations should be examined as a method for decreasing inconvenience for air passengers who also choose public transit.

This department recognizes that increasing air passenger use of public transit will have impacts for the MBTA. We encourage Massport and the MBTA to work closely together to resolve any issues that may prevent a coordinated effort to educate air travelers about the availability of our public transit system and then making it convenient for them to use that system.

On a more broad-based level, we believe that accommodating the region's expected number of air passengers in the coming years will require a joint effort by municipal and state agencies to identify and provide a range of convenient and efficient intermodal transportation alternatives to Logan that do not impact local communities. As an example, parking facilities convenient to the Massachusetts Turnpike, perhaps in conjunction with other development efforts, might allow for increased Logan Express or other park and ride services for air passengers. It would seem that a formal, distinct, collective enterprise by Massport, the MBTA, Massachusetts Highway Department (MHD), Massachusetts Turnpike Authority (MTA), Boston Transportation Department (BTD) and other agencies involved in transportation and economic development may be key to creating a variety of solutions. We ask that you take any steps necessary to encourage this type of a collaborative effort.

Health

This issue is clearly a prevailing concern of inhabitants of neighborhoods adjacent to Logan. Residents have questioned the potential tie between individual and cumulative airport impacts and cancer, respiratory illness, hearing damage, headaches, emotional distress, neurological complaints, violence and stress-related disorders. It appears, from information gleaned at the September 16, 1996 Technical Session, that available discharge data is not a reliable indicator of possible connections between an airport and illness. Clearly, a methodology for examining potential links must be identified so that a proper response can be formulated. While we understand that Massport is not a public health agency, we believe that it is appropriate for Massport to fund a study on this matter. We encourage Massport to make a commitment to not only work with residents and local and state health agencies to develop a scope and procedure for study but to fund the chosen process.

Noise

The number of Boston residents living in the L_{dn} 60 dBA and L_{dn} 65 dBA contours have increased despite the modest decrease in the Cumulative Noise Index (CNI). This clearly indicates that a more comprehensive mitigation program is necessary. The Annual Update should explain in detail why the collective use of Runway 15R/33L is not more frequent and how enhanced PRAS has or has not assisted in meeting PRAS goals.

Volume II (pages II-2-72/73) contains a discussion of reduced engine-taxi and concludes that there is a net reduction in cumulative noise when one or more aircraft engines are shut down during taxi operations. We request that this change be implemented as part of the overall noise abatement strategy.

The GEIR reports that the Low Frequency Noise Study showed that Massport's noise insulation program mitigates this impact. It is also noted that "the human perception threshold of

vibration ... is far below the vibration level needed to initiate surface cracking in structures." (Volume IV, Section 4.4.) There is however, no reference to the way in which vibration may affect the health and quality of life of residents exposed to his impact. This aspect of vibration must be examined.

Why were no wide-body aircraft included in the study when Massport is adding gates specifically designed to accommodate such airplanes? Given their absence, we question the validity and applicability of the conclusions and request that the low frequency noise effects of wide-bodied aircraft be studied. This is an issue that needs further investigation and Massport should continue research to identify any mitigation standards that have been set for this impact at other airports. Of particular concern for us are residents of neighborhoods like Jeffries Point who are not eligible for soundproofing but who are subject to considerable low frequency noise.

As staff from this department experienced on August 8, 1996 at a meeting at the Orient Heights Yacht Club, the noise level in the area is overwhelming. We understand from residents that the number of idling aircraft queued on the north taxiway contributes to the din. The Annual Update should include a discussion of ways to minimize the queue and resulting noise.

The GEIR indicates that Massport fields many telephone complaints annually and that information is forwarded to the Federal Aviation Administration (FAA). What appears to be missing from the description is the frequency and manner in which exceedance data is provide to the airlines. We recommend that such information be provided directly to each airline on a frequent, regular basis. The process for doing so should be specified in the Annual Update as should a clear reporting of exceedances, including single events.

Although directed to analyze the noise from helicopters flying to and from Logan, Massport has only reiterated information previously provided. The Annual Update should include an evaluation of the impacts of the described routes and the options for mitigation.

During a discussion of the Flight Track Monitoring Study at the September 20, 1996 Technical Session, community residents noted that low altitude operations are a nuisance and violate Massport's standards. The Annual Update should contain a method for factoring low altitude operations into flight track monitoring data.

Water Quality

Massport has demonstrated increasing attention to the impacts of airport operations on water quality in and around Logan. The support of best management practices and performance of environmental audits demonstrate a commitment to protection of ground and Harbor waters. This department is encouraged by the improved compliance with NPDES permits for oil, grease and pH (Tables II-5-7 and 5-8). Yet, stormwater runoff, deicing chemicals, and fuel spills continue to be potential sources of contamination for Boston Harbor and the ecologically important marshes that are a habitat for migrating water fowl and a breeding area for fish and fowl.

While recognizing the necessity of deicing for safe operations, we are concerned about its impacts. Although the compounds are not persistent in the environment, the GEIR does not provide information on the implications for the marine ecosystem due to short term and steady exposure. We recommend that Massport move away from the use of ethylene glycol and toward

the use of propylene glycol with a goal to ban the use of ethylene glycol at Logan within several years. If most of the glycol is used in a known location, i.e. on the aprons, planning efforts should be made to find a way to collect and dispose the used product before it enters the drainage system, collect and treat the fluid before release or to reuse collected glycol. This department requested in 1993 that Massport investigate the feasibility of installing catch basins/holding tanks for glycol in the apron areas and there has been no response. We request that, in the Annual Update, Massport respond to this request and thoroughly compare the effects of potassium acetate and other deicing compounds that are more sensitive to the marine ecosystem.

It is encouraging to see Massport's attention to the large salt marsh system at Wood Island Bay. Currently, this major ecological resource has no official protection. Over the past several years, this department has advocated that Wood Island Bay Marsh be formally designated a conservation area. The GEIR suggests that a formal designation is now feasible. The Boston Conservation Commission (BCC) requests that Massport initiate this process. The GEIR mentions planning for open space buffers. We applaud Massport's commitment to a community design process and request that plans for the East Boston Greenway be considered as part of the overall context. A boardwalk system through the marsh, for example, would connect pieces of the Greenway and provide opportunities for citizens to learn about the ecosystem. Massport has demonstrated an interest in education by allowing access to this area in the past for environmental education programs run by the Boston Natural Areas Fund (BNAF). We encourage continued efforts and offer our assistance in finding ways to open this major environmental resource to the public.

The GEIR contains numerous references to the limits of Massport's influence on changes in service, with the role of airport operators and transportation professionals described as subordinate to that of airlines. Notably missing from this description is the function of Massport's marketing staff in attracting new and expanded service. The representation is self-serving and understates the effect of policies and practices that may contribute to limited use of other airports. For example, Massport has imposed noise rules at Laurance G. Hanscom Field that effectively limits the size of aircraft flying to and from Bedford. In addition, there has been no investment in terminal space and passenger services and it is reasonable to conclude that Massport is acting to prevent this facility from being suitable and attractive for expanded service. This suggests to us that Massport is willing to inflict substantial impacts on urban residents but is unwilling to distribute some of those impacts to communities whose residents fly in and out of Logan. We believe that Boston residents have borne more than their share of airport-related difficulties and it is time they be shared.

In discussing the issue of expanded service at Logan or other facilities, including regional airports, the GEIR asserts that Logan Airport's location reinforces urban land use patterns and supports the economy and development in the downtown area (I-5-36). Growth and development of regional airports, it is suggested, will contribute to urban sprawl. Further, the reader is asked to consider that there is no such thing as an "impact-free choice" when trying to determine how to meet the need for increased air travel. Logan is identified as "uniquely well-

served in comparison to the regional airports by the highway, public transportation, and HOV services which help minimize the adverse environmental impacts of growth." Maximizing the use of regional airports is not thought to be necessarily "better" from an environmental perspective because of the potential for such consequences as increased traffic, poor levels of service at key intersections and possible secondary impacts to local street networks.

Residents of neighborhoods adjacent to Logan fully appreciate the impacts of a nearby airport. In fact, these neighborhoods today live with an overabundance of airport-related impacts. From our perspective, deliberations about the path to expanded air service must recognize this reality. Such a planning process must also resolve the major inconsistencies between the Massachusetts Aeronautics Commission (MAC) 1990 Second Major Airport Study (SMA) and the 1993 Strategic Assessment Report (SAR) regarding Logan's present capacity, future demand for air travel, the relative influence of telecommunications technologies and other travel modes on air travel demand and methods for ensuring continued, sufficient air service to the region. In any case, both studies acknowledge the need for service growth beyond Logan Airport. We note with concern that there has apparently been no action on recommendations from either the SMA or SAR.

While we recognize that Logan is expected to expand, it has reached the maximum level of local impact that the City of Boston and surrounding neighborhoods are willing or able to accept. As such, other airports must be prepared to expand or Logan will have to curtail its growth.

Thank you for the opportunity to offer comment. We look forward to the next Annual Update.

Sincerely,

Lorraine M. Downey
Director

MASSPORT, TEN PARK PLAZA, BOSTON, MA 02116-3971, (617) 973-5500

September 24, 1996

Peter L. Koff, Esq.
McGowan, Engel, Tucker, Garrett & Schultz
125 High Street
High Street Tower, Suite 2601
Boston, MA 02110

Dear Peter:

In accordance with our telephone conversation today regarding your public records request dated September 12, 1996, I have enclosed the "Agreement between The Federal Aviation Administration and The City of Boston and the Massachusetts Port Authority" (No. L-1950).

If after reading it you need additional documents, please call me at 973-5653.

Sincerely,

MASSACHUSETTS PORT AUTHORITY

Ira M. Wallach
Senior Legal Counsel

cc: S. Karker

AGREEMENT

between

THE FEDERAL AVIATION ADMINISTRATION

and

THE CITY OF BOSTON

and

THE MASSACHUSETTS PORT AUTHORITY

MPA Ref. No. L-1950

THIS AGREEMENT made as of this 31st day of July, 1980 between the FEDERAL AVIATION ADMINISTRATION (hereinafter, the "FAA"), an agency of the Department of Transportation of the United States of America, the CITY OF BOSTON (hereinafter, the "City"), a municipal corporation chartered by the Commonwealth of Massachusetts, and the MASSACHUSETTS PORT AUTHORITY (hereinafter, the "Authority"), a body politic and corporate organized and existing pursuant to Massachusetts St. 1956, c. 465 as amended:

WITNESSETH:

WHEREAS, FAA desires in conjunction with Authority to install certain navigational facilities on premises leased at Boston-Logan International Airport ("Airport") for the aid and assistance of aircraft preparing to land on Runway 15R at the Airport, which facilities are specifically:

1. A 1,400 foot-long Medium Intensity Approach Light System with Flashers, more commonly referred to as a MALS/F;

2. A 3,000 foot-long Touch Down Zone Lighting System (This system to be installed and operated by the Massachusetts Port Authority).

3. A relocation of the present Localizer System from an offset configuration to a centerline configuration which will be physically located on the Runway 33L pier but will serve Runway 15R.

WHEREAS, the City is concerned that features of the foregoing proposed installations may have the potential to raise significant environmental issues about increased noise annoyance for residents of the City living under the aircraft approach path to Runway 15R, particularly about increased aircraft arrival traffic on Runway 15R in periods of poor weather and at night.

WHEREAS, FAA, in a project notification form on the proposed installation prepared pursuant to Office of Management and Budget Circular A-95, has stated that FAA's intention is not to lower landing minimums on Runway 15R as a result of the proposed installations (a copy of the background information presented by FAA in support of the project notification is attached hereto as Exhibit A and incorporated by reference herein).

WHEREAS, the City has the right to oppose the proposed installations and so advise FAA and Authority, thereby having the potential for delaying or preventing their implementation.

NOW THEREFORE, for and in consideration of the premises and covenants, terms and condition hereinafter set forth, the City, the FAA and the Authority do hereby mutually agree as follows:

1. The City shall refrain from exercising its right to oppose the proposed installations.

2. FAA will not reduce the landing minimums for Runway 15R as a result of these installations from those existing prior thereto. Specifically, these minimums are a decision height of 268 ft. MSL and a visibility of 4,000 ft. as measured by the airport RVR system or three-quarters of a mile measured as the prevailing visibility.

3. If at any time in the future, for any reason, FAA desires to pursue lower landing minimums to Runway 15R not as a result of these installations, the FAA will be required to prepare a full environmental impact statement including public meetings if so desired by any community group or other interested party.

4. FAA agrees that the terms of this Agreement will be included in all leases associated with the navigational aids involved in these proposed installations, by inclusion of terms in said leases substantially as set forth as Exhibit B which is attached hereto and incorporated by reference herein.

5. Authority shall monitor the volume of landing traffic on Runway 15R in accordance with currently established runway use data collection procedures and will

report periodically to the City the changes, if any, in the volume of traffic on Runway 15R.

6. This Agreement may not be amended except in a writing duly signed by all parties.

7. This Agreement shall be deemed a Massachusetts contract to be governed by and construed under the laws of the Commonwealth.

IN WITNESS WHEREOF, the parties have caused counterpart originals of this Agreement to be executed by their duly authorized representatives as of the date first above written.

CITY OF BOSTON

By: _____

Title: _____

Date: 8/5/80

Approved as to Form: _____
Ass't Corp. Counsel

FEDERAL AVIATION ADMINISTRATION

By: _____

Title: _____

Date: _____

Approved as to Form: _____
Regional Counsel

MASSACHUSETTS PORT AUTHORITY

By: _____

Title: _____

Date: _____

Approved as to Form: _____
Chief Legal Counsel

BACKGROUND INFORMATION:

RUNWAY 15 RIGHT PROJECT

EXHIBIT A

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Program Narrative

I	Background
II	Proposed Action
III	Other Concurrent Actions
IV	Benefits/Results Expected
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VI	Mitigating Actions
VII	Implementation Schedule
VIII	Project Cost

Exhibits

1. Airport Map Depicting Project Locus
2. ~~Aerial Photo Depicting Proposed Improvements~~ *
3. Description of Instrument Landing System (ILS)
4. Pictorial Display of ILS
5. Description of Medium Intensity Approach Light System with Flashers (MALS/F)
6. Pictorial Display of MALS/F Lighting System
7. Description of Touchdown Zone Lighting System (TDZ)
8. Pictorial Display of TDZ Lighting System

* Exhibit 2 deleted . Will be available at public hearing

I. BACKGROUND

The FAA and MPA have been conducting studies of various facility modifications and improvements aimed at enhancing the overall airport environment at Logan International Airport. The thrust of these studies has been an attempt to achieve the best possible balance between community needs and concerns on the one hand, and improvements to the operational environment on the other. Both have considered the safety of people, both in the air and on the ground, as the primary factor, with no derogation of safety permitted. It was concluded that there were numerous actions that could be taken which would improve community, operational, and safety factors at Logan, some of which have already been implemented. Those actions pertaining to Runway 15R are considered of next highest priority and are the subject of this proposal.

The overall objective of this proposal is to improve the approach and landing environment to Runway 15R by enhancing the electronic precision and visual aids available to the pilot of landing aircraft. The intent is to achieve greater consistency in completion of the approach to touchdown, and to thereby greatly reduce the high incidence of missed approaches which have occurred on this runway in the past without the benefit of these improvements.

Landing approaches to Runway 15R under low visibility conditions have historically produced a far greater number of missed approaches than on any other runway. It is also the only runway approach where large numbers of consecutive missed approaches have occurred. The missed approach problem has subjected the residents under the final approach path to an unnecessary number of severe noise events.

In addition to the clear need to address the missed approach problem at its source, there is also a need for a continuing phased program to upgrade navigational aids available at Logan, and to provide approach lighting guidance for all air carrier landing runways. This proposal is one element of that program.

II. PROPOSED ACTIONS

The FAA, in conjunction with the Massachusetts Port Authority, proposes to improve the existing Runway 15R approach and landing environment at Logan Airport by taking the following specific actions:

1. Install a short medium intensity approach light system with sequenced flashers (MALS/F) extending 1,400 feet toward the northwest from the displaced landing threshold. The MALS/F system would be flush mounted in existing lighting cans previously installed in the displaced runway and blast pad pavement, and with new paved pads constructed in the grass overrun for installation of the last two light bars of the system. The nearest light bar to the airport property boundary would be 1,400 feet away. (See exhibits 2, 5, and 6 for location and further details.)

2. Install a touchdown zone lighting system extending from the displaced landing threshold toward the southeast for a distance of 3,000 feet. The lighting cans and conduit for this system were installed in the runway pavement several years ago. Activation of the system requires only the installation of the flush mounted lighting fixtures, installation of interconnecting cable, and certain lighting vault modifications. (See exhibits 2, 7, and 8 for location and further details.)

3. Relocate the present Localizer component of the instrument landing system (ILS) from its present offset position beside the runway to a centerline position on the approach light pier to Runway 33L. This relocation will require the construction of a new Localizer antenna platform on the pier, a new pile supported platform 250 feet to one side of the pier for the electronic equipment shelter, and a walkway connecting the two.

4. Relocate the present visual glide slope indicator (VASI) approximately 100 feet toward the southeast so that its visual glide slope is coincident with the existing electronic glide slope. (See exhibit 2.)

III. OTHER CONCURRENT ACTIONS

The Massachusetts Port Authority is also proposing other concurrent improvement and rehabilitation actions on airfield areas at Logan Airport this construction season which are the subject of a separate "Notice of Intent", filed by that agency under OMB Circular A-95 procedures on February 28, 1980.

IV. BENEFITS/RESULTS EXPECTED

The primary benefits of this proposal will be an enhancement of the runway environment which will produce a reduced potential for missed approaches, thereby eliminating the noise events produced under the path of those missed approaches, and an overall improvement in the precision, standardization, and margins of operational safety associated with landings on Runway 15R.

Specific benefits of the individual elements of the proposed program are as follows:

1. Installation of the MALS/F approach light system and touchdown zone lighting will greatly enhance a pilot's ability to gain visual contact with the runway environment well before reaching the existing decision height of 268 feet, at which point a missed approach must be executed if that environment is not clearly established visually. This is the primary element which will insure that a landing can be completed rather than a missed approach being executed.

2. Centering of the Localizer will eliminate this non-standard aspect of the ILS approach and the last minute course correction required for alignment with the runway. The centering will also enhance a pilot's ability to complete a transition from instrument flight to visual contact with the runway environment before reaching decision height.

3. Relocation of the existing VASI will eliminate a non-standard condition resulting from the fact that it was installed by the Massachusetts Port Authority prior to the installation of the existing ILS system by the FAA. As a result, its projected glide slope for visual approaches is not coincident with the ILS glide slope. Relocation will make both glide slopes coincident and move the VASI touchdown point slightly more than 100 feet further from the community, raising the altitude of that glide slope by about 6 feet.

...IDERATION OF PROPOSED ACTIONS

1. GENERATION OF INCREASED LANDING TRAFFIC

The proposed improvements to the Runway 15R approach and landing environment will not result in increased use of Runway 15R for landing. Assignment of runways for landing is made by the FAA in accordance with the preferential runway use system which gives Runway 15R the lowest landing priority. Other factors which must be considered in the assignment process include wind direction and velocity, runway surface condition, visibility and the capacity of the selected landing and takeoff runway combination to accommodate the anticipated volume of arriving and departing traffic without unacceptable delays. These runway assignment procedures will not change as a result of the actions proposed and have historically resulted in very low utilization of Runway 15R for landing. For five of the past six years, an average of only 4½ per cent of all landings have used Runway 15R. By comparison, if landings were assigned so as to equally distribute them between each of the five instrumented landing runways ends, the utilization of each would be 20 per cent. This serves to demonstrate the effectiveness of the preferential runway assignment practices employed by FAA in keeping the landing use of Runway 15R to a minimum. These practices will continue.

Since there will be no change in the landing utilization of Runway 15R as a result of the proposed actions, there can be no noise or air quality impacts thereby generated. The proposed actions are expected to greatly reduce if not eliminate missed approaches, and the additional landing attempts which usually occur after missed approaches have been executed.

2. LANDING MINIMUMS

The present landing minimums on Runway 15R will not be altered as a result of the actions proposed. Present landing minimums on Runway 15R are a decision height of 268 feet above sea level and a forward visibility of 4,000 feet, as measured by the Runway Visual Range (RVR) instrumentation in the touchdown area. These minimums will be retained upon completion of the proposed improvements.

3. LIGHTING EMISSIONS

a. MALS/F Approach Lighting System

Characteristics and location of the proposed MALS/F approach lighting system components are described in Exhibits 2, 5 and 6. and differ from the normal MALSF installation in that the lighting fixtures are recessed flush in the pavement rather than being elevated on stems above ground level. The light beams of the recessed fixtures are aimed upward toward the approach area at an angle of 5° to the horizontal by passing through a prism in the slotted fixture top. This produces sharper horizontal and vertical cut off angles than the elevated fixtures with no greater light intensity.

Light levels along the extended path of the MALSF system will be increased but only during those minimal periods when Runway 15R is in use for landings at night or under low visibility conditions. Since the light beams are aimed upwards to provide maximum brightness along the glide path and have a sharp vertical cut off angle, the increased illumination near the ground will be quite small. The illumination also falls off rapidly with distance and with increasing angles off the centerline.

In 1978, an environmental impact study of elevated MALS approach lighting systems was conducted by H. H. Aerospace Design Co. Inc. of Bedford, MA under contract to the FAA. This study produced a computer model capable of accurately estimating illuminance levels which would be produced at any point in the approach environment. Using this methodology, it has been calculated that worst case illuminance levels on Neptune Road would not exceed .05 foot candles. This value is compared to other common sources below:

Fluorescent Illumination in Kitchen	43.0 foot candles
Incandescent Light Suitable for Reading	15.0 " "
Beneath Mercury Vapor Street Lamp	1.3 " "
21" Color TV at Distance of 10 Feet	.3 " "
Full Moonlight	.02 " "

The sequenced flashing lights were also evaluated in the study with respect to their contribution to illumination levels. The study concluded that "The flashing illumination from the strobes in a MALS/F system falls off more rapidly than the steady illumination as one moves out from the airport. As soon as one is more than 100' beyond the last flasher, the flickering light is less than the constant light."

In the case of Neptune Road, none of the direct illumination of MALSF lights would be visible from ground level although in a few homes unshielded by trees or other buildings, they could be seen from upper story windows, as can other existing airport lighting. The fact that the direct illumination MALSF lights would not be visible near ground level was confirmed last year when FAA installed a sample light bar at the station which would be nearest the community for demonstration purposes.

Sometime in April 1980 the new MALS/F system installed in the displaced runway pavement to Runway 22L should become operational. This will provide an opportunity to view an identical system from the Bayswater shoreline and from a distance closely approximating that which would exist between Neptune Road and the proposed Runway 15R MALS/F system.

b. Touchdown Zone Lighting System (TDZ)

The characteristics and location of the proposed TDZ lighting system are described in Exhibits 2, 7 and 8. Due to its distance from the nearest community, the light emissions of this system are not anticipated to produce any incremental impact over that associated with the MALS/F system.

4. LOCATION OF SECOND CATEGORY II SYSTEM

A Category II instrument landing system was proposed for installation on Runway 15R. This is no longer contemplated. If a second Category II system is designated for Logan International Airport, it will be installed on Runway 33L.

5. CONSTRUCTION IMPACT

From a construction impact standpoint, no significant construction related annoyances should be created. The only noise which should be discernable from construction operations would be that associated with pile driving over a two to three week period at the Runway 33L approach light pier. All other construction work should produce no adverse noise, air quality or water quality impacts whatever. Truck deliveries would be extremely limited, consisting primarily of electrical materials. All piles and timber materials would be delivered by barge. The Massachusetts Port Authority will be filing permit applications with appropriate Federal, state and local licensing agencies for this marine construction work.

VI. MITIGATING ACTIONS

In order to mitigate environmental concerns, the Federal Aviation Administration and the Massachusetts Port Authority propose to jointly give positive assurances with respect to certain elements of the proposed actions which may be perceived as having a potential for some adverse environmental effects. These are as follows:

1. Generation of Increased Landing Traffic

Should it be proposed at any time in the future to revise the existing Preferential Runway Use Procedures under which runway use assignments are made by the FAA, full environmental assessment will be prepared and filed in accordance with state and Federal environmental laws. Full opportunity for public participation will be provided in these processes.

2. Landing Minimums

The FAA will accept a restriction which the Massachusetts Port Authority will incorporate in the new or amended site leases which FAA must obtain from the airport proprietor for the centering of the localizer and the MALSF approach light system

for Runway 15R. This restriction will be identical to those contained in the site leases for the new ILS system on Runways 22L and 27 which require that FAA file an Environmental Impact Statement under the National Environmental Policy Act, should at any time in the future it proposes to lower the landing minimums on those runways. The restriction also requires that the Massachusetts Port Authority concurrently file an environmental impact report under Massachusetts environmental law.

3. Lighting Emissions

Should the light emissions from the lighting systems proposed for installation prove to be of significant annoyance to residents living in the approach to Runway 15R, all feasible shielding measures will be explored and available alternatives reviewed with these residents to determine the most appropriate method to be employed for mitigating that annoyance.

4. Location of Second Category II System

By vote of the Massachusetts Port Authority Board several years ago, Runways 4R and 33L are the only runways on which Category II systems are permitted by that agency. The Authority has recently made a formal request to the FAA that it designate Runway 33L as the second runway at Logan for Category II installation to enhance its use for overwater approaches. The FAA is currently evaluating this request.

VI. PROPOSED IMPLEMENTATION OF ACTIONS PROPOSED

It is proposed to accomplish the construction work necessary to implement these actions during the 1980 construction season.

VII. PROJECT COST

Total estimated cost of this project is approximately $800,000.

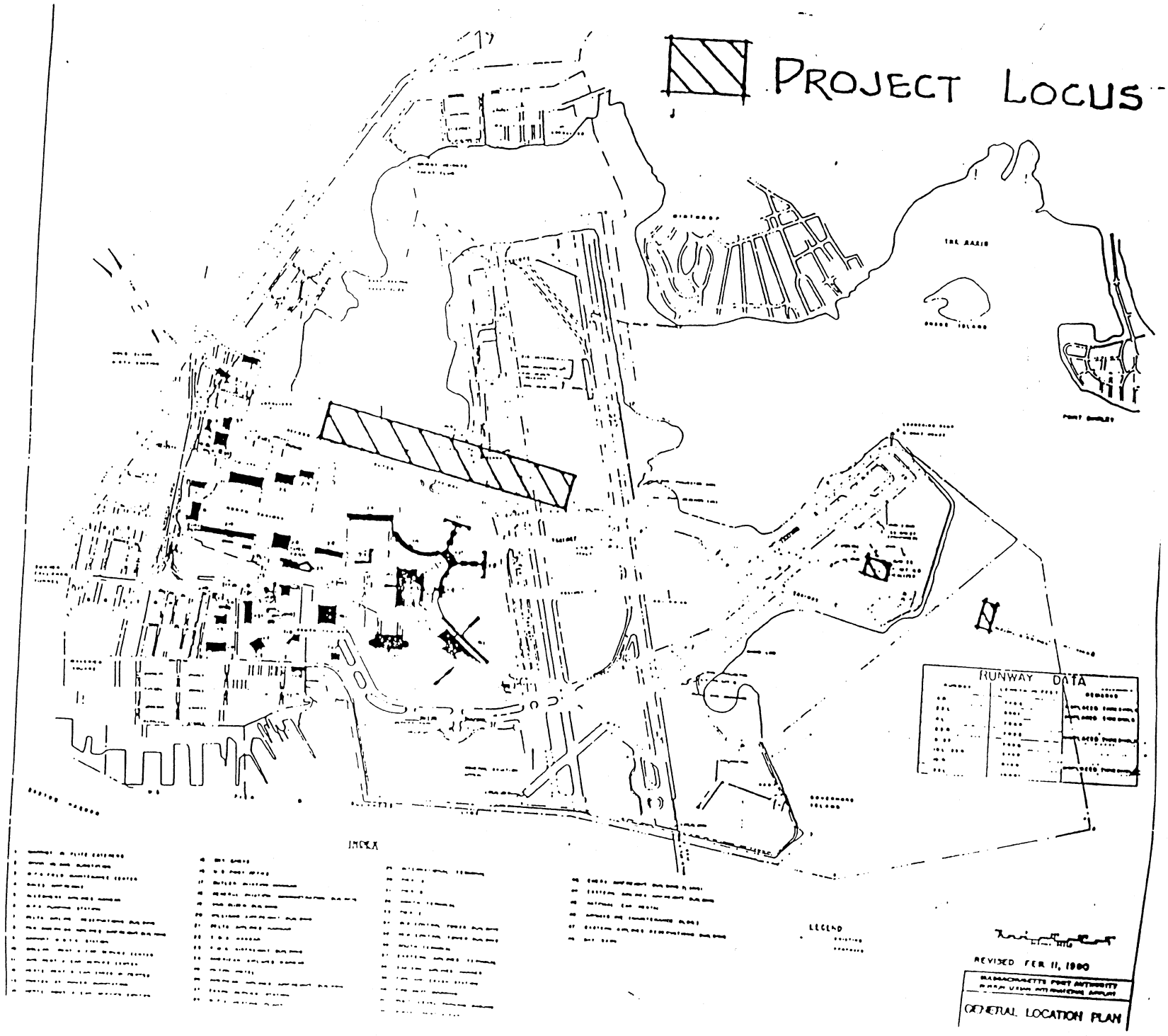

PROJECT LOCUS
RUNWAY DATA
INDEX
LEGEND
REVISED FEB 11, 1980
GENERAL LOCATION PLAN

Exhibit 1

Precision Instrument Approaches

1. General. The Instrument Landing System (ILS) is designed to provide pilots of properly equipped aircraft with precision electronic information for approach and landing. The system provides accurate vertical and lateral guidance to the runway. The ILS is the national standard precision system and is installed by FAA under its charter to foster safety in air commerce.

2. Description of ILS Components and Related Facilities Serving Runway 15R

   a. Localizer/Distance Measuring Equipment (DME).

   This facility which transmits lateral runway guidance information is presently installed as an offset facility. It is intended to relocate the system onto the Runway 33L approach light pier, approximately 1,000 feet from the Runway 33L landing threshold. Co-located with the localizer is distance measuring (DME) equipment which transmits to the pilot his distance to the runway touchdown point.

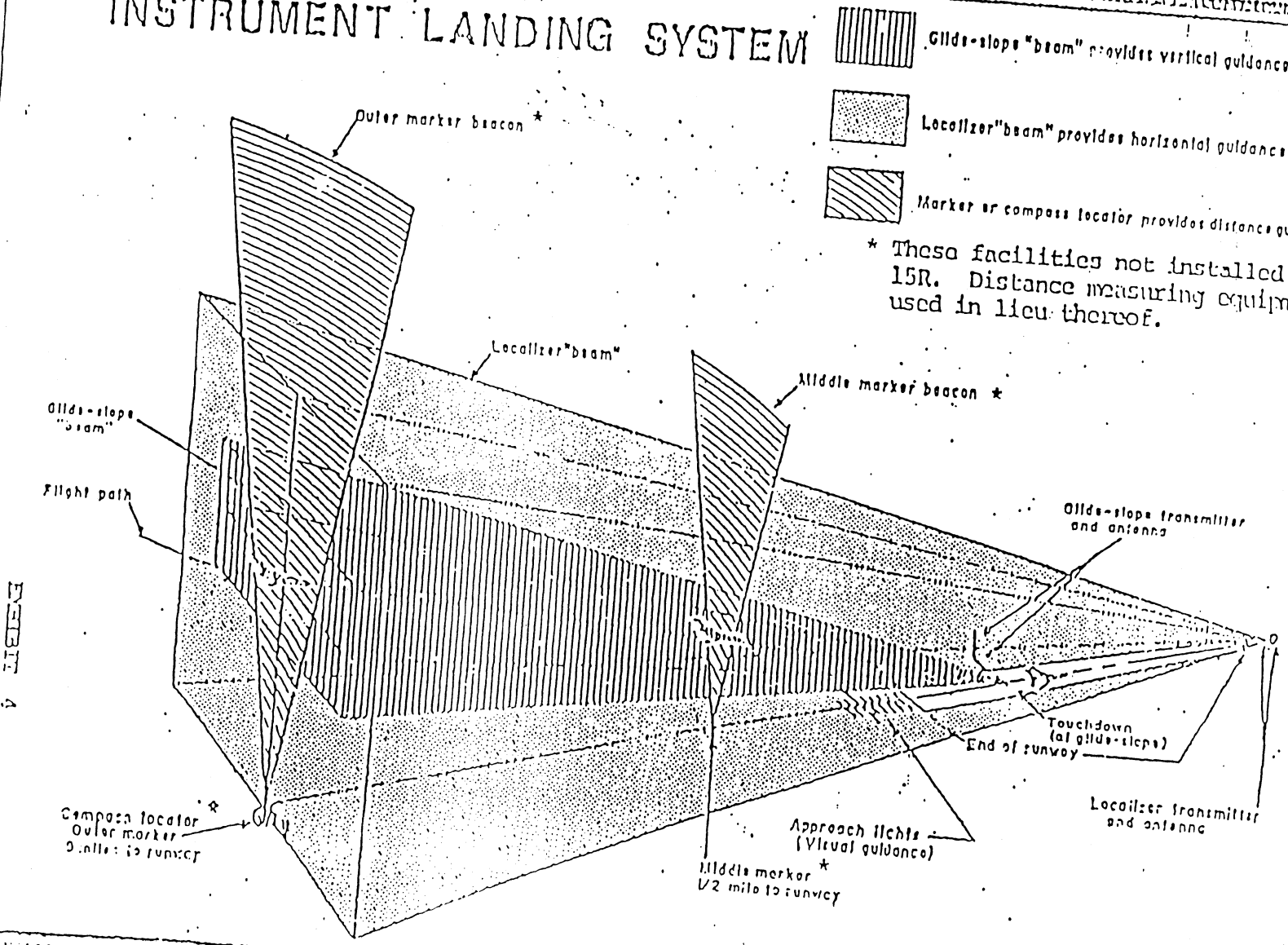
   b. Glide Slope.

   This facility transmits vertical guidance information from an on airport site which is adjacent to the runway touchdown point located approximately 1,000 southeasterly of the Runway 15R displaced landing threshold.

FEDERAL AVIATION ADMINISTRATION
PUBLIC AFFAIRS OFFICE
NEW ENGLAND REGION
BURLINGTON, MASS.

MARCH, 1977

INSTRUMENT LANDING SYSTEM



* These facilities not installed on Runw
15R. Distance measuring equipment (D
used in lieu thereof.

Medium Intensity Approach Light System with Flashers (MALS,F)

1. MALS.

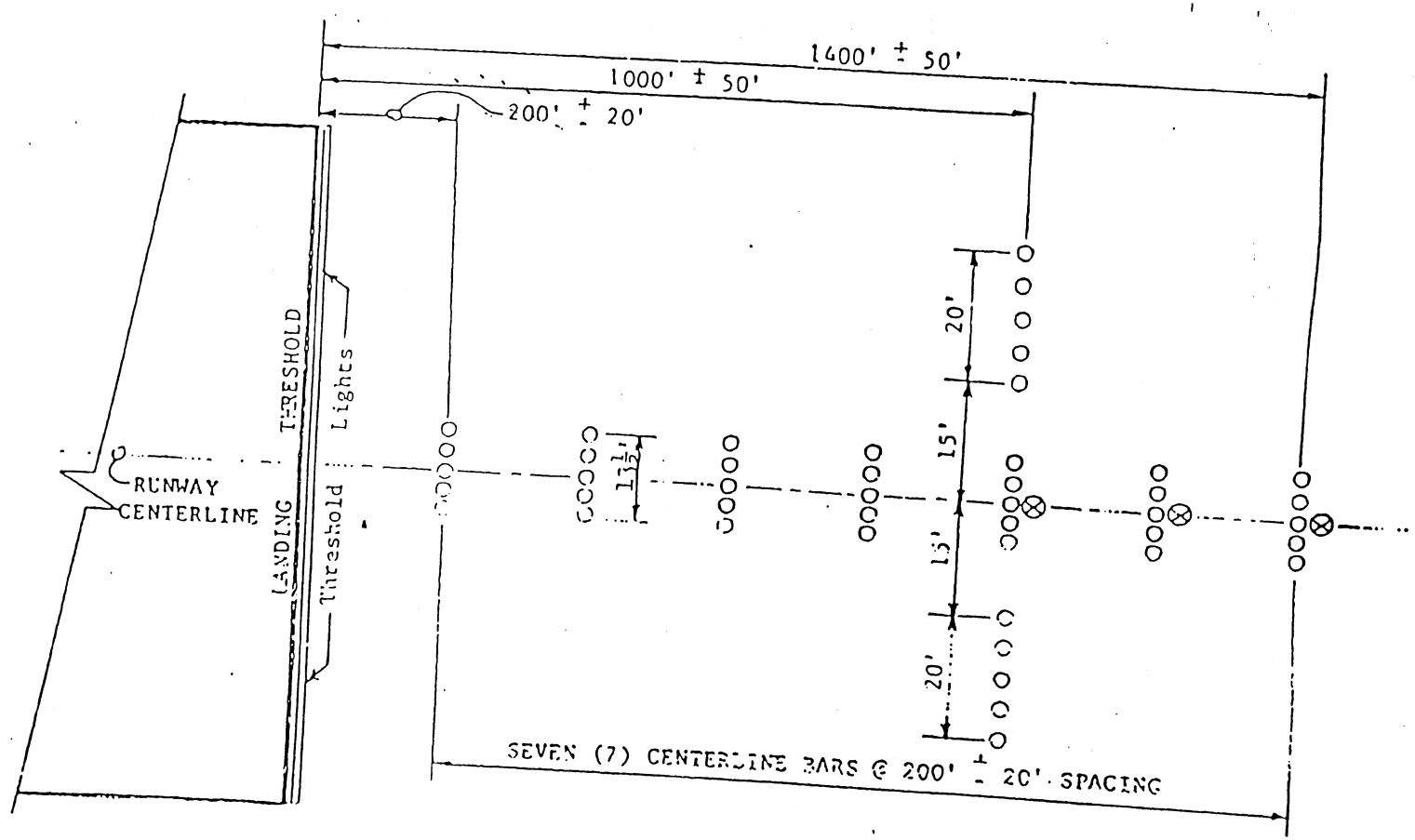
The Medium Intensity Approach Lighting System (MALS) will provide visual guidance to the pilot by radiating medium intensity focused light beams by which the pilot visually aligns the aircraft with the extended centerline of the runway. The MALS consists of light bars spaced 200 feet apart extending from the runway threshold to a point 1,400 feet from the runway threshold.

In addition to the eighteen steady burning lights in the threshold light bar, each light bar has five steady burning lights consisting of 200 watt incandescent lamps mounted below runway surface and directed through prisms in the flush mounted fixtures. These fixtures are spaced approximately 40½ inches apart facing the runway approach. The MALS at 1,000 feet from the end of the runway has two additional light bars each spaced 25 feet on each side of the centerline. The MALS will have three brightness intensities, low, medium, and high. The lights will be operated by Air Traffic Control Tower personnel.

2. Flashers.

The sequenced flashers are located at the last three light bar stations. These flashers are added to the MALS to assist pilots in making an earlier identification of the system. These lights flash in sequence toward the threshold at the rate of twice per second. The flashes are of extremely short duration, measured in microseconds.

Exhibit 6



MALSR Configuration
Boston-Logan Runway 15R

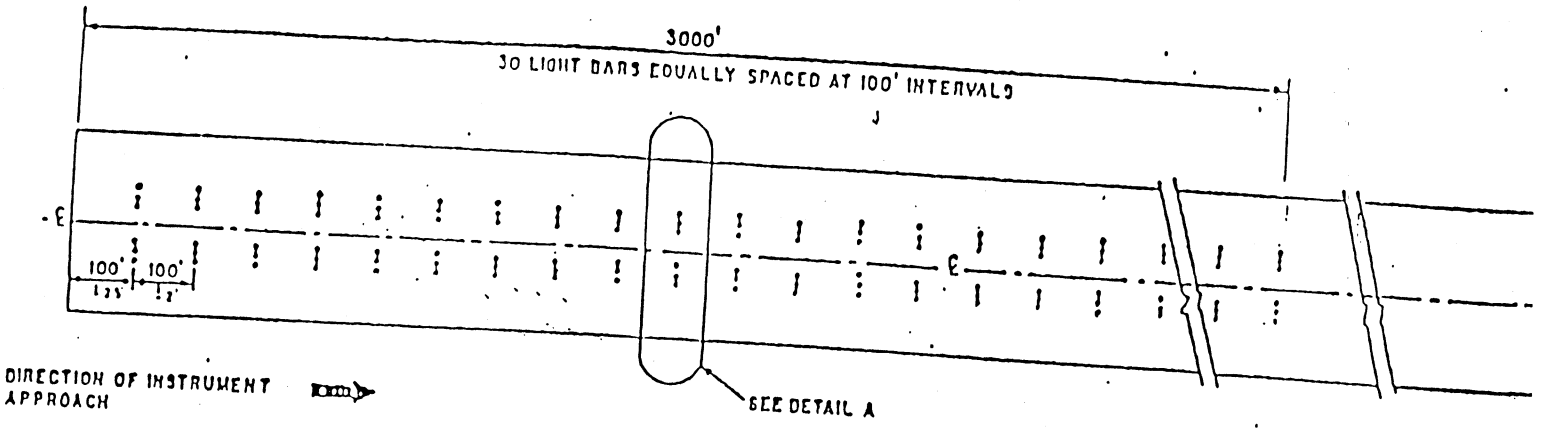
1. General

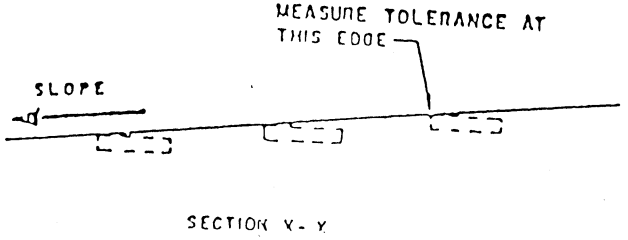
A Touchdown Zone Lighting System provides visual guidance to the pilot in the final phase of his landing approach to touchdown and can also serve as a visual extension of the approach light systems in earlier phases of the approach, particularly when associated with a short 1,400 foot approach light system such as the MALS/F.

2. Description

The TDZ system consists of 30 light bars symmetrically located on either side of the runway centerline, equally spaced at 100 feet intervals, and extending from the runway threshold for a distance of 3000 feet down the runway. Each light bar is 10 feet in width and contains three flush mounted light fixtures, the innermost fixtures being 36 feet from the runway centerline. Each light fixture contains one 200 watt lamp vertically mounted below runway grade. The light beam is directed toward the approach end of the runway through a prism in the slotted fixture top and at an angle of 5 degrees to the horizontal.

EXHIBIT 7





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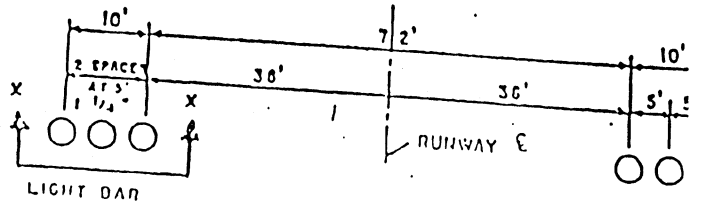

DETAIL A

LIGHT B

NOTES

1. THE LONGITUDINAL INSTALLATION TOLERANCE IN LOCATING THE PAIRS OF TRANSVERSE LIGHT BARS SHOULD NOT EXCEED 2 FEE LATERAL TOLERANCE OF LIGHTS IN A BAR IS ± 1/4"
2. THE SPACING BETWEEN THE INNERMOST TOUCHDOWN ZONE LIGHT FIXTURES SHOULD BE UNIFORM THROUGHOUT THE LENGTH OF THE SYSTEM. THIS SPACING IS 72 FEET EXCEPT WHERE CONSTRUCTION PROBLEMS PREVENT THIS SEPARATION. IN THIS CAS THE UNIFORM SPACING IS REDUCED TO NOT LESS THAN 65 FEET.

FIGURE 2. TOUCHDOWN ZONE LIGHTING LAYOUT

Exhibit 8

EXHIBIT B

LEASE TERMS

"WHEREAS, the Federal Aviation Administration (hereinater called "FAA"), wishes to install a [project description] at Logan International Airport for Runway 15-Right, and

WHEREAS, the Massachusetts Port Authority (hereinafter called the "Authority") desires to have said [project description] installed in accordance with the provisions of this lease.

WHEREAS, the FAA, which has the exclusive authority to control and manage the navigable air spaces, nevertheless recognizes the concerns and wishes of the Authority and the communities surrounding Logan.

NOW THEREFORE, the Authority hereby grants to the FAA the right to install, maintain and operate all equipment necessary or incidental for the operation of [project description] on Runway 15-Right at the locations hereinater specified in accordance with the following conditions:

1. This lease is for locations shown on FAA Drawing Nos. ____ attached hereto and made a part hereof as Attachments.

2. FAA shall have the right of access to said locations for all purposes consistent with the operation, installation, maintenance and repair of the [project description].

3. The landing minimums for Runway 15-Right will be established in accordance with those in existence on the date of this lease, which are a Minimum Decision Altitude of 268 feet MSL and visibility of 4000 feet RVR or 3/4 miles.

4. Should FAA at some future date propose to reduce landing minimums on Runway 15R, it will not do so prior to holding a public hearing and preparing a full environmental impact statement.

Letter 37
City of Boston
Honorable Mayor Thomas M. Menino

Code	Topic 1	Topic 2	Comment	Response
37.1	Environmental Review Process	Blue Ribbon Panel	The Commonwealth must convene a regional panel to evaluate the state of transportation in the region, develop comprehensive strategies to meet both short-term and long-term regional transportation needs, promote a greater variety of transportation options available for our citizens and our economy, and commit the Commonwealth to meet these goals in specific and feasible ways.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies form the basis of a comprehensive regional transportation strategy that includes the Airside Project at Logan Airport, expansion and growth of the regional airports, and the implementation of high-speed rail and other regional rail projects. All these measures are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. By the end of 2000, Boston residents had several alternatives to Logan Airport, including Worcester Regional Airport, Manchester Airport, T.F. Green/Providence Airport, Pease International Tradeport, and Amtrak's high-speed Acela train service. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of options to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its assumption of operating responsibility for the Worcester Regional Airport on January 15, 2000 and its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999. An additional Summit was held in December 2000, in Rhode Island. Refer to Section 2.9 for a discussion of Massport's initiatives in support regional transportation alternatives.
37.2	Air Quality	Impacts	Increased levels of VOC, CO and NOx emissions are projected as a result of anticipated growth at Logan.	Emissions are shown to decrease with the Preferred Alternative when compared to the No Action Alternative.

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Code	Topic 1	Topic 2	Comment	Response
37.3	Air Quality	Impacts	Increase in auto and bus emissions will result from growth.	The proposed Airside Project will not stimulate additional growth in passenger activity levels at Logan Airport. Off-site motor vehicle emissions estimates are shown in Table 6.4-9 of the Supplemental DEIS/FEIR. Increases in the number of vehicles accessing Logan Airport are not analogous to increases in emissions. As indicated in the table, these emissions generally decrease in the future; as a result of improved motor vehicle emission standards, the increased use of alternative fuels, and other factors.
37.4	Air Quality	Taxiway Improvements	With the addition of the Centerfield Taxiway, there will be additional planes with idling engines adding to pollutant emissions near public beaches and residences.	The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the taxiways reducing ground noise and emissions for close in residents of East Boston and Winthrop. Dispersion modeling indicates no violations of the NAAQS at any of the sites shown on Figure 6.3-1 of the Supplemental DEIS/FEIR, including those at public beaches and residential areas.
37.5	Air Quality	Model	Current Massport soot monitoring protocols are not sufficient to determine the effect on air quality.	The two soot monitoring programs conducted by Massport are scientifically accurate. Studies concluded that the soot was attributable to background (ambient) conditions in an urban environment, and not to airport-related activities. Refer to the *Logan Airport 1994/1995 GEIR* for additional information.
37.6	Air Quality	NAAQS	Current complaints about air quality, odor and soot emissions by affected residents continue and indicate current levels are not acceptable and have not been addressed.	Massport employs a GIS mapping system to correlate air quality and odor complaints with meteorology, airport use, and other factors. The soot sampling and monitoring programs indicate that Logan Airport is a very small (*i.e.*, less than one percent) contributor. In addition, the NAAQS serve as an indicator of the acceptability of current pollutant concentrations since these standards were designed to protect human health and welfare. Dispersion modeling indicates no violations of the NAAQS.
37.7	Noise	Taxiway Improvements	There will be additional noise from idling engines on the Centerfield Taxiway which will immediately impact residents of East Boston and Winthrop.	The ground taxi noise calculated for the northeast end of Runway 4/22, at locations in Winthrop and East Boston, show small to moderate *reductions* in ground noise of 2 to 3 dB for the Preferred Alternative when compared to the No Build Alternative (refer to Tables 6.2-15, 6.2-16, and 6.2-17 in the Supplemental DEIS/FEIR). This is true for average and for maximum propagation conditions and for all operational scenarios examined. The main reason for these noise decreases is the reduction of the number of taxiing aircraft waiting to takeoff on Runways 22LandR. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the taxiways reducing ground noise and emissions for close in residents of East Boston and Winthrop.
37.8	Noise	Impacts	Current complaints by residents indicate that existing noise levels are not acceptable.	Massport is a national leader in the implementation of an aggressive residential sound insulation program. Over the last decade, the affected population within the 65 dB DNL contour has been shrinking, attributable to improvements in aircraft technology and noise control, and better attainment of PRAS goals. Massport continues to explore means of further reducing noise in areas around Logan Airport.
37.9	Noise	Runway Use	Massport has indicated that Runway 14/32 is to be used primarily during periods of northwest winds and inclement weather. This will increase noise volumes in the flight path.	The operations of Proposed Runway 14/32 would be over the water. The departures on Runway 14 would turn over the inner harbor and proceed out the harbor mouth, as do the departures on Runway 15R, the nighttime preferential runway. Similarly, the last several miles of the approach path to Runway 32 would be over water and largely uninhabited islands. When Runway 14/32 is in operation, it would reduce the noise exposure over populated communities.

Code	Topic 1	Topic 2	Comment	Response
37.10	Noise	Runway Use	Lowering landing minimums on Runway 27 will increase noise for residents of Winthrop. Lowering landing minimums on Runways 22L and 15R will increase noise for residents of East Boston and Revere.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.
37.11	Environmental Review Process	Permitting	Massport has not provided the Boston Conservation Commission with adequate information about its monitoring or its compliance with the Orders of Conditions to protect the harbor and the valuable remaining wetlands.	Massport presents data regarding outfall monitoring in its GEIR/ESPRs and its subsequent Annual Updates. Similarly, Massport has developed extensive documentation regarding its development of the new salt marsh restoration area along Taxiway November. The Airside Project has been designed in a manner to avoid any wetland or harbor construction and a mitigation program has been developed to ensure that the project will not adversely affect water resources.
37.12	Water Quality	NPDES Permit	Massport is not in compliance with the National Pollution Discharge and Elimination Systems permitted outfalls at Logan.	A review of NPDES outfall monitoring data since 1995 indicates that Massport has consistently improved compliance with its NPDES permit limits for its permitted outfalls. This information is reported to the EPA, as required, and also is reported on an annual basis in the Logan Airport GEIR and its Annual Updates.
37.13	Water Quality	Stormwater	No pollution treatment structures for the North, Porter and Maverick Outfalls, which serve 306 acres, are discussed as required.	The North and West Outfalls are equipped with water pollution control devices such as oil/water separators and grit collectors, and were upgraded in Spring 2000. The construction of the Centerfield Taxiway or Runway 14/32 would not affect the drainage system for the North Pollution Control Facility. Similarly, the drainage system for the Maverick Street and Porter Street outfalls would be unaffected by the proposed taxiway construction. Construction, however, would occur in portions of the drainage area for the West Outfall and a number of the smaller culverts that drain the airfield. Approximately 55 acres of the airfield drainage will be redirected from the West Outfall to existing perimeter drains. The perimeter drains will be directed through a low-flow chamber sized to handle the first flush of stormwater before being discharged. This reconfiguration is shown in Figure 6.6-1 of the Supplemental DEIS/FEIR. The reconfiguration results in an 18 percent reduction in the drainage area for the West Outfall. The reduction in flow of generally uncontaminated airfield drainage is expected to increase the efficiency of the West Outfall to treat flow from the terminal areas. As described in Section 6.6.4 of the Supplemental DEIS/FEIR, Best Management Practices will continue to be implemented to minimize the discharge of sediment, and a low-flow chamber will be installed to treat first flush stormwater flows from drainage areas redirected from the West Outfall.

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Code	Topic 1	Topic 2	Comment	Response
37.14	Alternatives	Blast Fence	Before its removal, alternatives to the Blast Fence that provides marginal protection from noise, fumes and blast effects from take-offs for residents must be identified and funded.	The blast fence is not part of the Airside Project. Removal of the blast fence underwent a separate state environmental review process. An EOEA Certificate requiring no further environmental analysis was issued in February 2001.
37.15	Health Effects	Studies	To date, little or no analysis or study of the affects on public health from Logan operations has been conducted.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.
37.16	Environmental Justice	Impacts	No analysis of federal Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.
37.17	Cumulative Impacts	Master Plan	The DEIR/S does not address the link between air transportation supply and ground transportation demand.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.
37.18	Purpose And Need	Delay	The DEIR/S assumes that passenger traffic at Logan Airport will grow irrespective of airport capacity and resulting delay.	Growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in current and future passenger and aircraft activity at Logan Airport.
37.19	Environmental Review Process	FAA/NEPA	The DEIR/S does not present a reasoned Build vs. No-Build analysis of airport capacity with and without Runway 14/32, nor the resulting impacts on ground transportation (regional highways, local streets, transit modes).	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

Code	Topic 1	Topic 2	Comment	Response
37.20	Ground Transportation	Access to Logan Airport	The DEIR/S does not adequately justify some of its future projections of transit and HOV mode share.	The Airside Project does not result in additional demand for ground access services. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan, targeted HOV shares, forecasted Vehicle Miles Traveled, and trips by mode for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis. The *Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR) provides a status report on Massport's ground access initiatives and HOV ridership for 1999.
37.21	Ground Transportation	HOV	The DEIR/S does not differentiate the various types of HOV travel, nor does it take into account the full impacts of certain types of travel that are considered HOV (e.g., taxi and drop-off trips, passengers who drive alone to park in Chelsea are considered HOV trips because they take a shuttle one mile to Logan).	Refer to response to Comment 37.20.
37.22	Ground Transportation	TMA	The DEIR/S does not provide adequate information on Logan Transportation Management Association membership, participation, or plans for increasing participation.	The *Logan Airport 1999 Environmental Planning and Status Report* reported on Logan Airport Employee TMA achievements in 1999, including an increase of 14 member organizations, with a total of 6,200 employees.
37.23	Ground Transportation	Access to Logan Airport	The DEIR/S does not provide adequate proposals for improving utilization of the MBTA Blue Line by air passengers.	The Blue Line Modernization Program is discussed in the *Logan Airport 1999 Environmental Planning and Status Report* (formerly the GEIR) which was filed with the Secretary of Environmental Affairs on December 15, 2000.
37.24	Purpose and Need	Airfield Capacity	The DEIR/S does not adequately justify construction of the Centerfield Taxiway. Adequate runway crossing opportunities and airplane queuing capacity currently exist, and the construction of the Centerfield Taxiway would result in excessive aircraft idling.	The Centerfield Taxiway will significantly reduce ground delays and enhance the controllers' flexibility in routing inbound and outbound aircraft when Runways 4L/R or 22L/R are in use. The Centerfield Taxiway will *reduce* aircraft idling, particularly on Taxiways November, Romeo and Yankee waiting to cross Runway 4L/22R. For more details, refer to responses to Comments 37.64 through 37.69.
37.25	Purpose and Need	Delay	Runway 14/32 would address weather-related delays, but these are only a portion of the airside delays. The DEIR/S does not provide information on the relative impact of different causes of delay: weather, mechanical, and delays originating from other airports.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion by addressing constraints at Logan Airport. Delays caused by conditions at other airports or other factors, such as mechanical failure, are not addressed since Massport cannot influence these delays. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.

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37.26	Alternatives	Peak Period Pricing	The DEIR/S discounts peak period pricing because it is assumed to reduce regional air service. Massport should analyze a peak period pricing scenario, which considers a shifting of some service to other regional airports.	Regional carriers are not likely to shift operations to regional airports in response to PPP because doing so would likely reduce on-board passengers and the economic viability of the service. Regional carriers at Logan Airport carry a mix of local and connecting passengers. As the largest city in New England, Boston and the immediate vicinity represent the largest concentrations of local demand for regional carrier markets. Also, up to 50 percent of passengers on regional flights connect to other flights at Logan Airport. Shifting regional flights to other airports, such as Manchester or T.F. Green/Providence, would likely reduce the number of on-board passengers since a significant number of passengers are traveling to the City of Boston or connecting to flights that are not available from the regional airports. For example, service to Manchester Airport would not be a viable alternative for a Provincetown passenger traveling to a location in downtown Boston. Likewise, service to T.F. Green/Providence Airport would not be attractive to a Bangor passenger trying to reach Denver, since there are no nonstop services between Providence and Denver.
37.27	Regional Transportation	Regional Airports	There is no description of a regional plan that actually diverts traffic from Logan.	The regionalization of aviation in New England is currently underway. As a result of capital investment, service expansion at regional airports and coordinated efforts between Massport and other federal, state and local agencies, since 1996, eight out of ten new passengers in New England are using the regional airports. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of the emerging roles of the Logan, T.F. Green/Providence, Manchester, and Worcester Regional airports in the aviation transportation system and on upcoming New England Airports System Study.
37.28	Regional Transportation	Regional Airports	There are no funding requests in the Transportation Bond Bill for upgrades at Worcester, Hanscom, or Fort Devens to improve infrastructure and public transit as part of a regional strategy.	Worcester Regional Airport has existing terminal and airport infrastructure and has been targeted for increased use and future service expansion. MassHighway is in the process of beginning the preparation of the Draft EIS/EIR for highway improvements to improve access to Worcester Regional Airport..
37.29	Alternatives	Peak Period Pricing	Peak pricing is not explored as a tool to divert flights in the region.	Section 4.5 of the Supplemental DEIS/FEIR discusses PPP at length. Chapter 2 of the Supplemental DEIS/FEIR addresses ongoing regional strategies.
37.30	Purpose and Need	Airfield Capacity	The City of Boston views the proposed project as a capacity enhancement plan.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.

Code	Topic 1	Topic 2	Comment	Response
37.31	Environmental Review Process	Blue Ribbon Panel	The City of Boston finds the DEIS/R deficient in many respects and respectfully requests that...[a] regional panel of experts be convened to immediately assess the overall state of transportation in the region; [t]his panel develop strategies for both short- and long-term regional transportation needs and identify a variety of transportation options available for the traveling public and the movement of goods; and [c]ommunities in the region be fairly and adequately represented on such a panel along with public officials, economists, land use planners, and representatives of environmental and public health interests.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. As summarized in the Draft EIS/EIR, a number of studies that address regional transportation planning issues have been conducted over the last ten years. These studies have concluded that the Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high speed rail are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Chapter 2 of the Supplemental DEIS/FEIR discusses the entire region's air transportation system, along with a discussion of alternative modes, specifically high-speed rail, and describes the regional study and its major conclusions.
37.32	Air Quality	Alternative Fuels	Massport is to be commended for its program to convert its ground service vehicle fleet to alternative-fueled vehicles.	Comment noted. Massport has initiated and participated in a number of programs to encourage use of alternative fuels at Logan Airport, and has received national recognition for its efforts.
37.33	Air Quality	Alternative Fuels	The City has suggested in prior comments on Massport MEPA filings that important steps in mitigating the air quality impacts of Logan may include lease agreements with new or renewing tenants that contain requirements or incentives, such as reduced curb fees for private fleet operators, for use of low or no emission vehicles by tenants.	Massport offers a 25 percent discount on ground access fees to operators of qualified alternative fuel vehicles (AFVs). In addition, Massport has participated in several grant programs to encourage tenant use of AFVs. A status report on achievement of Massport ground access initiatives is provided in the *Logan Airport 1998 Annual Update* and is reported in the *Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR).
37.34	Air Quality	Impacts	The City believes that additional measures are necessary and requests that Massport and a regional transportation task force investigate other available technologies, particularly from companies based in the region, for reducing air emissions.	Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas.
37.35	Ground Transportation	Mitigation	For several years, Massport has indicated that it is evaluating the benefits of moving bus servicing and other operations to off-airport locations. This will add vehicle trips to current levels, a detriment to air quality. The City has twice requested that a detailed analysis and discussion be presented in a GEIR or Annual Update but Massport has never responded to this inquiry.	Massport's efforts to minimize vehicle trips are documented in the *Logan Airport 1999 ESPR* (previously GEIR). Massport continues to evaluate the benefits of moving bus services to off-airport locations. No definitive decision has been made at this time.

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37.36	Air Quality	Impacts	Massport has stated in prior environmental review documents that PM2.5 data for aircraft are not currently available. This is surprising since aircraft engines have undergone emissions testing for many years. This should be a subject evaluated in scientific and technical detail by the regional panel of experts. Findings and recommendations on this issue should be a component of a regional transportation report.	Particulate Matter (PM) emission factors for aircraft are very limited, at best, and nonexistent in most cases. Therefore, as a conservative, worst-case assumption, the air quality analysis assumed that all PM is less than 10 microns in diameter. No emission factors or approximation methods are available for $PM_{2.5}$.
37.37	Air Quality	Model	Given the continued reporting of anecdotal evidence of soot deposition and the open issues as to the accuracy and robustness of the soot monitoring protocol...this matter demands further study. Coupled with the continuing problem of odor from aircraft operations, the overall emissions from all airside operations should be the subject of a truly comprehensive, state-of-the-art monitoring and modeling study.	Monitoring of airborne soot levels in the vicinity of Logan Airport has shown that the airport is a very small (less than one percent) contributor. The air quality analysis, based on EPA/MDEP models and guidelines, performed for the Supplemental DEIS/FEIR is considered to be comprehensive and state-of-the-art.
37.38	Air Quality	NAAQS	The proposed Runway 14/32, at a minimum, facilitates more aircraft operations per hour during certain weather conditions. This is especially of concern when 14/32 is used for departures (wind out of the southeast) and emissions from take-off are blown back into the neighborhood. The result is that the Jeffries Point neighborhood and surrounding areas may experience an increase in concentration of jet emissions during southeast wind conditions.	The dispersion modeling results indicate that concentrations of pollutants will be below the NAAQS at all times. The Supplemental DEIS/FEIR reports worst-case conditions, meaning air quality will be better than this under almost all conditions. A full year of actual weather data was used to conduct the dispersion analysis. In summary, actual wind conditions have been used to model pollutant concentrations at Jeffries Point, where no violations of the NAAQS were projected. Furthermore, Runway 14/32 will primarily be used for arrivals. Also it will not increase the number of operations during northwest winds, but will allow projected operations to be accommodated with fewer delays.
37.39	Alternatives	Runway 14/32	Runway 14/32 is part of Logan Airport's overall program to increase passenger levels to a minimum of 37.5 million in 2010 and, as such, contributes to the increase in emissions generated by the new aircraft operations.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. Refer also to Section 4.2. The availability of Runway 14/32 is projected to produce a small improvement in air quality from improved efficiency of airfield operations.
37.40	Noise	Taxiway Improvements	The City respectfully disagrees with the statement in the DEIS/R that the Centerfield Taxiway will reduce noise impacts from taxiing aircraft in the areas located north/northeast of the airport.	Comment noted. Massport reaffirms the validity of its analysis. Refer to responses to Comments 37.7 and 37.24.
37.41	Alternatives	Preferred Alternative	East Boston residents view the blast fence as a device the partially mitigates fumes, noise and blast effects from takeoffs on Runway 22R. Massport believes that it has an obligation to take the fence down because it is non-frangible, and would therefore present a hazard to flight personnel and air passengers in the event of a crash. ... An alternatives analysis, prior to the filing of environmental documents, should include the results of a detailed investigation of a non-frangible barrier and other methods to ensure that the quality of life in and adjacent to Orient Heights is not further degraded.	Refer to response to Comment 37.14.

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37.42	Noise	Runway Use	The City does not agree with the FAA's assertion that lowering landing minimums will result in noise benefits for residents under the approach path to the runways in question. ... Lowering the landing minimums is likely to result in the use of these runways more often during poor weather conditions, exposing nearby residents to noise levels which they currently do not experience. The City of Boston believes that lowering the landing minimums will only serve to expose already overburdened residents to additional noise impacts.	Response to Comment 37.10 addresses the fact that the flight paths themselves do not change, and Appendix D in the Airside Project Draft EIS/EIR includes a complete discussion of the impacts of lowered landing minimums. The lowered minimums allow the use of runways more closely aligned with the prevailing winds, thereby increasing safety. The runway use would change imperceptibly by the reduced minimums—less than 0.2 percent of equivalent operations—and these flights represent shifts from Runway 4, not additional operations.
37.43	Alternatives	Reduced Approach Minimums	The DEIS/R indicates that the reduction of approach minimums is consistent with the minimums in effect at other major commercial airports. Current industry practice for major commercial airports allows for greater use of the four runways under certain weather conditions. ... The City questions if the referenced "major commercial airports" are located in similar areas. When other major commercial airports are referenced in environmental review documents, the locations and characteristics of these airports should be detailed.	The reduced minimums at Logan Airport would be consistent with recommended practices as established in FAA Order 8260.3B, *United States Standards for Terminal Instrument Procedures*. These standards are used at all airports in the United States, and in many other nations around the world. These standards are already used for Runway 4R approaches at Logan Airport. To cite two typical examples, both La Guardia New York and Washington Reagan Airports have Category I ILS with a minimum ceiling of 200 feet above ground level and one half-mile visibility.
37.44	Alternatives	Reduced Approach Minimums	As noted in the DEIS/R, the City of Boston entered into an agreement with the FAA and Massport not to decrease the landing minimums on Runway 15R. It is our intention that this agreement should be respected and honored... With the high number of residents living alarmingly close to the touchdown point of these two runways (22L and 15R), the lowering of the landing minimums will place these residents in additional peril.	The agreement between the City of Boston, the FAA and Massport stipulates that any modification of the existing minimums requires completion of an EIS/EIR, even though the setting of minimums is otherwise categorically excluded from the EIS/EIR process. The reduced minimums will, in fact, enhance safety by providing precision guidance to a point closer to touchdown and reducing reliance on Runway 4R under poor weather conditions, when winds may favor use of an alternate runway. Also, refer to responses to Comments 37.10 and 37.42.
37.45	Water Quality	NPDES permit	The City finds this reporting [on NPDES permitted outfall monitoring] imprecise and misleading and it is apparent that discharges are not meeting the EPA's NPDES limits.	Refer to response to Comment 37.12
37.46	Water Quality	NPDES permit	The DEIS/EIR does not identify any pollution treatment structures for the North, Porter and Maverick Outfalls that, combined, serve a 306-acre drainage area. It is also unknown if the 50 perimeter outfalls treat pollutants and if they are monitored and maintained.	Refer to response to Comment 37.13. As required by its NPDES Discharge Permit, Massport conducts water quality monitoring at the four outfalls that convey drainage from the "industrial" portions of Logan Airport, such as the fuel farms, terminals, car rental facilities, and maintenance facilities. These are the North, West, Porter and Maverick outfalls. Federal regulations do not require Massport to monitor the "non-industrial" drainage from the airfield that discharges through approximately 50 perimeter outfalls. The perimeter outfalls are not equipped with treatment devices, since the airfield areas they drain are not a significant source of contaminants or suspended solid materials. The perimeter outfalls are routinely inspected and maintained, as needed, by Massport.
37.47	Water Quality	Stormwater	While Massport identifies its existing drainage structures, there is no information describing drainage plans for 14/32 runoff. ... The proposed airside improvements will result in the conversion of 39.4 acres of vegetation to paved surface. Massport anticipates the need to use more de-icing agent with the proposed improvements. If overland dispersion is presently a method of treating these compounds, how will the loss of 39.4 acres be addressed? How will Massport mitigate this loss of pervious area?	As stated in the Draft EIS/EIR, Runway 14/32 will be de-iced when weather conditions dictate. Taxiways are, however, not routinely deiced and there will be no additional aircraft deicing or satellite deicing stations required for the project. The existing drainage system will be reconfigured, where necessary, to accommodate additional stormwater runoff. As stated in the response to Comment 37.46, the airfield is not a significant source of contaminants. However, Massport will install a low-flow chamber to capture any contaminants contained in the first flush stormwater. Although portions of the airfield pervious surfaces will be paved, adequate vegetated areas will be provided between paved surfaces and the new drainage inlets to provide suitable levels of treatment.

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37.48	Water Quality	NPDES permit	It is obvious when one reviews Logan AUs (GEIR Annual Updates) that Massport is experiencing difficulty in complying with the BCC (Boston Conservation Commission) Orders of Conditions and EPA NPDES permits conditions...The City asks that Massport review its permits, including all perpetual Orders of Conditions, and provide evidence that these conditions are being met.	As a condition of the NPDES Permit, Massport monitors water quality for pH, Oil and Grease, and Settleable Solids three times each month at the North, West, Porter and Maverick outfalls. These outfalls include all drainage from the terminal and fuel farm areas, and some runway and infield areas. The monthly monitoring is conducted (1) in dry conditions; (2) in wet weather conditions and (3) immediately following a storm event. This sampling and other monitoring has helped Massport to improve permit compliance significantly. During 1998, there was 100 percent compliance for pH. Oil and Grease limits compliance was 100 percent at the West Outfall; 97 percent at the North and Maverick Outfalls; and 94 percent at the North Outfall. A copy of the 1998 Water Quality Management Update is contained in the *Logan Airport 1998 Annual Update* and additional information is provided in Appendix I of that document. (Refer to Table of 1998 NPDES Compliance and Summary of 1995-1998 Compliance Averages). Massport's outfall sampling summary for Logan Airport in 1999 is contained in Appendix H of the *1999 ESPR.*
37.49	Water Quality	Stormwater	[Provide documentation that this commitment is being met]: DEP File No. 6-464, March 13, 1991, Logan Landscaping Improvements Special Conditions.	All on-site drainage structures are routinely inspected. As with all Logan Airport construction projects, contractors are required to implement and maintain full erosion and sediment control program throughout construction. Massport has an ongoing program to stencil surface drains that discharge to Boston Harbor.
37.50	Environmental Review Process	Permitting	[Provide documentation that this commitment is being met]: DEP File No. 6-467, June 19, 1991, Massport Employee Parking and Associated Roadway Special Conditions.	Although permit approvals for this project were secured, Massport never constructed this project.
37.51	Environmental Review Process	Permitting	[Provide documentation that this commitment is being met]: DEP File No. 6-516, July 22, 1992, Massport Test Borings/Logan.	There were no discharges or spillage of fuel, oil, or other pollutants during the test boring program. As with all Massport contracts, an emergency spill management program was in effect throughout the test boring program.
37.52	Environmental Review Process	Permitting	[Provide documentation that this commitment is being met]: DEP File No. 6-544, May 12, 1993, Logan Safety Ends.	During construction of the Runway-End Safety Improvements, erosion and sedimentation control practices were fully employed. Exposed landside soil was stabilized and vegetated quickly. Siltation booms were deployed in Boston Harbor and water quality monitoring was conducted as required in the Boston Conservation Commission Order of Conditions. Massport continues to monitor and maintain the runway end safety areas to assure their stability. There were no newly constructed or relocated catch basins associated with construction of the runway end safety improvements.

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37.53	Ecosystem	Rare Species	The City strongly objects to the suggestion that off-site [habitat] mitigation should occur outside of the Boston Harbor area.	Upland Sandpipers require extensive areas of grassland habitat. This type of habitat has dwindled steadily throughout New England as a result of natural succession of these areas to forest and through development. Many of the remaining large grassland areas in the Commonwealth and throughout New England are found at airports. Because of the hazard that birds present to aircraft and the flying public and because of the potential hazards to the birds, Massport has worked with the Natural Heritage and Endangered Species Program to develop a mitigation program that is removed from airport operations to the maximum extent practicable. Camp Edwards provides an excellent opportunity to reclaim a former grassland that is currently being lost to forest and restore a population of Upland Sandpiper that has declined over the past decade. Restoration of a degraded habitat is considered to have a much greater potential for success as compared to constructing a new habitat area of over a hundred acres in the Boston Metropolitan area even if such a suitable site were to be located.
37.54	Health Effects	Studies	The Boston Public Health Commission believes that Massport, the FAA and the U.S. Department of Transportation have failed to take the health of Boston residents into consideration in planning the proposed project.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport.
37.55	Environmental Justice	Impacts	The City asks that the FAA and DOT comply with Executive Order 12898 and provide documentation and all relevant data to that effect.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.
37.56	Environmental Review Process	MEPA	The City of Boston requests that the Secretary find this DEIS/R inadequate on the grounds that there is no analysis of the landside transportation impacts of the proposed Runway 14/32. The DEIS/R's reliance on analysis included in the GEIR is unacceptable, since the GEIR does not include specific impacts related to Runway 14/32. The City finds that many of the GEIR's assumptions related to HOV and transit modes are questionable, and that these assumptions should be re-examined.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act..." Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

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37.57	Purpose and Need	Delays	The DEIS/R's neglect of landside transportation issues is based on the premise that Runway 14/32 will not add capacity, only relieve delay. The City strongly questions the premise that passenger demand at Logan Airport is inelastic with respect to delay...It is illogical to suggest that such an increase in delay would not result in a shift in air service to New England's other airports or other services to substitute for air travel to and from Logan Airport.	The construction of unidirectional Runway 14/32 would not be expected to induce additional aircraft operations or passenger traffic at Logan Airport. Refer to Section 4.2. Increased use of the regional airports surrounding Boston and alternative transport modes (*e.g.*, high-speed rail) is reflected in the planning forecasts used for the Airside Project operational and environmental analyses.
37.58	Regional Transportation	Regional Airports	Such a shift in activity [to air service to New England's other airports] would result in divergent Build and No-Build conditions. This demands that Massport analyze the difference between the Build and No-Build conditions. Massport should be required to examine runway operational capacity, landside trips by mode, impact on roadway and transit capacity, and unfulfilled passenger and cargo demand that could be accommodated at other regional airports and transportation facilities.	Both the No Action Alternative and the Preferred Alternative assume increased use of regional transportation options. Analysis of operational capacity for Logan Airport runway configurations under various weather conditions was performed and represents a central input in the operational analysis presented in Chapter 4 of the Supplemental DEIS/FEIR. The recommended airside projects will not affect ground access demand or capacity at Logan Airport. The *Logan Airport 1999 ESPR* (previously GEIR) reports on vehicle trips by mode for both current and forecast passenger demand levels at Logan Airport. Chapter 2 of the Supplemental DEIS/FEIR examines passenger demand that could be accommodated at the regional airports surrounding Boston.
37.59	Ground Transportation	Impacts	The GEIR's traffic analysis sections have consistently been fraught with unsupported assumptions and questionable methodologies. ... The Boston Transportation Department suggests that Massport re-think traffic impact analysis in terms of vehicle-miles traveled and passengers per vehicle trip.	*The Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR) includes an updated traffic impact analysis that discusses Vehicle Miles Traveled and Massport's ground access management achievement.
37.60	Ground Transportation	Access to Logan Airport	Massport appears to rely on additional passenger and employee parking facilities just outside the East Boston parking freeze area to get employees and passengers within shuttle range of the airport. This puts an increased burden on private sector carriers and nearby communities to accommodate potentially dramatic increases in vehicle trips. This would certainly seem to work against the goals of the Transportation Management Association (TMA).	There are currently approximately 2,000 active airport employee and commercial parking spaces at various off-airport locations in Chelsea, which is outside the limits of the East Boston Parking Freeze area. These include 1,550 airport employee parking spaces in the Chelsea Parking Garage that are leased by Massport, 500 airport employee parking spaces that are controlled by Delta Air Lines for their employees, and 800 commercial parking spaces at the Park, Shuttle and Fly site on Marginal Street. The environmental impacts of these parking spaces were analyzed as part of the *Chelsea Garage DEIR* (prepared in 1992) and were confirmed by an additional analysis conducted in support of the *West Garage Final EIR* (prepared in 1995). Both analyses demonstrate that the provision of these parking spaces reduces vehicle trips and VMT on local East Boston streets and results in measurable air quality benefits.
37.61	Ground Transportation	TMA	The 1997 Annual Update does not provide information about the number of employees who belong to the TMA or who receive an MBTA pass subsidy. No explanation is offered for the TMA estimate that a reduction of only 250 to 300 employee commuter vehicle trips may result from Transportation Demand Management measures.	The *Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR) provides an accounting of the achievements of the Logan Airport Employee TMA. In 1999, five new organizations joined the TMA, bringing member organizations to 14 and the number of employees to 6,200.
37.62	Ground Transportation	Access to Logan Airport	Completion of the MBTA's Blue Line Modernization Program is described as a project that, in conjunction with the Airport Intermodal Transit Connector and other transit projects, will help increase the number of airport passengers using transit. Although the MBTA has not announced a final project schedule for the Blue Line project, it has been progressing at a slower than anticipated pace. This situation must be taken into account in assessing the impacts of increased operations and passenger levels.	Refer to response to Comment 37.23.

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37.63	Purpose and Need	Airfield Capacity	It is not clear why three (3) crossing points to Runway 4L are insufficient to handle most, if not all, capacity situations. Based on Massport's assertion that three crossing points are inadequate, specific information is lacking to substantiate the claim... The Runway 4R scenario fails to justify the benefits of the Centerfield Taxiway... Massport's claim that the Centerfield Taxiway will move this type of activity away from the community lacks merit.	Currently, approximately 75 percent of Runway 4R jet arrivals exit at Taxiway Yankee or Runway 33R. These aircraft cannot exit earlier because of landing distance requirements, and exiting on Taxiway Romeo or later greatly increases taxi time and distance unnecessarily. Aircraft crossing at Runway 33R are forced to queue on the runway to cross Runway 4L at this single crossing point and then use Taxiway November (along with any aircraft that exited via Taxiway Romeo or later) to get to the terminals. This queuing and the use of Taxiway November has adverse air quality and ground noise impacts on East Boston near Constitution Beach. The Centerfield Taxiway will allow these aircraft to taxi southward and cross the runway simultaneously at multiple points closer to the terminals. Appendix K in the Airside Project Draft EIS/EIR demonstrates that these delays will be cut by nearly 48 percent or more. It will also reduce congestion on Inner and Outer Taxiways Alpha and Kilo.
37.64	Alternatives	Taxiway Improvements	While the Centerfield Taxiway would provide an additional taxiing route to both Runways 22L and 22R, the City believes that the delay benefits may be exaggerated...The Centerfield Taxiway will be 9,300 feet in length. Since both the FAA and Massport will not agree to limit the number of aircraft allowed to queue on the Centerfield Taxiway, this will result in the potential for FAA ground controllers to approve permission for 40 to 50 aircraft to taxi to either Runway 22R or 22L. The City finds it difficult to comprehend how any aircraft located in the rear of this enormous queue would depart any earlier than if the pilot was waiting at a gate with the plane's engines off. Delays would remain, with the only difference being in the location of the aircraft at the airport.	Refer to response to Comment 37.130. The estimates of the taxiway delays were generated with FAA-approved and universally accepted modeling techniques, and the delay benefits are realistic expectations. Forty to fifty aircraft represent nearly an entire hour's departure flow at peak traffic conditions, and only about ten percent of these use Runway 22L. Extra aircraft idling on the taxiway system would cause unnecessary costs to the airlines, unnecessary environmental impacts, and increased taxiway congestion which would inhibit the ability of controllers to move aircraft to and from the runways.
37.65	Alternatives	Taxiway Improvements	Additional information and clarification are necessary on the environmental benefits [of the Centerfield Taxiway], both from a noise and air quality perspective.	Section 6.2 of the Supplemental DEIS/FEIR shows that there are small noise benefits from the construction of the Centerfield Taxiway. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the Taxiway November, thus benefiting East Boston. It also should eliminate aircraft landing on Runway 4R from waiting to cross Runway 4L and aiming their intake noise toward Constitution Beach. Section 6.4 of the Supplemental DEIS/FEIR discusses the air quality benefits of the Centerfield Taxiway.
37.66	Alternatives	Taxiway Improvements	The City of Boston believes that possible delays on Echo Taxiway from arrivals on Runway 22L also fail to justify the construction of the Centerfield Taxiway...How many crossing points are required in order for the air traffic controller to have a safe and efficient set of options? Also, what are the environmental benefits related to the Centerfield Taxiway if a pilot enters the Centerfield Taxiway and heads back towards the community seeking a place to cross Runway 22R?	Approximately 75 percent of jet aircraft arrivals exit Runway 22L at Taxiways Papa or Echo, leading to a single crossing point. Runway 27 jet arrivals also must move through this Southwest Corner area. The Centerfield Taxiway will allow aircraft to taxi north to crossing points at Charlie or Foxtrot. The aircraft can then cross at points closer to Terminals C and E without incurring delays in the Southwest Corner or causing increased congestion on Taxiways Alpha and Kilo near Terminals B and C. Allowing aircraft to bypass Southwest Corner and Taxiway Alpha/Kilo congestion will reduce environmental impacts from ground operations, and moving from Taxiway Echo to Taxiway Charlie or Taxiway Foxtrot will not move the impacts significantly closer to the communities.

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37.67	Alternatives	Taxiway Improvements	Massport has listed as one of its criteria for the construction of the Centerfield Taxiway the concern about wing-tip clearance conflicts on Taxiways Alpha (Inner) and Kilo (Outer). Should the Inner Taxiway remain in service subsequent to the construction of the Centerfield Taxiway? What is to prevent this potential conflict from remaining a concern?	Congestion on the Inner and Outer Taxiways is already a problem because pushbacks on Taxiway Alpha can interfere with and delay operations on Taxiway Kilo. As some future aircraft wingspans increase, wingtip clearance may occasionally increase congestion. Taxiway Kilo will still be needed for maneuvering most aircraft past Terminals B and C, since unnecessary runway crossings would have a detrimental impact on airfield capacity.
37.68	Alternatives	Taxiway Improvements	The City questions how the Centerfield Taxiway would enhance the general safety of airside operations, since the dramatic increase in the number of simultaneous aircraft ground movements could increase the potential for ground incursions on Logan's complex taxiway system.	The Centerfield Taxiway will not increase the number of ground operations at Logan Airport. It will simply increase controller flexibility and reduce delays. The number of aircraft on the taxiway system is directly related to the number of flights operating at Logan Airport and will not change because there is another taxiway.
37.69	Alternatives	Taxiway Improvements	Taking into consideration the Centerfield Taxiway length (9,300 feet) and the proposed location, a pilot not familiar with the airport may experience an identification problem while on approach to either 22L or, for small aircraft, 22R.	Practically every major airport with parallel runways (including Logan Airport) also has parallel taxiways. Runway markings, air traffic control procedures, and electronic approach guidance during poor visibility make mistaking taxiway for a runway highly improbable. The Centerfield Taxiway will satisfy all applicable FAA safety regulations regarding its design, construction, lighting, marking, signage, and use.
37.70	Alternatives	Taxiway Improvements	The November Taxiway will remain in operation. Therefore, the City would like to request clarification on how the air quality and noise benefits will be achieved?	While Taxiway November will remain in operation, the larger aircraft that require Runway 22L for departure will no longer need to queue on Taxiway November with the Runway 22R departures, reducing both the number and the size of aircraft using this taxiway.
37.71	Alternatives	Taxiway Improvements	The DEIS/R also claims that the Centerfield Taxiway will reduce delays for aircraft en route to Runways 22R/L for departure. Although this could occur if a minimal number of aircraft are on the field, the City questions how this benefit would be accomplished during peak periods of operation, when the number of aircraft movements on the airfield increases substantially?	Refer to response to Comments 37.64 and 37.68. The number of aircraft on the taxiways is directly related to the capacity of the runway system, since every departing or arriving aircraft must use the taxiway to get to or from the terminal. The Centerfield Taxiway will not change the taxiway demand. The delay benefits will be realized during high demand situations when Runway 22L departures are able to bypass the queue for Runway 22R. Some larger and heavier aircraft (which generally produce more noise and emissions) cannot use Runway 22R for departure but under current conditions must wait in the queue with other departures on Runway 22R, thereby increasing environmental impacts. Even though the queue on Taxiway November is limited to four jets, the heavy jets in this queue produce noise and air quality impacts that could be avoided if they could proceed directly to Runway 22L via the Centerfield Taxiway.
37.72	Alternatives	Taxiway Improvements	If the motivation behind this taxiway is to open gate space by increasing queues on taxiways, allowing Massport to reduce the so-called "delays" occurring now, then this plan is clearly a capacity enhancement program for Logan.	The purpose of the Centerfield Taxiway is not to open gate space, but to reduce taxiing delays and congestion and to provide environmental benefits. The taxiway modeling reflects delays from taxiway congestion and aircraft movements.

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37.73	Purpose and Need	Delay	The City questions Massport's representations of delays...Missing from any discussion or evaluation of delay is the role of other airports in delaying flights destined for Logan and problems with equipment or personnel, both at Logan and other airports....Delays due to cargo and small commercial and private aircraft must be a significant factor in delay. This suggests to us that delay must be evaluated in a regional context as these are the types of flights most easily accommodated at other airports. Future air passenger surveys should include questions about the passenger's origin and the timeliness of the flight(s) leaving the city of origin or that they traveled on prior to reaching Logan.	The Airside Project deals with delays at Logan Airport and the airport's ability to address them; hence delays caused by conditions at other airports, equipment failures, and personnel problems are not relevant nor are they included in the analysis. The delays caused by cargo, general aviation, and commuter aircraft are included in the analysis and the range of the various forecasts encompasses the impacts that may occur from development of and diversion to other airports or regional transportation modes. Chapter 2 of the Supplemental DEIS/FEIR discusses Logan Airport in a regional transportation context. As the second most delayed airport in the nation for arrivals, Massport is trying to reduce its airside-related delay at Logan Airport. Refer to Chapter 1 of the Supplemental DEIS/FEIR for a discussion of Logan Airport delays caused elsewhere in the system.
37.74	Alternatives	Peak Period Pricing	Massport's recommended project alternative does not include peak period pricing. In its analysis of this administrative option, Massport assumes that some existing aircraft operations would be discontinued by a shift to off-peak hours or cancellation of the service altogether. A scenario in which airlines would move service to a regional airport is not mentioned, as if it were not a viable option. Also neglected is a plan in which airlines would continue to offer flights at peak times but would add a surcharge to the fare to make up for the peak assessment. ... Massport's rejection of [the peak period pricing] alternative is unsupported by the arguments outlined in the DEIS/R.	Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport. Regional carriers that provide service between the Cape Cod and Island markets and Logan Airport are not likely to shift these services to other regional airports because doing so would reduce the number of passengers and the economic viability of such services. Regional carriers serving Logan Airport carry a mix of local and connecting passengers. As the largest city in New England, the Boston metropolitan area represents the largest concentration of demand for outlying regional carrier markets.
37.75	Environmental Review Process	Public Process	The City found that the information Massport chose to highlight from two of the cited studies, the SAR (Strategic Assessment Report) and the Second Major Airport Siting Study (SMA), did not fully represent the conclusions of those studies as they would affect Logan. The same is true for the way in which Massport now portrays the motivations for and conclusions of these studies in public Airside Improvements presentations.	Massport disagrees. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR accurately reflect the conclusions of these studies.

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37.76	Purpose and Need	Airfield Capacity	According to the SAR, renewed interest in the long dormant Runway 14/32 proposal grew out of a "Capacity Delay Task Force." But Michael Dawson, a private aviation consultant, in a letter to Massport correcting errors in the report, claimed that the correct name for this group was actually the "Airport Capacity Enhancement Task Force." This is an important distinction, because if Runway 14/32 is in reality a capacity enhancing measure, then the rationale for the runway contradicts Massport's recent statements. It may also violate the Supreme Judicial Court injunction that prohibits the airport's expansion.	The correct title of the report is the *Boston Logan International Airport Capacity Enhancement Plan.* It documents work by the Boston Airport Capacity Design Team (also referred to as the Task Force) which FAA established as part of its national effort to reduce delays in the NAS. The Task Force included key members from the FAA, Massport, and the airline community. The FAA has sponsored over 30 such teams, which "work to develop a coordinated action plan for reducing airport delay" (refer to Page 15 of the *Boston Logan Capacity Enhancement Plan*, produced in October 1992 by the FAA). The report recommends ways to accommodate 1992 and projected demand levels with an acceptable level of delay and without compromising safety or the environment. Runway 14/32 would not increase the normal operating capacity of the airport. Logan Airport can currently handle 120 hourly operations, and if the runway is constructed, that will still be the normal capacity throughput. Runway 14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. With a third available runway, controllers are able to segregate large and small aircraft operations, which leads to significant delay reduction benefits. Similar three-runway configurations exist for all other operating directions.
37.77	Alternatives	Peak Period Pricing	Peak hour travel time at Logan is a limited resource. Until Massport and a consortium of other public entities can expand capacity at alternative airports within the region, the immediate solution for relieving delays at Logan is to ration the existing resource through demand management policies.	The Airside Project analysis indicates that PPP is an effective option when airline's schedule beyond the normal hourly operating capacity of the airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
37.78	Alternatives	Demand	The proposed new Runway 14/32 will precipitate increased passenger volumes with consequent increases in vehicle-miles traveled. In the past, Massport has cloaked airside improvements under the veil of improved management of existing aircraft operations. But, clearly, 14/32 is different and will facilitate a new round of added air service and increases in vehicle traffic on the roads, both locally and regionally.	The construction of unidirectional Runway 14/32 would not increase Logan Airport's normal airfield capacity of 120 operations and will not generate additional aircraft operations or passenger traffic. Refer to response to Comment 37.18 and 37.76.
37.79	Alternatives	Peak Period Pricing	Massport claimed that it can seek to remove the injunction against capacity enhancing improvements for "reliever" purposes. If this is actually the case, the City questions why Massport has not pursued demand management policies such as peak hour pricing for relief.	Massport acknowledges the existence of an agreed injunction prohibiting only the completion of a Runway 14/32 concept and certain other airfield improvements proposed in the early 1970s. The express terms of this injunction, however, allow future improvements under certain circumstances, (*e.g.* changed conditions) or, more generally, if application of the terms of the injunction on a prospective basis is no longer equitable. The Airside Project Feasibility Study, Draft EIS/EIR, and Supplemental DEIS/FEIR examine Logan Airport's current and prospective operating environments and a wide range of alternative improvement concepts, including specifically, PPP. The improvement concepts have been compared to the No Action Alternative. The selection of the Preferred Alternative is based on the operating and environmental analysis set out in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. Massport has not made any claim or assertion to the contrary.
37.80	Alternatives	Runway 14/32	Constructing a new runway is only a short-term approach and will do little to solve the expanding regional transportation issues that must be addressed through a comprehensive, regional, inter/multi-modal solution.	Refer to response to Comment 37.1.

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37.81	Regional Transportation	Regional Airports	Massport claims to be "actively engaged in promoting the use of alternative travel choices to provide relief to Logan." Massport talked about relieving congestion at Logan by expanding use of the state's regional airports in Worcester and New Bedford. Yet, after years of talk and so-called plans, Worcester and New Bedford carry the lowest number of passengers of the eight New England regional airports examined in the Regional Air Service Study. ... There has been no aggressive service development at Worcester, Hanscom or any other regional airport in Massachusetts, even though Massport claims that "The regional alternatives to Logan Airport are an important component of Massport's plan for reducing delays at Logan" (EIS/R 2-48). ... Massport's unsuccessful record in diverting traffic to other airports makes the City doubt Massport's claim of promoting regional alternatives.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.

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37.82	Regional Transportation	Regional Airports, Cargo	The City notes that the DEIS/R does not include any discussion of the diversion of cargo to off-airport alternatives and, thus, does not comply with the Secretary's Certificate on the ENF.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act..." Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
37.83	Ground Transportation	Access to Logan Airport	Essential to the success of distributing air traffic within the region is the development of a comprehensive, inter- and multi-modal transportation system. Such a system should address not only the diversion of passengers from air service but should ensure that travelers have convenient vehicular, private and public transit access to regional transportation hubs...in order to minimize air quality impacts, incentives should be offered for the use of alternative fueled vehicles.	The Airside Project does not result in additional demand for ground access services. Massport is working with the MBTA to improve transit access to Logan Airport via the Blue Line and the Airport Intermodal Transit Connector (AITC). Section 2.7 of the Supplemental DEIS/FEIR discusses the proposed MBTA improvements in transit access to Logan Airport. *The Logan Airport 1999 ESPR* (previously GEIR), filed on December 15, 2000, also reports on the status of these ground transit improvement projects. Section 2.9 of the Supplemental DEIS/FEIR discusses the impact of planned ground access improvement projects at Logan Airport and the regional airports on passenger traffic levels and high-speed rail passenger diversion estimates.
37.84	Analysis Assumptions	Forecasts	The City recommends that data that distinguish between commuter, charter and other regularly scheduled non-commuter flights be part of the evaluation of regional air transit.	All the Airside Project forecasts included activity by segment: Jet, Regional Non-Jet, Charter Jet, Cargo Jet and Non-Jet, and General Aviation Jet and Non-Jet.

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37.85	Regional Transportation	Regional Airports	Hanscom's potential as a regional facility has been ignored in the DEIS/R and should have received substantial attention in the alternatives analysis... Massport has not invested the funds necessary for infrastructure improvements that would attract cargo and regional service...Hanscom could be upgraded into a first-class destination for General Aviation activity with facilities that would entice many private entities to make the switch. In combination with Peak Period Pricing at Logan, Hanscom could well become a convenient option for many travelers. Hanscom could also be developed into a Northeast hub airfield offering service to major destinations such as New York, Washington, D.C., Philadelphia, Pittsburgh, Cleveland and Detroit. ...Developing Hanscom as a feeder facility for flights within the Northeast could result in a reduction in Logan's flight operations significantly. Finally, extending the MBTA's Red Line from Alewife to Hanscom should be considered as an access option as should a connection with the Fitchburg Commuter Rail line that now stops in Lincoln and Concord.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field, consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
37.86	Regional Transportation	Regional Airports	Although Worcester may not serve as a primary reliever for Logan, it is fundamental that improved access, preferably off Interstate 90, be addressed first and foremost when planning to expand operations at this facility.	MassHighway is analyzing alternative routes that would improve surface access from Routes I-90 and I-290 to the Worcester Regional Airport. MassHighway filed an ENF in December 1999 and is in the process of preparing a Draft EIS/EIR, which is expected to be filed in October 2001.
37.87	Regional Transportation	Regional Airports	The City believes that evaluation of Fort Devens' potential role in a regional transportation system should be assessed.	Fort Devens was an alternative considered as a potential airport site in the Second Major Airport Site Selection study conducted in 1991 by the Massachusetts Aeronautics Commission. However, Fort Devens was not selected. The site has since been developed for other uses. Development at T.F. Green/Providence, Worcester Regional and Pease International Tradeport has superseded the need for a second major airport.
37.88	Mitigation	Initiatives	The DEIS/R, like other Massport project documents, does not adequately address the very real problems and needs of those most affected by airport operations on a daily basis...the quality of life of those who live and work in Logan's zone of impact is clearly not acknowledged.	Massport is committed to a number of mitigation measures in addition to project-specific mitigation. Refer to Chapter 8 of the Supplemental DEIS/FEIR for a discussion of mitigation measures.

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37.89	Open Space/ Parkland	Impacts	The DEIS/R states that, due to the airside improvements project, areas such as parkland, farmland and cultural resources will not receive impacts or will receive insignificant impacts. This is inaccurate and one example is the projected increase in flights over Franklin Park. This parkland is an important resource in a dense urban area populated by many people of color and is on the National Register of Historical Places.	Section 6.3.3 of the Supplemental DEIS/FEIR summarizes the additional analysis of parklands relative to the Preferred Alternative. As depicted in Figure 6.3-4, Franklin Park is well outside the 65 dB Day-Night Sound Level contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on this National Register property.
37.90	Analysis Assumptions	Forecasts	The base year in the DEIS/R for modeling and forecasting is 1993, six years ago. Given the changes in fleet mix and other baseline conditions, 1993 is an inappropriate base year. Projections for 1999 are inappropriately called "near-term" rather than 'current activity' and the year 2010, only 11 years in the future, is called "long term." The DEIS/R short- and long-term time horizons do not conform with generally accepted planning practices or with FAA standards. The result is an analysis that relies upon outdated information and inadequate forecasting. At a minimum, planning and forecasting for this project should carry through the year 2020.	Consistent with the request made by EOEA in its Certificate, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport is not expected to reach the 29 million passenger forecast presented in the Airside Project Draft EIS/EIR until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is not expected to achieve the 37.5 million passenger forecasts until 2015, and the 45 million passenger forecasts will not be achieved until 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.
37.91	Purpose and Need	Airfield Capacity	There are questions about Logan Airport's long-term capacity to serve growing air traffic demand in the region, particularly the growing territory beyond Route 128;	With recent service developments, Manchester and T.F. Green/Providence airports, are becoming attractive options for air passengers that originate in communities north and south of Routes I-95 and I-495. By its agreement to assume operational responsibility and the eventual ownership of the Worcester Regional Airport, Massport is working to increase air services at Worcester Regional Airport and is working to increase the airport's role in accommodating air travel demand generated in communities west of I-95 and I-495.
37.92	Ground Transportation	Access to Logan Airport	There are questions about whether already congested urban highways can absorb larger volumes of suburban traffic;	Refer to response to Comment 37.17.
37.93	Ground Transportation	Access to Logan Airport	...commuters who will share the roads with Logan's passengers and residents of surrounding communities who will share the air deserve an accounting of the environmental and economic costs of more traffic congestion and delays on urban roads;	Refer to response to Comment 37.17.

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37.94	Purpose and Need	Delays	There are questions about genuine causes of delays at Logan other than northwest winds, such as the inability of airlines to find attractive alternative airports in the region; if delays actually stem from airlines scheduling far more flights than Logan is capable of handling, then adding capacity will not solve the problem...The only real solution is to improve other airports as more attractive alternatives for the airlines...	Airline services in New England are concentrated at Logan Airport because Boston is the region's most populous city and generates the most air travel demand. The regionalization of aviation in New England is currently underway. In fact, since 1996, eight out of ten new passengers in New England have used the regional airports instead of Logan Airport. Refer to Sections 2.3 through 2.6 of the Supplemental DEIS/FEIR for a discussion of the emerging roles of the Logan, T.F. Green/Providence, Worcester Regional, and Manchester airports in the regional system.
37.95	Alternatives	Peak Period Pricing	There are questions about Logan's high volume of small planes that could be accommodated at smaller, regional airports; some 45% of Logan's flight capacity is planes with 40 passengers or less;...Logan can reduce this percentage through market mechanisms geared to relieve congestion, such as peak pricing;	The Airside Project analysis evaluated PPP as a demand management measure for reducing delays caused by airline overscheduling, such as that experienced at Logan Airport in 1993. Since 1993, regional carriers operations at Logan Airport have declined by 25 percent through market mechanisms without any intervention by Massport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
37.96	Regional Transportation	Regional Airports	There are questions about the suitability of alternative airports or the readiness of alternative regional airports to handle increased traffic and meet demand projections; the effects of physical improvements to existing airports, ground access infrastructure, as well as improvements to Logan Airport need to be studied in a regional context, not in isolation.	Refer to Section 2.9 of the Supplemental DEIS/FEIR for a summary of existing ground access projects that will benefit the regional airports and to Appendix B of the Supplemental DEIS/FEIR for a summary of environmental impacts of the regional airports.
37.97	Regional Transportation	Regional Airports	There are questions about the need to preserve available sites for potential airfields; with Logan at capacity, the state needs to reexamine the suitability of Fort Devens for a new regional reliever airport to serve growing demand along the I-495 and Route 128 corridors;	Refer to response to Comment 37.87. Massport is not aware of any state initiatives to re-examine the suitability of Fort Devens. The development at T.F. Green/Providence and Manchester airports and Massport's role in Worcester Regional Airport have superceded the need for a second airport.
37.98	Regional Transportation	Regional Airports	There are questions about the regional economic benefits of airport expansion and infrastructure improvements at all facilities in the region.	The regionalization of aviation in the eastern Massachusetts, Rhode Island, and New Hampshire region is underway. The T.F. Green/Providence and Manchester airports are experiencing tremendous growth in passenger volume because of the entry and expansion of low fare carriers such as Southwest Airlines, MetroJet, and Delta Express. This strong growth at the regional airports should relieve traffic growth pressures at Logan Airport, both currently and well into the future. On January 15, 2000, Massport assumed the operational control of Worcester Regional Airport, located west of Boston, in an effort to establish a third significant regional airport for accommodating future growth in air travel demand. While these developments are important, improvements at Logan Airport are an equally critical element of the regional transportation strategy and would produce immediate benefits for area travelers. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of the role of options to Logan Airport and steps Massport has taken to foster increased use of these alternatives.
37.99	Purpose and Need	Delays	There are questions about whether prohibiting a new runway at Logan would actually have any undesirable consequences to the efficiency of Logan's operations or the region's economy.	The delay analysis presented in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR clearly indicates that delays will increase in the future if Runway 14/32 is not built. Section 1.2 of the Airside Project Draft EIS/EIR and Section 1.5 of the Supplemental DEIS/FEIR discuss the importance of Logan Airport to the regional economy. Refer also to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of the delays that would occur under future scenarios if no actions were taken, and the delay reduction benefits of the Preferred Alternative.

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37.100	Alternatives	Runway 14/32	The runway is a violation of Massport's commitments that [air] traffic at Logan would not grow.	Massport has made no such commitment. The analysis in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR indicates that with the Preferred Alternative, Massport can accommodate existing and foreseeable future demand efficiently and responsibly.
37.101	Regional Transportation	Regional Airports	The only solution is for the Commonwealth to get serious about a regional solution to a regional problem. The runway is not a regional solution. It is a short-term quick fix for an agency that shows an incredible lack of regional vision. An agency with no long-term plans for what to do after Logan fills up again.	Regional initiatives to improve the efficiency of the region's inter-city transportation network have been studied since 1989. Section 2.9 of the Supplemental DEIS/FEIR summarizes relevant planning studies and their major conclusions. A regional transportation strategy that includes the expansion of regional airports, the development of high-speed rail, and the construction of Runway 14/32 and other infrastructure improvements at Logan Airport has evolved from these important studies. All the major improvements to the regional transportation system have been implemented except for improvements to Logan Airport's airfield. The regional airports have been experiencing tremendous growth in services and passenger traffic since 1996 and Amtrak introduced its high-speed Acela train service between Boston and New York in December 2000. Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. While greater use of the regional airports and high-speed rail will provide relief to Logan Airport, the proposed Airside Project provides clear benefits at current, as well as future, traffic levels. The benefits will only increase in the future, even as regional transportation developments act to reduce the rate of future growth at Logan Airport.
37.102	Regional Transportation	Regional Airports	The Commonwealth could capture economic growth that will be drawn to an alternative airport only if it builds another major airport to serve the region, or expands existing airports like Hanscom Field. Hanscom is in the best position to serve growing businesses along Routes 128 and 495.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.
37.103	Alternatives	Runway 14/32	A new runway at Logan will only mean more congestion and delays on our highways. Those delays will mean lost time, lost productivity, and a loss of quality of life. ... Adding more traffic to congested highways will only weaken our quality of life—and our regional economic advantage.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to section 4.2 of the Supplemental DEIS/FEIR.
37.104	Regional Transportation	Regional Airports	Massport has no serious plans for what to do when Logan reaches its new capacity. And until Massport gets serious about a regional solution to a regional problem, the people of Boston cannot take Massport's commitments seriously at all.	Refer to response to Comment 37.101.

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37.105	Regional Transportation	Regional Airports	The most serious delays at Logan are caused by the lack of attractive alternative airports in greater Boston for airlines and consumers. Without appealing alternative options, more traffic will continue to go to Logan. But Logan can only accommodate so much.	Refer to response to Comment 37.94.
37.106	Ground Transportation	Access to Logan Airport	More traffic at Logan will only mean more cars, trucks and shuttle buses on our congested highways and urban road system.	Refer to section 4.2 of the Supplemental DEIS/FEIR.
37.107	Regional Transportation	Regional Airports	For years, Massport planners have talked about relieving congestion at Logan by building a second major airport or expanding the use of the state's regional airports in Worcester and New Bedford ... Yet, after years of talk and so-called plans, Worcester and New Bedford carry the lowest number of passengers of all of New England's ten largest regional airports.	Refer to response to Comment 37.102.
37.108	Environmental Justice	Impacts	I am concerned that the Massachusetts Port Authority, the US Transportation Department and the FAA Logan Airside Improvements Planning Project, DEIR/DEIS, have not taken into consideration the health of Boston residents in their Logan Airport expansion plan. This is particularly worrisome because of the potential impact on some of the City's most vulnerable subpopulations who are already disproportionately affected by negative environmental factors. Furthermore, the failure to consider such matters appears to be out of compliance with President Clinton's Executive Order 12898.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to Logan Airport.
37.109	Alternatives	Preferred Alter native	The DEIR/DEIS claims that environmental impacts resulting from emissions, noise and odor are negligible or within established state and federal guidelines/ standards. We question this conclusion.	Refer to Section 5.2.4 and Section 5.4.1 of the Supplemental DEIS/FEIR for a discussion of the federal threshold for noise compatibility standards for residential land uses and the state and federal air quality standards. Also, refer to Section 6.2 and Section 6.4 of the Supplemental DEIS/FEIR for a discussion of the noise and air quality impacts, respectively, of the Preferred Alternative relative to federal and state standards.
37.110	Noise	Sound Insulation	The DEIR/DEIS proposes to use soundproofing to mitigate noise impacts in certain neighborhoods. The process of soundproofing residences and businesses can create indoor air quality problems. ...There is no acknowledgement of such secondary impacts in the DEIR/DEIS.	Sound insulation is a widely accepted and popular form of noise mitigation. Neither Massport nor the FAA is aware of secondary impacts that would alter the recommended practice.
37.111	Noise	Studies	Noise and odor impacts have been associated in some studies with decreased learning and increased aggression. In Boston's neighborhoods affected by the redirection and new traffic which will result from this project, decreased learning and increased aggression are issues of concern which should also be addressed.	There is no consensus of these effects within the scientific community. Massport will continue its attempts to reduce instances of highest noise exposure first. The greatest benefit of Runway 14/32 would be the reduction of noise to those most impacted by noise. It would shift 75,000 flights over water, while reducing total number of nighttime flights.
37.112	Public Health	Effects	The BPHC (Boston Public Health Commission) strongly recommends that Massport, the US Transportation Department and the FAA commission the appropriate studies that will document whether or not there are real health impacts on affected Boston neighborhoods associated with the proposed Logan project.	Refer to response to Comment 37.15.

Code	Topic 1	Topic 2	Comment	Response
37.113	Regional Transportation	Regional Airports	There needs to be a regional approach to resolving the current problems at Logan Airport. We firmly believe that the solution to these problems cannot be solved solely by improving conditions only at Logan. ... In our opinion, both the State and Federal governments have the obligation to devise a strategy to encourage and to ensure that a much higher percentage of the burden at Logan is relieved by regional commercial airports.	Since 1990, there have been several studies that have recommended regional initiatives to improve the efficiency of the region's inter-city transportation network. These studies reflect the cooperation of federal, state and local transportation agencies and stakeholders. Section 2.9 of the Supplemental DEIS/FEIR summarizes relevant regional planning studies and their conclusions. All studies have concluded that the Proposed Runway 14/32 and the other airside improvement projects at Logan Airport, along with increased use of the regional airports, including T.F. Green/Providence, Manchester and Worcester Regional airports, and high-speed rail services, are necessary for accommodating the region's future inter-city air travel demand. Refer to discussion of the role of regional alternatives and steps Massport has taken to foster increased use of these alternatives in Chapter 2 of the Supplemental DEIS/FEIR.
37.114	Environmental Review Process	Blue Ribbon Panel	We want to express our support of the proposal of Mayor Menino that an independent commission, or "blue ribbon panel" be established to study objectively the opportunities for regional air traffic improvements and the environmental and economic impact of further expansion at Logan.	Refer to response to Comment 37.1.
37.115	Regional Transportation	Regional Airports	We support the Mayor's suggestion that a regional New England Port Authority be established to implement a regional transportation strategy, replacing the limited focus of Massport.	This is a matter for the United States Congress and individual state legislatures.
37.116	Regional Transportation	Regional Airports	Regional airports offer a highly feasible resource to attract a large proportion of demand from Logan. Manchester and T.F. Green Airports, for example, already are demonstrating their ability to act as major alternatives to Logan ... We are especially pleased that Massport recently announced plans to take over operations, and eventually ownership, at Worcester Municipal Airport. This is a first step in the right direction to develop a regional solution to Logan's capacity and delay problems. In the meantime, we strongly urge Massport to put the same energy in promoting and developing the use of Worcester as an alternative to Logan as it has in developing the Airside Improvements Project.	Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Worcester Regional and Manchester airports. Service developments and increased traffic at these airports are a component of the region's long-term strategy to accommodate passengers and activity growth. By its agreement to assume operational responsibility and the eventual ownership of Worcester Regional Airport, Massport is working to increase air services at Worcester Regional Airport and its role in accommodating air travel demand generated in communities west of I-95 and I-495. Greater use of the regional airports will relieve traffic growth pressures at Logan Airport, but will not eliminate the need for the Airside Project.
37.117	Purpose and Need	Delay	We believe that the delay data and analysis used by Massport to support its proposals, especially the new Runway 14/32, is highly questionable and overstates the actual problem.	The FAA consistently rates Logan Airport as one of the most delay-prone airports in the United States. Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. The FAA Technical Center simulated Logan Airport operations in 1992 and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Supplemental DEIS/FEIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29 M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates with those of the Airside Project modeling. The FAA has concluded that the Airside Project delays represent "a plausible and conservative estimate".

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Code	Topic 1	Topic 2	Comment	Response
37.118	Delay	Model	We believe that Massport's analysis basically is flawed for several reasons. First Massport chose to develop its own model. Further, Massport based its model on data from 1993, a peak year for delay at Logan, rather than averaging several years of data. ... FAA statistics on delay at Logan since 1993 have indicated an approximate 19 percent decrease in delays between 1993 and 1998, ... In sum, we feel that the data and methodology used by Massport to calculate existing and future delay do not realistically portray the normal operation of a major U.S. airport and overstate a problem in order to support a pre-conceived program of airside improvements.	Massport developed or modified various models used in this Supplemental DEIS/FEIR to account for truly unique aspects of this project. For example, no other airport in the world has a runway advisory system as sophisticated as PRAS; no other airport in the world has adapted an existing noise prediction model to account for over-water sound propagation (to the extent it is a problem at other locations, it has been ignored); and no other airport in the world has addressed the noise from aircraft taxi movements in as comprehensive a manner as this. The FAA and Massport believe the resulting analyses presented in Chapter 4 of the Supplemental DEIS/FEIR are thus more informative than they would be using only standard models. Separately, the existing environment has been updated in this Supplemental DEIS/FEIR to reflect 1998 operations.
37.119	Noise	Studies	Prior to the construction of the proposed improvements, we recommend that Massport conduct a Federal Aviation Regulations (FAR) part 150 noise compatibility study, which would set forth measures to be taken by Massport to reduce incompatibility in land uses and prevent additional incompatible land uses in the vicinity of Logan Airport.	Massport has implemented numerous noise mitigation measures over the years and continues to pursue a variety of innovative solutions to its noise problems. Massport has no authority to direct land use outside Logan Airport's boundaries.
37.120	Noise	Studies	A Part 150 study, in turn, would trigger an FAR part 161 study for a program of noise abatement and restriction, which could provide for a voluntary control of the number of flights to Logan through agreements between Massport and the airlines serving the airport.	A Part 150 study does not necessarily trigger a Part 161 study. Massport has implemented numerous noise mitigation measures over the years and continues to pursue a variety of innovative solutions to its noise problems.
37.121	Alternatives	Other Non-Construction Alternatives	We believe that limiting or restricting uncontrolled growth of operations at Logan is imperative and could serve as an alternative means to reduce the current and projected future flight delays. ... Eliminating or consolidating flights to provide higher load factors than presently exist would, in turn, not only reduce the number of operations and maximize airline revenue, but also result in delay reduction.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.
37.122	Noise	PRAS	We feel that a fair and equitable distribution of aircraft operations can be achieved through alternative measures and without the construction of a new runway. We recommend that Massport officials work with FAA tower personnel to examine the PRAS program to determine whether there may be changes to the program that would result in a superior noise abatement policy to that currently in place.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.

Code	Topic 1	Topic 2	Comment	Response
37.123	Alternatives	Runway 14/32, Peak Period Pricing	[In comparing Preferred Alternative 1A vs. Alternatives 2 and 3] [o]nly under the 37.5 million Low Fleet scenario, where non-jet, commuter operations represent a smaller share of the fleet serving Logan, would construction of Runway 14/32 alleviate a greater share of the delay. Thus, if a High Fleet scenario develops at Logan, the construction of Runway 14/32 becomes more of a hindrance and is no longer effective without additional mitigation measures.	Table 4.5-3 in the DEIS shows that the reduction in annual delay hours under the 29 M Low Fleet, 37.5 M Low Fleet, and 29 M High Feet scenarios would be greater with Runway 14/32 than with PPP. Under the 37.5 M and 45 M High Fleet scenarios, PPP provides a greater delay reduction (Alternative 1A compared Alternative 3) but the percentage delay reduction with the new runway is greater than under each of the Low Fleet scenarios. The results demonstrate that Runway 14/32 would provide benefits under all the future forecasts, while the PPP benefits are much more significant under the High Fleet scenarios than under the Low Fleet scenarios. The results for the new 37.5 M High Regional Jet Fleet in Table 4.7-2 of the Supplemental DEIS/FEIR are similar to those of the Low Fleet scenarios in terms of the relative benefits of the alternatives. Recent history suggests that the Low Fleet forecasts seem to represent the more likely future scenario. If future conditions do trend towards the High Fleet scenarios, the new runway would still provide major delay reductions, and the addition of PPP would further help to reduce delays. This is because the runway would primarily address northwest wind delays; while PPP addresses airline overscheduling with flight cancellations. Additional analysis of PPP is set out in Section 4.5 the Supplemental DEIS/FEIR.
37.124	Regional Transportation	Regional Airports	This analysis also points to another problem. Since the High Fleet assumes a mix with significant regional operations at Logan, an improvement could only occur if there is a substantial transfer of the regional operations from Logan to other airports, as we have recommended above.	The fleet forecasts address a wide range of scenarios, and the High Fleet results seem less probable given current conditions. However, this does not affect the benefits of the proposed runway. Runway 14/32 would reduce delays by at least 27 percent under any of the fleet conditions. In all cases, the delay reduction benefits of the runway would be clearly substantial. Regional carriers are not likely to shift operations to regional airports because doing so would likely reduce on-board passengers and the economic viability of the service. Regional carriers at Logan Airport carry a significant number of local passengers traveling to the City of Boston and passengers connecting to other flights at Logan Airport that are not available from the regional airports. For example, service to Manchester Airport would not be a viable alternative for a Provincetown passenger traveling to a location in downtown Boston. Likewise, regional service to T.F. Green/Providence Airport would not be attractive to a Bangor passenger trying to reach Denver, since there are no nonstop services between Providence and Denver. Additional analysis of PPP is set out in Section 4.5 the Supplemental DEIS/FEIR
37.125	Noise	Runway 14/32	Implementation of Runway 14/32 will result in substantial noise impacts on many of the greater Boston area communities. ...Overall, implementation of Runway 14/32 would widen the scope of communities exposed to noise levels equal to or greater than 65 dB by 2 percent, over the other alternatives.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

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37.126	Alternatives	Runway 14/32	It is our understanding that Massport will not agree to any legally binding agreement to maintain the unidirectionality of this runway in perpetuity.	Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
37.127	Alternatives	Runway 14/32	We also have some concerns with the type of aircraft that would use Runway 14/32. ... It appears that Massport intends greater use of Runway 14/32 for larger jets than it has presented in the Draft EIS/EIR, having categorized the runway as essentially a commuter runway.	Unidirectional Runway 14/32 would be principally used by regional non-jets, general aviation and small jet aircraft capable of landing or taking off in 5,000 feet. Appendix E of the Airside Project Draft EIS/EIR contains the fleet mix for each scenario. Design Category C-III indicates the highest approach speed and widest wingspan of the aircraft to use the runway. Approach Category C includes those with speeds from 121 to 140 knots; Design Group III designates wingspans from 79 to 117 feet. Several of the general aviation and commuter aircraft have approach speeds or wingspans in these ranges.
37.128	Alternatives	Runway 14/32	Although according to Massport the maximum available capacity is 120 operations per hour (with a 3-runway configuration), this capacity is available only about 80% of the year. With Runway 14/32, actual capacity, and thus the number of operations, would increase to more closely approach 100% use.	The availability of unidirectional Runway 14/32 would provide a third runway for use during northwest wind conditions. The runway will not increase the airfield's normal operating capacity of 120 operations per hour and will not generate additional aircraft operations.
37.129	Alternatives	Taxiway Improvements	We seriously question the safety of proposing a taxiway between two busy runways, which we believe could be a problem for a pilot who, on approach to either runway, is not familiar with Logan Airport or when there is extremely low visibility.	Refer to response to Comment 37.69.
37.130	Alternatives	Taxiway Improvements	Since neither the FAA nor Massport would agree to limit the number of aircraft which could use the Centerfield Taxiway, the number of aircraft which could approach this end of the airport would be very high, and would be added to those aircraft using Taxiway November....Since Taxiway November is 3,800 feet in length, the number of aircraft requesting permission to use the Centerfield Taxiway could nearly triple. With a large number of aircraft using the Centerfield Taxiway, there obviously would be a substantial increase in noise, air pollution, and odor impacts on the Bayswater section of East Boston, which is located opposite the proposed alignment of this taxiway. These impacts especially would occur during the summer months, when southwesterly winds are the most common in Boston. Accordingly, we would seriously question Massport's claim to air quality and noise benefits of constructing the Centerfield Taxiway.	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays; thereby reducing associated noise and emissions. When using Runways 22L/R for departures, the Centerfield Taxiway would provide an alternate taxi route for Runway 22L departures to bypass the queue for Runway 22R, thereby reducing taxiway congestion and associated noise and emissions. Runway 22L departures represent less than ten percent of the total departures. Under existing conditions, aircraft needing to depart on Runway 22L (typically heavy jets, such as 747s with long takeoff distance requirements) must wait in the queue on Taxiway November with aircraft departing on Runway 22R. With the Centerfield Taxiway, aircraft departing on Runway 22L could depart quickly after reaching the runway end, and the number of aircraft queuing on Taxiway November should decline. Also, the aircraft on the Taxiway November should be smaller, implying lower noise and air quality emissions. With the addition of Runway 14/32, use of Runways 22R and 22L for departures would decline.
37.131	Alternatives	Reduced Approach Minimums	Since arrival is the most difficult and challenging portion of a flight, our safety concerns are based on the premise that the poor weather conditions and reduced visibility, which would trigger the use of these lower landing minima, would only serve to exacerbate a pilot's workload during the landing procedure. With the high number of residents living in close proximity to the touchdown points of these runways, we believe that lowering the safety standards would leave these residents in peril and could result in a tragedy at any time...	Reduced landing minimums provide for a safer approach by providing precision guidance at lower altitudes, and thus a safer approach. The reduced landing minimums do not change the approach path nor reduce the clearance between aircraft and the surface. Rather, they shift the location at which a missed approach decision is initiated closer to the airport. For Runways 27 and 22L, the reduced minimums will make the approach procedures flown by pilots more consistent with FAA standards in effect at most other airports. Reduced landing minimums will increase airfield safety by allowing operations more directly into the prevailing wind and will help improve PRAS goal achievement.

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37.132	Alternatives	Reduced Approach Minimums	We disagree with FAA's assertion that lowering the landing minima would result in noise benefits for the residents living under the approach paths to the subject runways. ... Lowering the landing minima potentially could result in greater use of these runways during poor weather conditions, exposing nearby residents to greater noise levels and more frequent disturbances than they currently experience.	With the proposed reduced minimums, the percentage of equivalent jet arrival operations would decrease by 0.4 percent on Runway 4 and increase by 0.2 percent on Runway 15 and 0.1 percent on Runway 22L. These small increases in arrival operations would not have a measurable effect on the Day-Night Sound Levels under the approaches. Additionally, most of the neighborhoods now exposed to the higher noise levels from power-up would experience reductions up to 10 dB because the proposed reduced minimums would shift the location of the missed approach decision toward the airport beyond most of the neighbors.
37.133	Alternatives	Taxiway Improvements	A number of taxiway improvements also are proposed...in order to reduce taxiway congestion, enhance airfield safety and facilitate operating efficiencies. ... Since these improvements are designed to enhance airfield safety by eliminating confusing or problematic alignments and intersections, we support their implementation at this time.	Comment noted.
37.134	Alternatives	Peak Period Pricing	Massport has eliminated [peak period pricing] based on a claim that airline over-scheduling is not currently a problem at Logan...and is not projected to be a problem in the near future... We do not agree with these conclusions, particularly since the Draft EIS/EIR acknowledges that under long-term High Fleet scenarios "peak period pricing could provide meaningful delay benefits by reducing airline over-scheduling that emerges as a contributor to Logan delays within these flights" (emphasis added).	Refer to response to Comment 37.26.
37.135	Noise	Model	Page 5-34 (top paragraph) – One could question the use of modeled runway use rather than actual effective runway usage in the noise analysis; does this not distort the analysis?	The only way to estimate future noise impacts is by modeling the airfield operations and runway use. The same assumptions used in analyzing the future scenarios were also applied to the analysis for 1993 to demonstrate the effects. The discussion on page 5-34 of the Airside Project Draft EIS/EIR points out the two main differences: (1) runway use in the model is based on the best attempt to meet PRAS goals; (2) year-to-year weather variations are smoothed out by averaging across ten years of Logan Airport weather observations. The 1993 analysis depicts what would have occurred if the Enhanced PRAS had been installed and its recommendations followed that year, and if the weather in 1993 had been the same as the average for 1981-90.
37.136	Ecosystems	Rare Species	Page 5-61 – Construction of the Centerfield Taxiway will displace the nesting sites of the upland sandpiper, a State-listed endangered species. The Massport mitigation plan proposes to relocate these birds off-site to Cape Cod. One could question whether a more local site would be more appropriate.	Refer to response to Comment 37.53.
37.137	Noise	Impacts	Page 6-43 (Tables 6.2-14 and 6.2-15) – The differences between alternatives are not significant or are imperceptible. (Similarly with Tables 6.2-22 to 6.2-29)	Typically, changes in Day-Night Sound Levels of 0 to 2 dB may be perceived and changes of 2 to 5 dB are generally perceived, while changes of more than 5 dB are likely to cause a change in community reaction. By these guidelines, differences between alternatives may be perceived as small, but they occur at the highest exposure levels existing around Logan Airport and are therefore important to mitigate.
37.138	Air Quality	NAAQS	Page 6-82 – 6-83 (Tables 6.3-10 – 6.3-14) – The air quality differences among the alternatives is not significant.	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

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37.139	Soil/Sediment	Reuse/ Disposal Options	Page 6-100 (Table 6.6-1) – There are errors in the mean for arsenic, chromium, and lead (see Table 5.6-2, Page 5-74).	There is no error between the two tables. The mean values for the referenced parameters differ only as a result of rounding. The two Governors Island soil characterization tables are not repeated in the Supplemental DEIS/FEIR since that material will be removed from the airfield, as part of an unrelated project, before initiation of any Airside Project construction. Section 5.7.2 of the Supplemental DEIS/FEIR describes that action.
37.140	Construction	Noise	Page 6-117 (Nighttime Construction) – Nighttime construction is scheduled for Runway 14/32, the Centerfield Taxiway, Taxiway November, and possibly elsewhere. The impact on the adjacent East Boston community (Jeffries Point, etc.) needs to be addressed (should construction proceed).	The Supplemental DEIS/FEIR includes an analysis of nighttime construction noise in potentially affected residential areas. All increases in noise associated with construction of the Preferred Alternative improvements are less than 5 dB, the Federal standard for a finding of "no impact". Refer to Section 6.9.4 of the Supplemental DEIS/FEIR.
37.141	Construction	Traffic	Page 123 – Barging, rather than trucking, should be considered for the removal of earth from the airport (also, barging in soil and construction materials) to reduce construction vehicle traffic.	The number of construction vehicles for the Airside Project has been reduced as a result of the reduction in the amount of soil material that will need to be removed from the airport. These construction vehicles represent less than 0.2 percent of the total traffic volume of the regional highway system. All contractors will be required to use designated truck routes. Barging of materials would not be practical since disposal locations for the excavated soil material and existing asphalt to be removed from the site, as well as the sources of paving materials to be brought on-site, will vary and are unlikely to be near coastal waters.
37.142	Errata		Page 8.5 (Figure 8.2-1) – This Figure is incorrect (actually it is the same as Figure 8.2-2).	The correct data for this figure can be found in Table 4.5-1 on Page 4-29 of the Airside Project Draft EIS/EIR.

Charles C. Yancey

Boston City Councillor

April 26, 1999

LETTER 38

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202

Dear Secretary Durand:

I am writing to strongly oppose **Massport's 14/32 Runway Expansion Proposal.**

Massport and the FAA has argued that annual mean levels of carbon monoxide, nitrogen dioxide, particulate matter and volatile organic compounds do not have an adverse air quality impact on the Commonwealth of Massachusetts. But, their detailed analytic data reveal that cumulative noise and ambient contaminants will disparately impact the predominately low-income neighborhoods of Boston. While these impacts have been acknowledged in Chapter 6 of the Draft Environmental Impact Report/Statement (DEIR/DEIS), a regulatory loophole allows Massport not to provide soundproofing within the 65 decibel contour and other mitigation to residential property which do not comply with building code. The Massport expansion and the regulatory loophole are discriminatory. Low income property owners frequently do not have the means to bring their property up to code. Section 8.7 of the DEIR/DEIS offers a dismissive discussion of Airside Project issues relative to environmental justice and compliance with Executive Order 12898. The Commonwealth appears to have no guidance or environmental justice policy, which parallels the Federal Executive Order. However, if your office finds the Logan Expansion adequate, since Massport receives Federal funding, you and your agencies will knowingly violate Title VI of the Civil Rights Act of 1964. 38.1

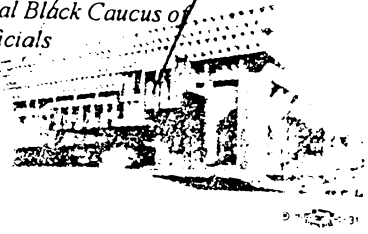
I believe that the additional burden of any expansion should be equitably distributed and Massport's are not. It is clear that if we build the new runway, we are going to increase traffic on runway 27. Massport has failed to offer mitigations to any burdens that may be placed on community residents in Dorchester, Roxbury, Mattapan, East Boston, the South End, Chelsea, Winthrop and Somerville. 38.2

Massport representatives have avoided discussing the failure of their project report to comply with the Environmental Justice's Executive Order and the adverse health additional pollution that a new runway may impose on low-income Boston residents. They only focus on improving tourism and business travel in Boston. We are put in the position of looking as though this is not an either/or decision. From a political and environmental perspective, it should be both.

Region I alternatives to the Massport plan, such as providing incentives to attract air traffic away from Logan Airport to Worcester, Providence, RI, and Manchester New Hampshire, require further analysis. 38.3

Sincerely,

Charles C. Yancey
Boston City Councillor
President, National Black Caucus of Local Elected Officials



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Letter 38
City of Boston
Boston City Councillor Charles Yancey

Code	Topic 1	Topic 2	Comment	Response
38.1	Environmental Justice	Impacts	...[D]etailed analytic data reveal that cumulative noise and ambient contaminants will disparately impact the predominately low-income neighborhoods of Boston. While these impacts have been acknowledged in Chapter 6 of the Draft Environmental Report/Statement (DEIR/DEIS), a regulatory loophole allows Massport not to provide soundproofing within the 65 decibel contour and other mitigation to residential property which do not comply with building code. The Massport expansion and the regulatory loophole are discriminatory. Low income property owners frequently do not have the means to bring their property up to code.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.

Code	Topic 1	Topic 2	Comment	Response
38.2	Environmental Justice	Impacts	It is clear that if we build the new runway, we are going to increase traffic on runway 27. Massport has failed to offer mitigations to any burdens that may be placed on community residents in Dorchester, Roxbury, Mattapan, East Boston, the South End, Chelsea, Winthrop and Somerville.	The Supplemental DEIS/FEIR indicates that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The PRAS goals were established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. Chapter 8 of the Supplemental DEIS/FEIR summarizes Massport's proposed project-specific mitigation program associated with the Preferred Alternative including: Runway 14/32 would be designed, constructed, and operated to handle over-water operations only (unidirectional). Massport would seek to construct Runway 14/32 to reflect unidirectional use. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. Section 2.8 of the Supplemental DEIS/FEIR discusses passenger and activity growth at the regional airports and their effect on Logan Airport's projected passenger and activity levels. With regard to ridership projections on Amtrak's high-speed rail, the Airside Project Draft EIS/EIR described in detail the best current information. No updated projections are available. Refer to Appendix B for Amtrak's letter stating that no revised ridership estimates are available. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's Alternative Fuels Vehicle program and on Massport's efforts to encourage the use of alternative fuel vehicles.
38.3	Regional Transportation	Regional Airports	Region I alternatives to the Massport plan, such as providing incentives to attract air traffic away from Logan Airport to Worcester, Providence, RI, and Manchester, New Hampshire, require further analysis.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Paul J. Scapicchio ■ Boston City Council
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617-635-3200
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LETTER 39

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
Massachusetts Environmental Protection Agency
100 Cambridge Street, Room 2000
Boston, MA 02202

Dear Mr. Durand,

I am writing to comment on the Draft Environmental Impact Statement/Draft Environmental Impact Report for the Logan Airside Improvements Planning Project as presented by Massachusetts Port Authority in Fenway 1999. I find the DEIS/DEIR to be inadequate and full of shortcomings. It should be rejected as a shortsighted and limited study.

The main thrust of my objection to Massport's DEIS/DEIR is the lack of reasonable alternatives considered in the document as is required by the National Environmental Policy Act. This Act requires the DEIS/DEIR to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. No Discussion of "alternatives not considered in the DEIS/DEIR" was included. I question whether Massport followed the rules of section 1502.1 and 1502.14, which address alternatives. I have not been informed of "reasonable alternatives, which would avoid or minimize adverse impacts or enhance the quality of the human environment." I am not aware of any alternatives presented in comparative form or rigorously explored and objectively evaluated. Massport did not devote substantial treatment to each alternative considered nor included the alternative of no action. You must not accept a DEIS/DEIR that does not follow the standard format that is required. 39.1

There are many other concerns that I have with the document. The airside project and the landside projects at Logan Airport are interdependent, and both will increase capacity and stimulate demand. Yet, Massport wants you to consider landside and airside impacts separately. The cumulative impacts of these projects are immense and must be taken into account. Massport understates these impacts while overstating the delay problems at Logan by using its own model instead of using the FAA approved SIMMOD model for the airport simulation. No data is presented to show recent improvement due to the availability of Enhanced PRAS (EPRAS). In actuality, FAA data on delays shows that the delay situation at Logan has improved since 1993 and is holding steady. The FAA reported delay for 1998 was 18% lower than 1993 levels. This is not reflected in the DEIS/DEIR. This improvement has occurred without any of the airside improvements proposed in this DEIS/DEIR. 39.2 39.3 39.4

FAA legislation requires that airport sponsors conduct a benefit -cost analysis for capacity- related airport projects. The DEIS/DEIR does not indicate such an analysis. There are also no economic analyses of the noise impacts of the various alternatives. Noise related costs and benefits should be addressed in economic analyses of activities that result in increases or decreases in aircraft noise. 39.5

Furthermore, I have concerns with Massport's guarantee of unidirectional use of runway 14/32. It is clear to me that this commitment is reversible. Massport also reports that the proposed runway will be used only by regional and commuter aircraft. However, large jets such as Boeing 737,s, MDC DC-9's, and Airbus A-320's are allowed to use the runway and surely will use it. 39.6

There are unaddressed questions dealing with adverse air quality impacts associated with construction of runway 14/32 and the Centerfield Taxiway. The DEIS/DEIR does not sufficiently explore the odor impacts or the dust problems due to construction of the runway. The proposed airside improvements provide minimal long-term air quality benefits. On the other hand, The Jeffries Point Neighborhood will be adversely impacted by odor from takeoffs. 39.7 39.8

In summary, I must restate my opposition to the Logan Airside Improvements Project and ask that you judge the DEIS/DEIR to be inadequate and removed from further consideration due to its deficiencies. There is no plan or program to deal with long term growth at Logan Airport. There are measures that could be instituted to effectively address transportation in Eastern New England, but there is no discussion in this document. There must be a plan and a program to shift some current and future air traffic and passengers from Logan. Major expansion of service at and capacity of other Airports must be undertaken. The ENF Certificate dated November 22, 1995 cited that "the alternatives analysis must be broadened to include off-airport alternatives". Although Massport includes some off-airport options, the development of other obvious alternatives has not been reasonably discussed nor have the reasons for their elimination as options.

Thank you for your consideration to this important matter.

Sincerely

Paul Scapicchio

Paul Scapicchio

Letter 39
City of Boston
Boston City Councillor Paul J. Scapicchio

Code	Topic 1	Topic 2	Comment	Response
39.1	Environmental Review Process	NEPA	...my objection to Massport's DEIS/DEIR is the lack of reasonable alternatives considered in the document as is required by the National Environmental Policy Act. This Act requires the DEIS/DEIR to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. No Discussion of "alternatives not considered in the DEIS/DEIR" was included. I question whether Massport followed the rules of section 1502.1 and 1502.14, which address alternatives.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
39.2	Cumulative Impacts	Landside Improvements	The Airside Project and the landside projects at Logan Airport are interdependent, and both will increase capacity and stimulate demand...The cumulative impacts of these projects are immense and must be taken into account.	Environmental and health issues within the City of Chelsea were considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8.6 of the Supplemental DEIS/FEIR for additional information.
39.3	Delay	Model	Massport understates these impacts while overstating the delay problems at Logan by using its own model instead of using the FAA approved SIMMOD model for the airport simulation.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Section 1.4 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
39.4	Delay	Model	No data is presented to show recent improvement due to the availability of Enhanced PRAS (EPRAS). In actuality, FAA data on delays shows that the delay situation at Logan has improved since 1993 and is holding steady. The FAA reported delay for 1998 was 18% lower than 1993 levels. This is not reflected in the DEIS/DEIR.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
39.5	Environmental Review Process	NEPA/FAA	FAA legislation requires that airport sponsors conduct a benefit-cost analysis for capacity-related airport projects. The DEIS/DEIR does not indicate such an analysis [was completed]. There are also no economic analyses of the noise impacts of the various alternatives. Noise related costs and benefits should be addressed in economic analyses of activities that result in increases or decreases in aircraft noise.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..."

Code	Topic 1	Topic 2	Comment	Response
39.6	Alternatives	Runway 14/32	Furthermore, I have concerns with Massport's guarantee of unidirectional use of Runway 14/32. It is clear to me that this commitment is reversible. Massport also reports that the proposed runway will be used only by regional and commuter aircraft. However, large jets such as Boeing 737s, MDC DC-9s, and Airbus A-320's are allowed to use the runway and surely will use it.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32. Unidirectional Runway 14/32 would be principally used by regional non-jets, general aviation and small jet aircraft capable of landing or taking off in 5,000 feet. Appendix E of the Airside Project Draft EIS/EIR contains the fleet mix for each scenario. Design Category C-III indicates the highest approach speed and widest wingspan of the aircraft to use the runway. Approach Category C includes those with speeds from 121 to 140 knots; Design Group III designates wingspans from 79 to 117 feet. Several of the general aviation and commuter aircraft have approach speeds or wingspans in these ranges.
39.7	Construction Period	Mitigation	There are unaddressed questions dealing with adverse air quality impacts associated with construction of Runway 14/32 and the Centerfield Taxiway. The DEIS/DEIR does not sufficiently explore the odor impacts or the dust problems due to construction of the runway. The proposed airside improvements provide minimal long-term air quality benefits.	Massport will require contractors to retrofit their heavy construction equipment with advanced pollution control devices in accordance with DEP's Clean Air Construction Initiative. Contractor owned equipment, such as front-end loaders, backhoes, cranes and excavators, will be retrofitted with oxidation catalysts to filter and break down hydrocarbons, particulate matter and carbon dioxide from diesel emissions. Refer to Section 6.9.4 of the Supplemental DEIS/FEIR for additional discussion of air quality mitigation measures during the construction period. As stated in Section 6.9.4.2 of the Supplemental DEIS/FEIR, Massport is committed to implementing the Clean Air Construction Initiative in cooperation with MADEP and Northeast States for Coordinated Air Use Management (NESCAUM). Furthermore, construction will conform to FAA AC 150/5370-10A, *Standards for Specifying Construction of Airports.* Construction-period air quality impact mitigation will include the steps specified in FAA Advisory Circular 150/5370-10A, Standards for Specifying Construction of Airports. These and other measures are listed in Section 8.5.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
39.8	Air Quality	Odor	The Jeffries Point Neighborhood will be adversely impacted by odor from takeoffs.	One-hour VOC concentrations (used as an indicator of odor) increase only slightly at Jeffries Point with the Preferred Alternative, when compared to the No Action Alternative. The predicted increase is so small that changes in odor will remain imperceptible, as measured against the No Action Alternative. Concentrations decrease at all other receptors with the Preferred Alternative.

BARNSTABLE MUNICIPAL AIRPORT

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LETTER 40

The members of the Barnstable Municipal Airport Commission would like to express their support for the construction of runways 14-32 at Logan International Airport.

We recognize that many untrue and half-true statements have made headlines recently concerning this project. We wish to comment on just few of them.

The first is "NOISE" pollution. This runway cannot possibly generate any additional noise, as it is a completely over-the water approach. It may in fact reduce the existing noise generated both in the air by circling traffic and on the ground by planes waiting for departure clearance. 40.1

Then there is talk that "DELAYS" at Logan should be controlled by a device called "PEAK PERIOD PRICING." This policy would increase landing fees for all carriers wishing to use the airport at "Certain" times, when in fact, the problem is not timing but a wind/weather situation which can occur at any time. When the wind goes to the Northwest, Logan International Airport needs two runways, not one, as is the current status. This runway will be a unidirectional runway. For use only when the winds make it the safe second runway. 40.2

The residents of Cape Cod rely heavily on our Airport to get them where they need to be in an efficient manner. Logan is their departure point of choice. They are still going to go there for their through flights. If air travel is to be restricted between Barnstable and Logan during "Peak" times, then our residents will choose to be either driven to or will drive to the airport themselves. Has the impact of the additional vehicular traffic been considered? Will additional parking facilities be constructed? 40.3

Cape Cod is not the only area in the state that will be affected.

We see this runway not as the end of the story, but a first chapter in the regionalization process which is being discussed. Give the airport the safety of a second northwest runway, while alternatives for greater dispersion of traffic can be explored.

Please support this construction project.

Thank you.

Katherine A. Strojny, Chairman, Barnstable Municipal Airport Commission
Phillip R. Doherty, Vice Chairman, Clerk
William Elkins, Commissioner
Edwin A Gourley, Commissioner
John A. Lemos, Commissioner
David A Barber, Commissioner
John T Griffen, Jr. Commissioner

4/21/99

Letter 40
Town of Barnstable Municipal Airport Commission
Katherine Stronjy, Chairman

Code	Topic 1	Topic 2	Comment	Response
40.1	Noise	Runway 14/32	This runway cannot possibly generate any additional noise, as it is a completely over-the-water approach. It may in fact reduce the existing noise generated both in the air by circling traffic and on the ground by planes waiting for departure clearance.	Comment noted.
40.2	Alternatives	Peak Period Pricing	..."PEAK PERIOD PRICING" ...would increase landing fees for all carriers wishing to use the airport at "Certain" times, when in fact, the problem is not timing but a wind/weather situation which can occur at any time.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
40.3	Alternatives	Peak Period Pricing	The residents of Cape Cod rely heavily on our Airport to get them where they need to be in an efficient manner. Logan is their departure point of choice. They are still going to go there for their through flights. If air travel is to be restricted between Barnstable and Logan during "Peak" times, then our residents will choose to be either driven to or will drive to the airport themselves. Has the impact of the additional vehicular traffic been considered? Will additional parking facilities be constructed?	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

OFFICE OF THE CITY CLERK

CITY OF CAMBRIDGE

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LETTER 41

D. MARGARET DRURY
CITY CLERK

DONNA P. LOPEZ
DEPUTY CITY CLERK

April 9, 1999

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Durand:

Pursuant to the request of the Cambridge City Council, I am forwarding to you the enclosed resolution submitted by Councillors Kathleen Born and co-sponsored by the entire membership. The resolution expresses the opposition of the City of Cambridge to the proposed Runway 14/32 at Logan Airport, and is intended to be considered as part of the MEPA comment process.

As you will note, all members present were unanimous in their support of this resolution.

Thank you for your attention in this matter.

Very truly yours,

D. Margaret Drury
City Clerk

DMD/mc

Enclosure

CCM-101

City of Cambridge

40.

IN CITY COUNCIL

April 5, 1999

COUNCILLOR BORN
COUNCILLOR DAVIS
MAYOR DUEHAY
VICE MAYOR GALLUCCIO
COUNCILLOR REEVES
COUNCILLOR RUSSELL
COUNCILLOR SULLIVAN
COUNCILLOR TOOMEY
COUNCILLOR TRIANTAFILLOU

WHEREAS: The construction of Runway 14/32 at Logan Airport would lead to an intolerable increase in noise and pollution for neighboring communities such as Cambridge because of the increased volume of flights it would allow; and 41.1

WHEREAS: Its construction would lead to a **300%** increase in departures using Runway 33L, which fly over Cambridge and Somerville; and

WHEREAS: The proposed runway is a short-term short-sighted fix to the problem of delays at Logan; Massport admits that the delays will return to current levels within five years of the construction of Runway 14/32; what is needed is a realistic, long-term, regional aviation plan for New England; and 41.2

WHEREAS: There has been a dearth of opportunities for public participation in this issue; Massport has refused to come to a meeting of the Cambridge City Council or to schedule its own public meeting in Cambridge; now therefore be it 41.3

RESOLVED: That the Cambridge City Council go on record joining the governing bodies of Boston, Chelsea, Winthrop and Somerville in opposing this runway because of the negative effects it will have on the health and quality of life of our citizens; and be it further 41.4

RESOLVED: That the City Clerk forward a suitably engrossed copy of this resolution to Robert Durand, Secretary of Environmental Affairs, prior to April 20, 1999, which is the end of the MEPA comment period and to John C. Silva, Manager of Environmental Programs for the Federal Aviation Administration.

In City Council April 5, 1999.
Adopted by the affirmative vote of nine members.
Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:- D. Margaret Drury

D. Margaret Drury, City Clerk

Letter 41
City of Cambridge, City Council
D. Margaret Drury, City Clerk

Code	Topic 1	Topic 2	Comment	Response
41.1	Noise	Runway 14/32	The construction of Runway 14/32 at Logan Airport would lead to an intolerable increase in noise and pollution for neighboring communities such as Cambridge because of the increased volume of flights it would allow.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context. The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.
41.2	Alternatives	Runway 14/32	The proposed runway is a short-term short-sighted fix to the problem of delays at Logan; Massport admits that the delays will return to current levels within five years of the construction of Runway 14/32; what is needed is a realistic, long-term, regional aviation plan for New England....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
41.3	Environmental Review Process	Public Process	...Massport has refused to come to a meeting of the Cambridge City Council or to schedule its own public meeting in Cambridge....	Since the initial scoping, FAA and Massport have established a dialogue with the Airside Review Committee, community leaders and the public through hearings, briefings, and circulation of over 700 copies of the Airside Project Draft EIS/EIR for comment. At public meetings and at the request of interested community members, Massport has provided the public full access to information about the Airside Project and its associated social and environmental effects.
41.4	Alternatives	Runway 14/32	...Cambridge City Council... [opposes] this runway because of the negative effects it will have on the health and quality of life of our citizens....	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.

CITY OF CAMBRIDGE
CAMBRIDGE, MASSACHUSETTS 02139
TEL 349-4300
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EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

LETTER 42

April 20, 1999

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley, EOEA No. 10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Mr. John Silva
Federal Aviation Administration
New England Region Headquarters
12 New England Executive Park
Burlington, MA 01803

Dear Sirs:

Each year, I receive numerous complaints from residents about noise from commercial airplane flights over Cambridge. Therefore, I must object to any expansion or operational changes at Logan Airport that would result in more planes flying over our city.

Runway 33L is the one that most affects Cambridge. I understand that this runway must be used during periods when strong winds are blowing from the northwest but I am concerned that construction of runway 14-32 would greatly increase the number of flights using runway 33L. According to Massport, their current goal is for this runway to be used about 12 percent of the time but in actuality it is used only a little over 5 percent of the time. With the construction of runway 14-32, runway 33L is projected to be used between 26 and 43 percent of the time. This will severely increase the noise impacts on Cambridge residents. 42.1

Massport has stated that although the number of flights over Cambridge will increase, the number of nighttime flights will be reduced. Currently, Massport operates Logan with two basic runway configurations, one in a general north/south direction using three runways, and the other in a general east/west direction but with only two runways, including runway 33L. Because of the capacity constraints on the two runway configuration, the three runway configuration is used in peak demand periods unless there are heavy winds from the northwest.

In order to try and balance the total flights over all communities, Massport uses runway 33L more often at night and on weekends because there are fewer flights which can be accommodated by using only two runways. With the addition of runway 14-32, there

will be three runways for the east/west configuration resulting in an increase in capacity to that of the north-south three runway configuration. Therefore, some of the current night and weekend flights over Cambridge will move to the north-south configuration and some of the daytime flights will move to the east/west configuration. This is intended to better balance the impact among all communities. What guarantees are in place to make sure this will happen? While the proposed runway changes are designed to reduce impacts on the communities both north and south of Logan, they do not appear to be embraced by most communities, including East Boston, Hull and Winthrop. 42.2

Massport has abandoned the idea of charging higher landing fees during peak demand periods because of the financial impact on the regional carriers that use small planes and thus have fewer passengers to share in the cost. This position should be reconsidered since the result would be to move some flights to the off-peak periods and/or move some of the carriers to the other regional airports in Manchester, Providence and potentially Worcester. The result would be to reduce airplane noise in Cambridge and other communities currently impacted. 42.3

Massport has based the need for runway 14-32 on the desire to reduce the amount of airplane delay which they say is 120,000 hours per year (sixth highest in the country). Massport's Community Advisory Committee (CAC) and others have questioned that data. Massport itself has indicated that by the year 2010 delays will increase by 39,000 hours annually even with the new runway. 42.4

I am therefore requesting that Massport be instructed to resolve the issue of how much airplane delay is actually occurring at Logan before deciding on what improvements, if any, should be made. In addition, Massport should be instructed to reopen the issue of peak period pricing and any other operational changes the could reduce the need for new runways.

Thank you for the opportunity to comment on this project.

Very truly yours,

Robert W. Healy
City Manager

Cc: Beth Rubenstein, Acting Assistance City Manager
for Community Development

Letter 42
City of Cambridge
Robert W. Healy, City Manager

Code	Topic 1	Topic 2	Comment	Response
42.1	Alternatives	Runway 14/32	Runway 33L is the one that most affects Cambridge…I am concerned that construction of Runway 14/32 would greatly increase the number of flights using runway 33L…With the construction of Runway 14/32, runway 33L is projected to be used between 26 and 43 percent of the time. This will severely increase the noise impacts on Cambridge residents.	The Supplemental DEIS/FEIR indicates that the Preferred Alternative promote runway use in a manner that is more consistent with annual PRAS goals. The PRAS goals were established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. Total departures from Runway 33L would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below, the annual goals for these operations.
42.2	Alternatives	Runway 14/32	With the addition of Runway 14/32, there will be three runways for the east/west configuration resulting in an increase in capacity to that of the north-south three-runway configuration. Therefore, some of the current night and weekend flights over Cambridge will move to the north-south configuration and some of the daytime flights will move to the east/west configuration…What guarantees are in place to make sure this will happen?	The FAA assigns the runways to be used for takeoff and landing using standard operating procedures that take into account wind, weather, traffic demands, PRAS recommendations and other factors. Modeling these conditions into the future requires knowledge of historical trends and predictions of future activity, and if those factors unfold as they have in the past, the projections are likely to occur as expected. However, the control of air traffic is a dynamic process and there are no guarantees or safeguards that the predictions will occur exactly as modeled.
42.3	Alternatives	Peak Period Pricing	Massport has abandoned the idea of charging higher landing fees during peak demand periods because of the financial impact on the regional carriers that use small planes and thus have fewer passengers to share in the cost. This position should be reconsidered since the result would be to move some flights to the off-peak periods and/or move some of the carriers to the other regional airports in Manchester, Providence and potentially Worcester. The result would be to reduce airplane noise in Cambridge and other communities currently impacted…Massport should be instructed to reopen the issue of peak period pricing and any other operational changes that could reduce the need for new runways.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.

Code	Topic 1	Topic 2	Comment	Response
42.4	Alternatives	Runway 14/32	Massport has based the need for Runway 14/32 on the desire to reduce the amount of airplane delay which they say is 120,000 hours per year (sixth highest in the country). Massport's Community Advisory Committee (CAC) and others have questioned that data. Massport itself has indicated that by the year 2010 delays will increase by 39,000 hours annually even with the new runway...I am therefore requesting that Massport be instructed to resolve the issue of how much airplane delay is actually occurring at Logan before deciding on what improvements, if any, should be made.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Section 1.4 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

City of Chelsea

Guy A. Santagate, City Manager
City Hall
500 Broadway
Chelsea, Massachusetts 02150

Chelsea
All-America City
1998

LETTER 43

April 23, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Dear Secretary Durand:

I would like to thank you for this opportunity to comment on the proposed Logan Airside Improvements Project, EOEA #10458. As the Chelsea City Manager, I am pleased to offer the following comments on behalf of Chelsea City Government and all of the residents of the City of Chelsea.

To help define the City's position on the addition of another runway at Logan, the City believes the focus belongs on the rights of airline passengers versus airport neighbors. In particular, we would respectfully ask those reviewing the runway expansion project if relieving the minutes of inconvenience caused to airline passengers at Logan should override the negative impacts such a tremendous increase in daily flight operations will have on the 30,000+ residents of Chelsea and others so impacted?

Having framed the question, some may answer yes. An argument may be made, I suppose, that the on-time shuttle of passengers and cargo to and from Logan Airport is so vital to the region's economic well-being that hundreds of thousands of people should suffer a deterioration in their quality of life for the benefit of the greater good. We in Chelsea are certainly very aware of that type of thinking. After all, Chelsea is host to a significant portion of the region's petroleum supply, as well as the region's largest salt pile and most important bridge. Additionally, thousands of trucks and millions of gallons of sewage a day can be found on and under our street network. The cumulative impact in the name of the greater good has already caused the most densely populated community in the commonwealth to suffer dramatically.

Yet, through it all, Chelsea has finally gained its stride after decades of missteps and at last appears to be on the verge of the revitalization for which generations have longed. We have learned to live with the problems being the regional solution to so many issues have posed, and through it all, we are achieving much despite the reduction in quality of life we suffer because of the burdens we bear. However, our capacity to absorb additional impacts and maintain an acceptable quality environment for our residents to enjoy and our businesses to thrive is central to the Logan expansion debate. We fear the

43.1

impacts, both real and perceived, from what is to be an incredible increase in airport operations and related support activities under the Logan AIP.

Of course, we realize if Logan Airport was the average size airport in the country by landmass, all of Chelsea would be on-airport. Yet, those pushing an expansion agenda need to realize that those sprawling airports are not often located in such densely populated neighborhoods as those surrounding Logan. By some estimates, Logan's capacity to generate additional passenger and cargo activity appears to be almost unlimited. At some point, however, the reversal in the quality of life caused by the absorption of that capacity begins to outweigh the supposed greater good achieving those numbers can produce.

From the passenger perspective, that which I am most familiar, the traveling public is so use to delays and inconveniences that many of us now build in extra time and bring along extra patience to deal with the problem. Certainly delay-free travel is a goal worthy of pursuit, however we cannot let the pursuit of the goal override a more fundamental goal we must all strive to realize: The peaceful and healthy enjoyment of one's neighborhood and home. It is this last point that brings us back to Chelsea.

Unfortunately, environmental justice is a concept we are just becoming familiar with in Chelsea. The odors have seemingly always been there. Now, however, we are learning about the high levels of VOCs in the emissions of the petroleum operations, the cyanide in the salt that blows off the piles and into our neighborhoods, and the particulates that thousands of dieseling trucks and more than 100,000 cars a day traveling over the three Chelsea bridges into Boston are adding to our environment. With several of our industrial operations on the list of top dischargers of solvents, and being downwind of the Exxon Terminal in Everett and Sithe Energies in Charlestown, Chelsea's statistically significant levels of respiratory cancers and other ailments may indeed be a result of the pollution corridor in which we are located.

It is by no coincidence that Chelsea has systematically enticed the middle and upper-middle class back to our community. I take very serious, though, the threats of many in those socio-economic categories that the addition of the runway means the end of their investment in Chelsea. Of course, those people have the means to make such a decision, no matter how devastating another flight of the middle class would be on our schools, civic institutions, political leadership, neighborhood stability and so much more. It is those of lesser means, though, the first and second generation immigrants and longer residents who have not found themselves a position on the corporate ladder of success that will again be left behind. Those who cannot afford to escape the environment

re: Logan Airside Improvements Project, EOEA #10458

around them will once again bear the same types of impacts brought to the city by the petroleum industry in the 1930's, the Tobin Bridge in the 1950's and the salt pile in the 1970's.

Chelsea has done its part and continues to work with the Massachusetts Port Authority to improve efficiencies at Logan Airport. We have become home to many of the freight forwarders who once populated Logan Airport, and we have developed a district that allows other support services to locate off-airport. We certainly understand the need for the region's largest economic engine to continue to spin-off the jobs and services that make Greater Boston one of the most attractive areas to live and work. However, like any good thing taken to the extreme, we remain concerned that the expansion of Logan Airport, without serious consideration and resolution of the tremendous impacts such an expansion will have on the residents of Chelsea and our fellow neighbors so situated, is unwarranted. To date, we have not seen a comprehensive plan that provides us with the necessary comfort level to believe that the noise, traffic and health impacts of the Logan expansion will be mitigated in our community. Of course, our suspicions are reflective of the lack of action that has taken place to solve the impacts we already have in our community. The city has not seen any soundproofing activity in more than a decade, the trucks keeping rolling through our community at greater levels and our insistence that our residents may suffer short- and long-term health problems as a result of so many noxious activities receives little attention. 43.2

Perhaps Logan has already reached its capacity to serve the region. The regional significance of more passengers and more cargo requires regional solutions, but in this case, it appears that Logan expansion proponents are suggesting that Logan is the only answer. The City believes otherwise. The regional discussion needs to not only include airports and highspeed rail, but must also question where, in a world that continues to grow smaller, does Logan's role as a cargo facility go into the future. Before committing to a new runway at the expense of the neighborhoods that have long existed before Logan appeared, we should have a more in-depth long-range plan to manage growth. While the cost of the alternatives and the impact of limiting growth may be substantial, so too is the impact on those who will bear the brunt of the negatives that the new runway could bring. In light of seeking a relevant framework for discussion, we must also question the validity of the dated data presently being used to determine both the so-called delays and the relief being offered by the Logan AIP. 43.3 43.4

Most importantly, we certainly feel Logan has exceeded its ability to call upon its neighbors to sacrifice any more. Never again should a television need to be turned up, an outdoor conversation need to be interrupted or a car alarm set off because

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a plane is flying overhead or an air freight truck is rumbling by. Gone forever should be the harmful fumes that find their way down from the skies and into our bodies. Perhaps policy officials should consider mitigating the existing impacts before creating even more like those the Logan AIP will undoubtedly create. 43.5

Again, on behalf of the City of Chelsea and all its residents, we greatly appreciate your review of the factors I have raised and others being raised by concerned citizens, business officials and elected and appointed leaders alike. Chelsea is eager to see the discussion on alternatives begin, and therefore hopes your review will cause our questions and others to be thoroughly investigated and acted upon.

Very truly yours,

Guy A. Santagate
City Manager

cc: James Wickersham, MEPA Unit
Senate President Thomas Birmingham
Representative Eugene O'Flaherty
Congressman Michael Capuano
Chelsea City Council members

Letter 43
City of Chelsea
Guy A. Santagate, City Manager

Code	Topic 1	Topic 2	Comment	Response
43.1	Alternatives	Runway 14/32	We fear the impacts, both real and perceived, from what is to be an incredible increase in airport operations and related support activities under the Logan AIP.	Refer to response to Comment 85.4. The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Airside analysis and GEIRs.
43.2	Alternatives	Runway 14/32	...we remain concerned that the expansion of Logan Airport, without serious consideration and resolution of the tremendous impacts such an expansion will have on the residents of Chelsea and our fellow neighbors so situated, is unwarranted. To date, we have not seen a comprehensive plan that provides us with the necessary comfort level to believe that the noise, traffic and health impacts of the Logan expansion will be mitigated in our community.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR. The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.

Code	Topic 1	Topic 2	Comment	Response
43.3	Regional Transportation	Cargo	...The regional significance of more passengers and more cargo requires regional solutions...The regional discussion needs to not only include airports and high-speed rail, but must also question where, in a world that continues to grow smaller, does Logan's role as a cargo facility go into the future. Before committing to a new runway at the expense of the neighborhoods that have long existed before Logan appeared, we should have a more in-depth long-range plan to manage growth.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act..." Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Secretary of Environmental Affairs' Certificate on the ENF directed Massport to "discuss [these] off-airport alternatives and analyze the potential each has to divert passengers and/or cargo from ... Logan Airport." Cargo operations were not specifically analyzed because they account for only two percent of aircraft activity at Logan Airport and since most all cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport.
43.4	Delay	Model	...[W]e...also question the validity of the dated data presently being used to determine both the so-called delays and the relief being offered by the Logan AIP.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
43.5	Mitigation	Initiatives	...policy officials should consider mitigating the existing impacts before creating even more like those the Logan AIP will undoubtedly create.	Refer to the *Logan Airport 1999 ESPR* (previously GEIR) for the status of Massport's mitigation programs and to Chapter 8 of the Supplemental DEIS/FEIR for a discussion of proposed Airside Project mitigation measures.

April 8, 1999

LETTER 44

To Whom It May Concern:

The majority and the focus of my presentation today will address the inconstancies and inadequacies of the proposal before us as they relate to the City of Chelsea. I will, before the April 23rd deadline, submit a more comprehensive written comment.

First, I'd like to address the issue of the noise impact assessment. In order to go forward, it is necessary to look back. I first started examining the noise contour shortly after I bought my home in the Historic Waterfront District in 1996. After becoming elected to represent District 8, one of the communities that will be most heavily impacted if this proposal is authorized, I had the opportunity to attend a public hearing with the FAA and Massport Noise Abatement and Aviation Planning Officials. It was at this meeting in 1998 and through several communications between myself, Senator Kerry's Office and the FAA, that I learned why Chelsea is considered just outside the 65 dNL noise contour. It's because Massport submitted a map to the FAA based on a prediction made by a computer model that has consistently underestimated the noise level in our community. The proof is in the GEIR, and I will submit copies of my communications with the FAA along with this statement. Fact is that actual, that is measured noise results in Chelsea have been year after year above 65 and the predicted number used by Massport to assess the noise impact on the community is below 65. How convenient. 44.1

Without an accurate noise assessment the true impact of health, environment and real estate value effects can not be clearly defined, making any mitigation offer unreasonable. Based on the fact that Massport is using the same process to measure noise impacts that they have in black and white and in public admitted is not accurate, and based on the fact that the FAA recognizes the predicted noise levels are less than actual noise levels, the draft EIR should be rejected.

Further, it should be noted that the noise monitor location (figure 5.2-1) on page 5-13 indicates there is a permanent noise monitor on Admiral's Hill 44.2

in Chelsea, while all subsequent analysis of measured noise data is placed at "Shurtleff & Essex, Chelsea" a site that has not had a monitor since 1991, and then for only one year.

Another area of the EIR that is inadequate with respect to accuracy and thoroughness is the 4 page evaluation in section 8.7 of the environmental justice issue. Chelsea will receive the brunt of the short term negative impacts of this proposal should you see fit to give your approval. In a presentation to the Chelsea City Council on March 3, 1999 Massport representatives said runway 33 departures will increase from 4.8% to 12% of total departures (a 150% increase) and runway 15 arrivals will increase from 1.5% to 7.7% (a 413% increase). The associated increase in noise is large enough that, even using the understated predicted noise measures, 1100 homes will be eligible for soundproofing. While we feel sound insulation can not fully mitigate the impacts of increased ambient noise levels and many of the older homes will not be eligible for funding due to FAA Order 5100.38A which requires the property owner to bring homes up to code, we realize that Chelsea is the only community impacted devastatingly enough to qualify. The EIR concludes, "Given the reduction in the highest noise exposed population and this mitigation (soundproofing), the low income and minority population will not experience disproportionately high adverse impacts" in comparison to the affected population as a whole. This analysis is neither thorough, nor accurate, as the EPA Census maps on population density, minority concentration and people below poverty level show. The EIR's conclusion conflicts with President Clinton's Environmental Justice Executive Order 12898, which was designed to prevent the types of environmental and health injustices that have occurred in Chelsea for over a hundred years. To demonstrate this I have also attached a copy of an EPA funded report on the extent of industrial pollution in Chelsea and its relation to the socioeconomic status of Chelsea Residents. Essentially, the 4 page environmental justice analysis contained within the EIR does not adequately analyze the environmental effects, including human health, economic and social effects, of the proposed expansion. I would suggest the analysis is a yet another clever obfuscation of the truth. and That The Analysis in The Eir Doesn't meet The standards of The DOT Order.

44.3

44.4

I really consider the two previous points my strengths, but I would like to briefly add that the EIR is either inaccurate or incomplete with respect to the following:

* Alternatives under discussion such as a comprehensive peak hour pricing analysis using a range of operations per hour levels instead of the single higher operational threshold that underestimated the delay reduction. Hanscom should not be ruled out as a piece of the regionalization solution, and a second major airport should have at least been considered. 44.5 44.6
* Air quality measurement. Noise and air quality equipment should be along flight paths, Chelsea's air monitor is at the Soldier's Home – out of harm's way. 44.7
* The impact on the Upland Sandpiper. The plan to relocate and or mitigate for this endangered species is inadequate and indefinite. 44.8
* Traffic Study. A study of the long-term traffic impacts on the surrounding communities should be as comprehensive as possible. 44.9
* A benefit cost analysis – how can you realistically and honestly mitigate the noise, health and real estate costs to residents? 44.10
* The commitment to maintain the new runway's unidirectional status – there isn't one. 44.11
* Data used for this analysis is over 5 years old and doesn't reflect current conditions. 44.12

For all of these reasons, and I'm sure many more, I encourage you to find the proposal before us today functionally inadequate and I would respectfully request that a new draft document should be required before any expansion can be considered. I would also suggest that any future requests for expansion include an independent impact assessment that would meaningfully, thoroughly and accurately detail the impacts on surrounding communities like Chelsea.

Sincerely,

Preston G. Galarneau, Jr

Preston G. Galarneau, Jr
Councillor District 8
Chelsea, MA

Chelsea City Council

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500 Broadway
Chelsea, MA 02150
(617) 889-8210
(617) 889-8349 Fax

Wednesday, July 01, 1998

The Honorable John F. Kerry
United States Senator
One Bowdoin Square
Tenth Floor
Boston, MA 02114

Dear Senator Kerry:

As a newly elected Councilman representing District 8 Chelsea residents, the single most common complaint I receive is about aircraft noise. Just a month or so after purchasing my home in the Historic Waterfront District I wrote to you to see if there was any possibility of relief. I was impressed with the timeliness of Constituent Services' response, and frankly I was satisfied with the explanation offered by Massport and the FAA: "Residential areas in Chelsea are outside of the 65 DNL contour and thus not eligible for federal funding." I have not written since.

Recently, however, in my capacity as Councilman I have taken the time to learn everything I could about this issue. The facts are disturbing. The truth of the matter is that Massport's "state-of-the-art Noise Monitoring System" on Admiral's Hill in Chelsea has measured Day Night Average Sound Levels (DNL's) ***above*** 65 in every year back through 1994! At last night's Subcommittee Meeting regarding air pollution resulting from Logan Airport I asked "Why, if the measured levels are above the 65 DNL level year after year, does Chelsea not qualify for assistance?" The answer is preposterous. Following FAA, Department of Transportation guidelines, Massport has provided the FAA with a noise exposure map based on "forecast aircraft operations at the airport for the fifth calendar year beginning after the date of submission." In other words, using data provided by Logan Airport, a computer model known as the INM (Integrated Noise Model) has predicted that Chelsea will fall below the 65 DNL level in 1999. Because of this our health is being ignored?

The system used to make this optimistic prediction (which has consistently been proven false by real world experience) is regarded by the FAA as "The Descriptor of Choice for Airport Noise Assessment." It is not hard to figure out why. The descriptor of choice has saved the FAA and Massport untold millions of dollars by being wrong again and again. That Massport has more than once chosen not to revise the model to more accurately reflect reality is indefensible. When you, or any other representative of the residents of District 8 explain why Chelsea is not eligible for Federal funding, I think it is important to explain the truth as Massport finally has. Then the question becomes do you accept it?

At the meeting last night I asked members of the Massport Noise Abatement team what will happen when 1999 is over and the hard data again proves the model wrong? The answer is a new model will be developed some time after the year 2000. I'm sorry, but I have little confidence in their ability to produce a model that will accurately reflect the noise of jet plane after plane roaring over the head of my 18 month old son as he plays in Paloma Park on a Sunday morning.

I respectfully request that you fully investigate this matter on behalf of your constituents in Chelsea.

Sincerely,

Preston G. Galarneau, Jr
District 8 City Councilor

ration of aircraft, in the air or on the ground.

"Sound exposure level" means the level, in decibels, of the time integral of squared A-weighted sound pressure during a specified period or event, with reference to the square of the standard reference sound pressure of 20 micropascals and a duration of one second.

"Yearly day-night average sound level" (YDNL) means the 365-day average, in decibels, day-night average sound level. The symbol for YDNL is also L_{dn}.

[Doc. No. 18691, 49 FR 49269, Dec. 18, 1984, as amended by Amdt. 150-1, 53 FR 8724, Mar. 16, 1988; 53 FR 9726, Mar. 24, 1988; Amdt. 150-2, 54 FR 39296, Sept. 25, 1989]

§ 150.9 Designation of noise systems.

For purposes of this part, the following designations apply:

(a) The noise at an airport and surrounding areas covered by a noise exposure map must be measured in A-weighted sound pressure level (L_A) in units of decibels (dBA) in accordance with the specifications and methods prescribed under Appendix A of this part.

(b) The exposure of individuals to noise resulting from the operation of an airport must be established in terms of yearly day-night average sound level (YDNL) calculated in accordance with the specifications and methods prescribed under Appendix A of this part.

(c) Uses of computer models to create noise contours must be in accordance with the criteria prescribed under Appendix A of this part.

§ 150.11 Identification of land uses.

For the purposes of this part, uses of land which are normally compatible or noncompatible with various noise exposure levels to individuals around airports must be identified in accordance with the criteria prescribed under Appendix A of this part. Determination of land use must be based on professional planning criteria and procedures utilizing comprehensive, or master, land use planning, zoning, and building and site designing, as appropriate. If more than one current or future land use is permissible, determination of compatibility must be based on that use most adversely affected by noise.

§ 150.13 Incorporations by reference.

(a) *General.* This part prescribes certain standards and procedures which are not set forth in full text in the rule. Those standards and procedures are hereby incorporated by reference and were approved for incorporation by reference by the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR Part 51.

(b) *Changes to incorporated matter.* Incorporated matter which is subject to subsequent change is incorporated by reference according to the specific reference and to the identification statement. Adoption of any subsequent change in incorporated matter that affects compliance with standards and procedures of this part will be made under 14 CFR Part 11 and 1 CFR Part 51.

(c) *Identification statement.* The complete title or description which identifies each published matter incorporated by reference in this part is as follows:

International Electrotechnical Commission (IEC) Publication No. 179, entitled "Precision Sound Level Meters," dated 1973.

(d) *Availability for purchase.* Published material incorporated by reference in this part may be purchased at the price established by the publisher or distributor at the following mailing addresses.

IEC publications:

(1) The Bureau Central de la Commission Electrotechnique, Internationale, 1, rue de Varembe, Geneva, Switzerland.

(2) American National Standards Institute, 1430 Broadway, New York, NY 10018.

(e) *Availability for inspection.* A copy of each publication incorporated by reference in this part is available for public inspection at the following locations:

(1) FAA Office of the Chief Counsel, Rules Docket, AGC-10, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, D.C. 20591.

(2) Department of Transportation, Branch Library, Room 930, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, D.C. 20591.

(3) The respective Regional Offices of the Federal Aviation Administration as follows:

(i) New England Regional Office, 12 New England Executive Park, Burlington, Massachusetts 01803.

(ii) Eastern Regional Office, Federal Building, John F. Kennedy (JFK) International Airport, Jamaica, New York 11430.

(iii) Southern Regional Office, 3400 Norman Berry Drive, East Point, Georgia (P.O. Box 20636, Atlanta, Georgia) 30320.

(iv) Great Lakes Regional Office, 2300 East Devon, Des Plaines, Illinois 60018.

(v) Central Regional Office, 601 East 12th Street, Kansas City, Missouri 64106.

(vi) Southwest Regional Office, 4400 Blue Mound Road, (P.O. Box 1689), Fort Worth, Texas 76101.

(vii) Northwest Mountain Regional Office, 17900 Pacific Highway, South, C-68966, Seattle, Washington 98168.

(viii) Western Pacific Regional Office, 15000 Aviation Boulevard, Hawthorne, California (P.O. Box 92007, Worldway Postal Center, Los Angeles) 90009.

(ix) Alaskan Regional Office, 701 "C" Street, Box 14, Anchorage, Alaska 99513.

(x) European Office, 15, Rue de la Loi (3rd Floor) B1040 Brussels, Belgium.

(4) The Office of the Federal Register, Room 8401, 1100 "L" Street, NW., Washington, D.C.

[Doc. No. 18691, 49 FR 49269, Dec. 18, 1984, as amended by Amdt. 150-2, 54 FR 39296, Sept. 25, 1989]

Subpart B—Development of Noise Exposure Maps and Noise Compatibility Programs

§ 150.21 Noise exposure maps and related descriptions.

(a) Each airport operator may after completion of the consultations and public procedure specified under paragraph (b) of this section submit to the Regional Airports Division Manager five copies of the noise exposure map (or revised map) which identifies each

noncompatible land use in each depicted on the map, as of the d submission, and five copies of a each with accompanying docun tion setting forth—

(1) The noise exposure base forecast aircraft operations at th port for the fifth calendar year ning after the date of subm (based on reasonable assumption cerning future type and frequen aircraft operations, number of time operations, flight patterns port layout including any planne port development, planned land changes, and demographic chang the surrounding areas); and

(2) The nature and extent, if a which those forecast operations affect the compatibility and land depicted on the map.

(b) Each map, and related docu tation submitted under this se must be developed and prepared i cordance with Appendix A of this or an FAA approved equivalent, a consultation with states, and p agencies and planning agencies w area, or any portion of whose are jurisdiction is within the L_{dn} 65 contour depicted on the map, FA gional officials, and other Federal officials having local responsibility land uses depicted on the map. consultation must include re aeronautical users of the airport. airport operator shall certify th has afforded interested persons quate opportunity to submit views, data, and comments concer the correctness and adequacy of draft noise exposure map and de tions of forecast aircraft operat Each map and revised map must b companied by documentation de ing the consultation accompli under this paragraph and the opp nities afforded the public to re and comment during the developm of the map. One copy of all wri comments received during consu tion shall also be filed with the gional Airports Division Manager.

(c) The Regional Airports Div Manager acknowledges receipt of t exposure maps and descriptions indicates whether they are in com ance with the applicable requirem The Regional Airports Division M

150—AIRPORT NOISE COMPATIBILITY PLANNING

Subpart A—General Provisions

Sec.
150.1 Scope and purpose.
150.3 Applicability.
150.5 Limitations of this part.
150.7 Definitions.
150.9 Designation of noise systems.
150.11 Identification of land uses.
150.13 Incorporations by reference.

Subpart B—Development of Noise Exposure Maps and Noise Compatibility Programs

150.21 Noise exposure maps and related descriptions.
150.23 Noise compatibility programs.

Subpart C—Evaluations and Determinations of Effects of Noise Compatibility Programs

150.31 Preliminary review; acknowledgments.
150.33 Evaluation of programs.
150.35 Determinations; publications; effectivity.

APPENDIX A TO PART 150—NOISE EXPOSURE MAPS

APPENDIX B TO PART 150—NOISE COMPATIBILITY PROGRAMS

AUTHORITY: 49 U.S.C. 1346, 1354(a), 1421, 1431, 2101, 2102, 2103(a) 2104 (a) and (b), 2201 *et seq.*; 49 U.S.C. 100(g) (Revised, Pub. L. 97-449, Jan. 12, 1983).

SOURCE: Docket No. 18091, 49 FR 49269, Dec. 18, 1984, unless otherwise noted.

Subpart A—General Provisions

§ 150.1 Scope and purpose.

This part prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. It prescribes single systems for— (a) measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and surveyed reaction of people to noise; and (b) determining exposure of individuals to noise that results from the operations of an airport. This part also identifies those land uses which are normally compatible with various levels of exposure to noise by individuals. It provides technical assistance to airport operators, in conjunction with other local, State, and Federal authorities, to prepare and execute appropriate noise compatibility planning and implementation programs.

§ 150.3 Applicability.

This part applies to the airport noise compatibility planning activities of the operators of "public use airports," including heliports, as that term is used in section 101(1) of the ASNA Act as amended (49 U.S.C. 2101) and as defined in section 503(17) of the Airport and Airway Improvement Act of 1982 (49 U.S.C. 2202).

[Doc. No. 18091, 49 FR 49269, Dec. 18, 1984, as amended by Amdt. 150-1, 53 FR 8723, Mar. 16, 1988]

§ 150.5 Limitations of this part.

(a) Pursuant to the ASNA Act (49 U.S.C. 2101 et seq.), this part provides for airport noise compatibility planning and land use programs necessary to the purposes of those provisions. No submittal of a map, or approval or disapproval, in whole or part, of any map or program submitted under this part is a determination concerning the acceptability or unacceptability of that land use under Federal, State, or local law.

(b) Approval of a noise compatibility program under this part is neither a commitment by the FAA to financially assist in the implementation of the program, nor a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA.

(c) Approval of a noise compatibility program under this part does not by itself constitute an FAA implementing action. A request for Federal action or approval to implement specific noise compatibility measures may be required, and an FAA decision on the request may require an environmental

tal Policy Act (42 U.S.C. 4321 *et seq.*) and applicable regulations, directives, and guidelines.

(d) Acceptance of a noise exposure map does not constitute an FAA determination that any specific parcel of land lies within a particular noise contour. Responsibility for interpretation of the effects of noise contours upon subjacent land uses, including the relationship between noise contours and specific properties, rests with the sponsor or with other state or local government.

§ 150.7 Definitions.

As used in this part, unless the context requires otherwise, the following terms have the following meanings.

"Airport" means any public use airport, including heliports, as defined by the ASNA Act, including: (a) Any airport which is used or to be used for public purposes, under the control of a public agency, the landing area of which is publicly owned; (b) any privately owned reliever airport; and (c) any privately owned airport which is determined by the Secretary to enplane annually 2,500 or more passengers and receive scheduled passenger service of aircraft, which is used or to be used for public purposes.

"Airport noise compatibility program" and "program" mean that program, and all revisions thereto, reflected in documents (and revised documents) developed in accordance with Appendix B of this part, including the measures proposed or taken by the airport operator to reduce existing noncompatible land uses and to prevent the introduction of additional noncompatible land uses within the area.

"Airport Operator" means the operator of an airport as defined in the ASNA Act.

"ASNA Act" means the Aviation Safety and Noise Abatement Act of 1979, as amended (49 U.S.C. 2101 et seq.).

"Average sound level" means the level, in decibels, of the mean-square, A-weighted sound pressure during a specified period, with reference to the square of the standard reference sound pressure of 20 micropascals.

this part as nonc patible with the outdoor nois ment (or an adequately attenuated noise level reduction for any indoor activities involved) at the location because the yearly day-night average sound level is at or below that identified for that or similar use under Appendix A (Table 1) of this part.

"Day-night average sound level" (DNL) means the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 a.m., and between 10 p.m., and midnight, local time." The symbol for DNL is L_{dn}.

"Noise exposure map" means a scaled, geographic depiction of an airport, its noise contours, and surrounding area developed in accordance with section A150.101 of Appendix A of this part, including the accompanying documentation setting forth the required descriptions of forecast aircraft operations at that airport during the fifth calendar year beginning after submission of the map, together with the ways, if any, those operations will affect the map (including noise contours and the forecast land uses).

"Noise level reduction" (NLR) means the amount of noise level reduction in decibels achieved through incorporation of noise attenuation (between outdoor and indoor levels) in the design and construction of a structure.

"Noncompatible land use" means the use of land that is identified under this part as normally not compatible with the outdoor noise environment (or an adequately attenuated noise reduction level for the indoor activities involved at the location) because the yearly day-night average sound level is above that identified for that or similar use under Appendix A (Table 1) of this part.

"Regional Airports Division Manager" means the Airports Division Manager having responsibility for the geographic area in which the airport in question is located.

"Restriction affecting flight procedures" means any requirement, limitation, or other action affecting the op-

(0 011 0 - 90 — 3

Jun-98

Measured Ldn Noise Levels Report

Summary of Measured
Day-Night Equivalent Sound Levels
Summary to Date

Area	Location	Site No	1991	1992	1993	1994	1995	1996	1997	Jan-Feb 1998
South End	E Dedham	1	66.0	64.6	66.2	66.3	65.9	66.4	65.8	66.0
S Boston	Bolton St	2	69.9	68.1	67.5	68.1	68.2	69.0	69.4	69.2
S Boston	SB Yacht Club	3	67.8	69.4	69.3	68.2	68.1	66.8	67.1	68.5
Winthrop	Grandview	4	80.0	79.7	79.8	79.1	79.6	78.8	80.4	81.3
Winthrop	Faun Bar	5	72.5	72.7	73.3	72.0	71.7	71.7 *	71.1	72.1
Winthrop	Somerset	6	71.7	71.1	71.1	71.5	71.0	71.1	71.4 *	70.6
Winthrop	Loring Rd	7	74.1	74.1	74.1	74.1	73.4	73.8	74.4	73.3
Winthrop	Morton St	8	68.7	67.6	68.4	66.6	67.2	67.8	68.2	69.5
E Boston	Annavoy	9	75.1	75.8	75.6	76.0	75.8	75.7	76.0	75.3
E Boston	Shawsheen	10	71.4	71.2	71.3	70.6	70.2	70.8	71.9	71.7
E Boston	OH Hill	11	Not In	Not in	Not In	Not In	Not In	66.4 *	66.8	66.6
E Boston	EB Yacht Club	12	73.9	73.2 *	Down	71.7 *	71.6 *	72.7	72.7	71.4
E Boston	EB High	13	68.4	66.5	64.9	65.4	66.4	66.5	67.1	68.4
E Boston	JP Yacht Club	14	69.1	67.5	67.4	65.7	66.6	66.9	67.0	68.2
Chelsea	Admiral's Hill	15	69.1	Down	Down	67.0 *	67.2	68.5	67.6 *	67.9
Revere	Bradstreet	16	71.8	71.3	71.4	69.9	71.8	72.3	71.9	70.1
Revere	Carey Circle	17	66.4	67.2	66.4	66.8	66.7	66.7	66.7	66.4
Nahant	CG Rec Facility	18	68.8	68.3	69.1	68.2	66.7	66.7 *	65.8	66.7
Swampscott	Smith Lane	19	58.7	57.6	58.8	56.8 *	56.8	56.7	56.9	56.3
Lynn	Flax Pond	20	65.5	59.3 *	60.6	59.4	58.8	59.9	59.2	57.8
Everett	Prescott	21	60.6	62.4 *	62.9	60.2	60.6	60.7	61.0	60.7
Medford	Magoun	22	61.7	61.3	59.6	59.6	60.2	60.0	60.7	59.9
Dorchester	Myrtlebank	23	63.8	63.4	63.6	63.2 *	62.8	62.5	62.7	63.5
Milton	Cunningham Pk	24	60.6	60.9	61.8	60.7	60.6	60.6	60.6	61.4
Quincy	Squaw Rock Pk	25	58.5	58.6	59.5 *	56.6 *	57.2	57.9	60.1	57.5
Hull	Hull HS	26	72.0	65.0	65.7	64.1	63.7	63.6	63.7	64.2
Roxbury	Bos Latin Academy	27	Not In	Not In	Not In	Not In	Not In	Not In	64.7 *	65.3
Mattapan	Lewenberg School	29	Not In	Not in	Not In	Not in	Not In	Not In	59.4 *	59.3
East Boston	Piers Park	30	Not In	Not In	Not In	Not In	Not in	63.6 *	63.4	63.4

TOTAL P.09

Table 6-5 presents a comparison of the measured L_{dn} values at each installed monitoring location to the corresponding value calculated by the adjusted INM 5.0 for 1996. As expected, the best agreement is seen at the sites close to the airport, where aircraft noise is greatest. At the more remote locations, the measured noise level tends to be significantly higher than the INM-predicted value, since community sounds from traffic on local roads and other human activity contribute more to the overall noise level. Also, aircraft flight paths far from the airport are usually more dispersed over the ground, and hence are more difficult to model. For example, at sites 4 and 5 in Winthrop, where the dominant source of noise is aircraft overflights from arrivals on Runway 27 and departures on Runway 9, the INM-predicted noise level is within one decibel of the measured noise levels. Any community noises at these sites contribute far less to the overall sound levels than the aircraft noise.

Table 6-5
Comparison of Measured L_{dn} Values to INM-Computed L_{dn} Values for 1996

Site	Location	1996 Measured	1996 INM**
1	Andrews Street, South End	66.4	60.7
2	B and Bolton, South Boston	69.0	66.4
3	Day Blvd. near Farragut, South Boston	66.8	64.2
4	Bayview and Grandview, Winthrop	78.8	79.0
5	Harborview and Faun, Winthrop	71.7*	71.4
6	Somerset and Johnson, Winthrop	71.1	67.7
7	Loring Road near Court, Winthrop	73.8	76.4
8	Morton and Amelia, Winthrop	67.8	67.2
9	Bayswater and Annavoy, East Boston	75.7	72.5
10	Bayswater/Shawsheen, East Boston	70.8	66.3
11	Orient Heights, East Boston	66.4*	62.1
12	East Boston Yacht Club	72.7	73.8
13	East Boston High School	66.5	64.3
14	Jeffries Point Yacht Club, East Boston	66.9	64.4
15	Admiral's Hill, Chelsea	68.5	61.4
16	Bradstreet and Sales, Revere	72.3	69.8
17	Carey Circle, Revere	66.7	59.5
18	U.S.C.G. Recreational Facility, Nahant	66.7*	49.3
19	Smith Lane, Swampscott	56.7	46.5
20	Pond and Towns Court, Lynn	59.9	51.0
21	Tremont near Prescott, Everett	60.7	53.2
22	Magoun near Thatcher, Medford	60.0	49.2
23	Myrtlebank/Hilltop, Dorchester	62.5	53.7
24	Cunningham Park, Milton	60.6	51.5
25	Squaw Rock Park, Quincy	57.9	49.9
26	Hull High School, Hull	63.6	56.2
30	Piers Park, East Boston	63.6*	61.7

* Indicates partial data; monitor not operational for full year
** INM Version 5.0 with adjusted database
NA Data not available
Note: Sites 27, 28, and 29 to be installed in late summer 1997 as a result of the Runway 27 EIS process.

United States Senate
WASHINGTON, DC 20510-2102

BANKING, HOUSING, AND URBAN AFFAIRS
COMMERCE, SCIENCE, AND TRANSPORTATION
FOREIGN RELATIONS
INTELLIGENCE
SMALL BUSINESS

One Bowdoin Square
Tenth Floor
Boston, MA 02114
(617) 565-8519

July 21, 1998

Mr. Preston G. Galarneau, Jr.
District 8 City Councilor
Chelsea City Council
City Hall
500 Broadway
Chelsea, Massachusetts 02150

Dear Mr. Galarneau:

Regarding your correspondence, enclosed you will find a response to an inquiry my office made to the FAA.

I thank you for your patience and will forward you future correspondence on this issue. If you have any questions regarding this matter, please call Mark S. Sternman of my Boston office at (617) 565-8519.

Sincerely,

John F. Kerry
United States Senator

JFK/mss

Would like to visit Chelsea

Spoke w/ Sternman — will address Scrubeleus issue — and — encourage feel to Encourage Mosport Bluewit The Noise Contour map.

U.S. Department
of Transportation
Federal Aviation
Administration

New England Region

12 New England Executive Park
Burlington, MA 01803-5299

JUL 16 1998

The Honorable John F. Kerry
United States Senator
One Bowdoin Square
Tenth Floor
Boston, Massachusetts 02114

Dear Senator Kerry:

We are responding to your letter of July 2, 1998, concerning aircraft noise issues contained in a July 1, 1998, letter to you from Chelsea City Councilor Preston G. Galarneau.

Mr. Galarneau questions the accuracy of the Integrated Noise Model (INM) in predicting the noise environment from Logan International Airport in Chelsea, citing measured noise levels that exceed INM-predicted noise levels. He also criticizes use of forecasted 1999 noise contours in establishing eligibility for Massachusetts Port Authority's (Massport) soundproofing program.

We would expect community noise measurements to exceed INM-predicted noise levels since measured noise reflects ambient noise levels. As is stated in the text from the page of the study that Mr. Galarneau provided, "At the more remote locations, the measured noise level tends to be significantly higher than the INM-predicted value, since community sounds from traffic on local roads and other human activity contribute more [than at close-in locations] to the overall noise level." This factor and the capability of the model to predict noise levels at lower levels such as 65 DNL explain at least some of this difference.

Since 1994, the Federal Aviation Administration has required that Massport utilize a forecasted 1999 noise contour as the basis of soundproofing eligibility. This noise contour reflects the noise environment from close to 100% compliance with the requirement to phase out older, noisier airline aircraft. We require its use because we are concerned that scarce resources for soundproofing not go toward soundproofing residences that would no longer need it until sometime after the year 2000 when growth in aircraft operations would cause noise contours to expand again.

Massport may submit a new official noise exposure map for post-1999 at any time. Alternatively, they will need a new one after 1999. We note that progress on residential soundproofing of currently eligible homes indicates that Massport's program will be ongoing for several more years. As the soundproofing program continues, it needs to be recognized that the list of eligible homes will probably exceed the available Airport Improvement Program (AIP) funds that can be provided on an annual basis.

Should Chelsea become eligible as part of any new noise exposure map, they too must be part of the on-going list of eligible homeowners. On a positive note, it is the largest soundproofing program in the New England Region and we have been successful in providing AIP funds on an annual basis. Hopefully that will continue with reauthorization of the AIP.

Sincerely,

for Robert S. Bartanowicz
Regional Administrator

United States Senate
WASHINGTON, DC 20510–2102

BANKING, HOUSING, AND URBAN AFFAIRS
COMMERCE, SCIENCE, AND TRANSPORTATION
FOREIGN RELATIONS
INTELLIGENCE
SMALL BUSINESS

One Bowdoin Square
Tenth Floor
Boston, MA 02114
(617) 565-8519

September 3, 1998

Mr. Preston G. Galarneau, Jr.
District 8 City Councilor
Chelsea City Council
City Hall
500 Broadway
Chelsea, Massachusetts 02150

Dear Mr. Galarneau:

Regarding your correspondence, enclosed you will find a response to an inquiry my office made to the FAA.

I thank you for your patience and will forward you future correspondence on this issue. If you have any questions regarding this matter, please call Mark S. Sternman of my Boston office at (617) 565-8519.

Sincerely,

John F. Kerry
United States Senator

JFK/mss

U.S. Department
of Transportation
Federal Aviation
Administration

New England Region

12 New England Executive Park
Burlington, MA 01803-5299

Congressional Courtesy Copy

AUG 2 8 1998

The Honorable John F. Kerry
United States Senator
One Bowdoin Square
Tenth Floor
Boston, Massachusetts 02114

Dear Senator Kerry:

We are responding to your letter of August 10, 1998, which was written as a follow-up to our letter of July 16, 1998, to Chelsea City Councilor Preston G. Galarneau. Your letter addresses two points stated in our letter.

Can you believe this?

The first point refers to the use of the term "remote locations" in describing a noise monitoring location in Chelsea, noting that Chelsea is not a remote location. Please understand that this term was quoted from an environmental study not written by the Federal Aviation Administration. Thus, we cannot state with certainty what the author intended. From the context in which it is used, however, our interpretation is that it appears to be used as a relative term to connote that the Admirals Hill noise monitoring site is remote when compared to the other noise monitoring sites detailed in the report. We don't think that it was meant to connote that Chelsea is remote from Logan International Airport.

The second point refers to encouraging Massachusetts Port Authority (Massport) to update its noise exposure map sooner rather than later in order to account for actual rather than predicted conditions. While we will suggest this to Massport, it may have little effect on soundproofing in Chelsea, assuming that areas of Chelsea are found eligible. The reason for this is that Massport is currently soundproofing homes in East Boston that are exposed to greater noise levels and, given the level of funding that we have been able to apply, anticipates doing so for several more years.

We have been strong advocates for soundproofing funds for the three airports in New England that are part of our program (Boston, Providence, and Manchester). Over the years Massport has received substantially more for Logan than the other two airports combined. We will continue to push hard for these funds.

Sincerely,

Original signed by
Robert S. Bartanowicz

Robert S. Bartanowicz
Regional Administrator

(1) When configuration 33/27 is in use, hourly Leqs in Chelsea can reach the low 70's during high volume periods of the day.

(2) When Runway 33 is being used for departures, maximum event noise levels are often in the mid-90 dBA range, and can exceed 100 dBA.

(3) Not un-expectedly, noise levels from Runway 33 departures are generally slightly higher at the Galarneau residence than at the permanent monitor. This results from the lower altitudes of the aircraft overflying the Galarneau residence, which is closed to the airport than the permanent monitor.

Please advise if you want me to distribute any of the above, and to whom.

cc: T. Kinton (w/o enclosures)
K. Dillon (w/o enclosures)
T. Butler (w/o enclosures)
D. Steele (w/o enclosures)
N. Timmerman (w/o enclosures)

REALITY VS MASS PORT !
This is what happens when you listen
To the noise instead of predicting it
with a computer model.

massport memo

MEMORANDUM

TO: Betty Desrosiers
FROM: Emilio Favorito
DATE: 23 November 1998
RE: GALARNEAU SURVEY DATA/ RESULTS

Attached please find the data and analysis results from the noise monitoring survey which was conducted at City Councillor Preston Galarneau's residence at 15 Beacon Street in Chelsea, as requested. The survey spans the 16-day time period from October 26th to November 10th.

The following items are attached:

-A- "INTERVAL REPORT - Galarneau" (16 pages) provides the hourly Leq, Lmin, Lmax, L5, L50 and L90 for each of the hours that the portable monitor was recording data over the 16-day period.

-B- "HOURLY NOISE STATISTICS - RMS 15" (10 pages) provides equivalent data ffom the permanent Chelsea noise monitor.

-C- "RUNWAY CONFIGURATION" Report (3 pages) provides the runway configurations in use for the time period in question.

-D- "SUMMARY/COMPARISON (5 days)" (5 pages) essentially takes the "INTERVAL REPORT - Galarneau" and adds in the Leq and Lmax data from the permanent monitor (columns marked RMS 15), as well as the listed runway configuration (column marked "config").

The following items were also compiled, but are ***not*** included in the attachments. They are available if desired.

-E- "EXCEEDANCE REPORT- Galarneau" (28 pages) lists noise data for each of the individual noise events at that location that exceeded the monitor threshold.

-F- "RMS 15 EVENTS" (38 pages) provides similar information for the permanent Chelsea noise monitor.

From item "D" the following observations can be made:

(1) When configuration 33/27 is in use, hourly Leqs in Chelsea can reach the low 70's during high volume periods of the day.

(2) When Runway 33 is being used for departures, maximum event noise levels are often in the mid-90 dBA range, and can exceed 100 dBA.

(3) Not un-expectedly, noise levels from Runway 33 departures are generally slightly higher at the Galarneau residence than at the permanent monitor. This results from the lower altitudes of the aircraft overflying the Galarneau residence, which is closed to the airport than the permanent monitor.

Please advise if you want me to distribute any of the above, and to whom.

cc: T. Kinton (w/o enclosures)
K. Dillon (w/o enclosures)
T. Butler (w/o enclosures)
D. Steele (w/o enclosures)
N. Timmerman (w/o enclosures)

CHELSEA

Zip Code: 02150

This computer representation has been compiled by the U.S. Environmental Protection Agency (EPA) from sources which ha supplied data or information that has not been verified by the the EPA. This data is offered here as a general representation only, and is not to be used for commercial purposes without verification by an independant professional qualified to verify such data or information. The EPA does not guarantee the accuracy, completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance upon the information shown.

LEGEND

- Public Water Supply EPA SDWIS System
- Hospital (From 1995 GNIS names file)
- School (From 1995 GNIS names file)
- Basin Boundary USGS Catalog Unit
- County Boundary
- Zip Code Boundary Licensed by GDT Inc.

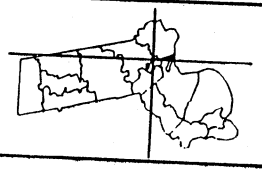
1990 Population Density Per Sq Mi

- Under 10
- 10 –100
- 100 –1,000
- 1,000 –3,000
- 3,000 –6,000
- 6,000 –10,000
- 10,000 –20,000
- Over 20,000

0 0.4

Miles

Albers Projection



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Produced March 18, 1999
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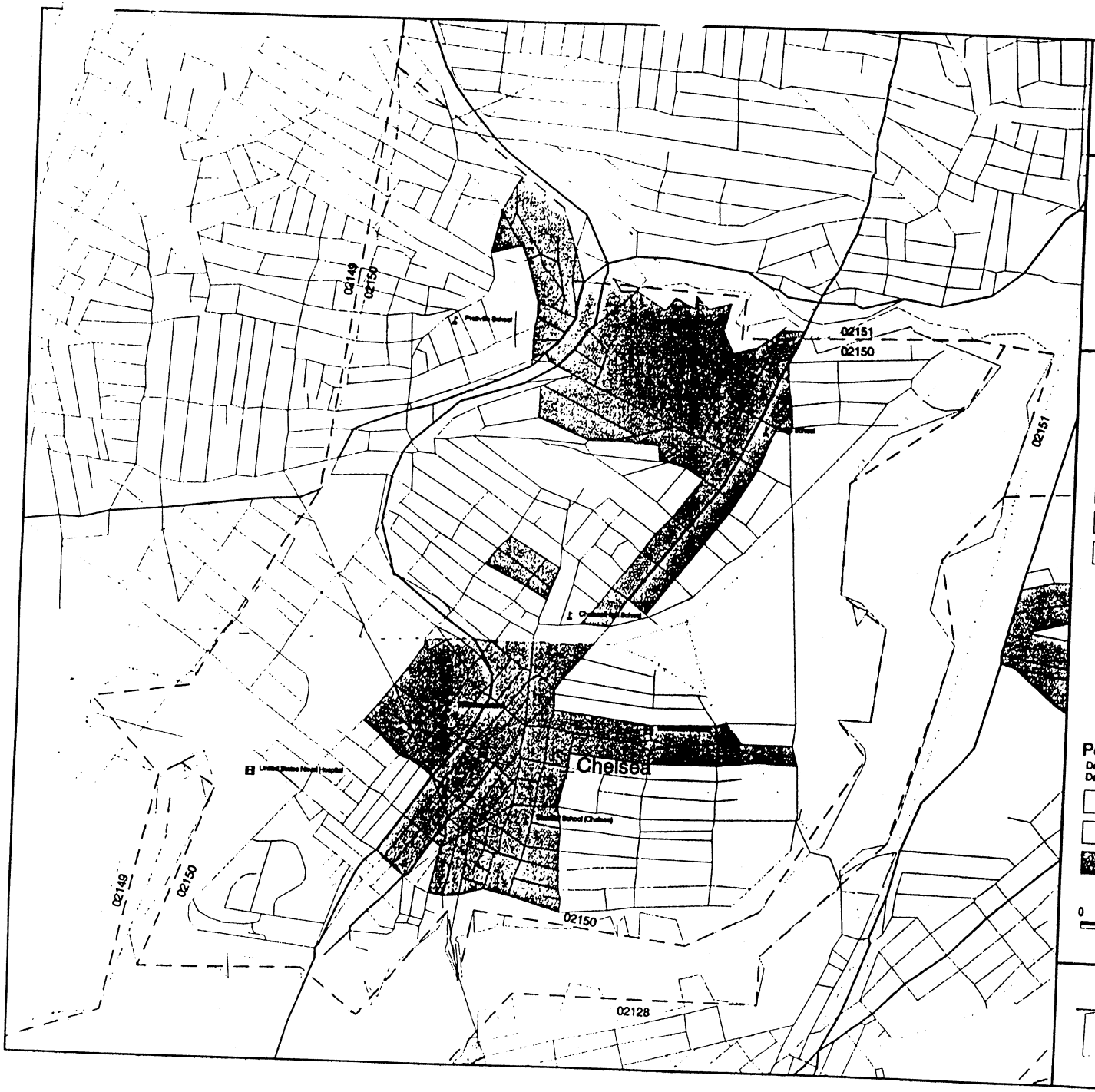

CHELSEA

Zip Code: 02150

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LEGEND

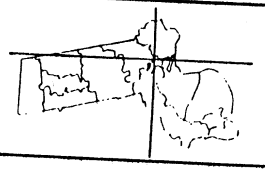
- Public Water Supply
  EPA SDWIS System
- Hospital
  (From 1995 GNIS names file)
- School
  (From 1995 GNIS names file)
- Basin Boundary
  USGS Catalog Unit
- County Boundary
- Zip Code Boundary
  Licensed by GDT Inc.

Percent People with Income Below Poverty Le

Data from Census STF3A files based on 1989 Income.
Data is summarized by 1990 Census Block Group areas.

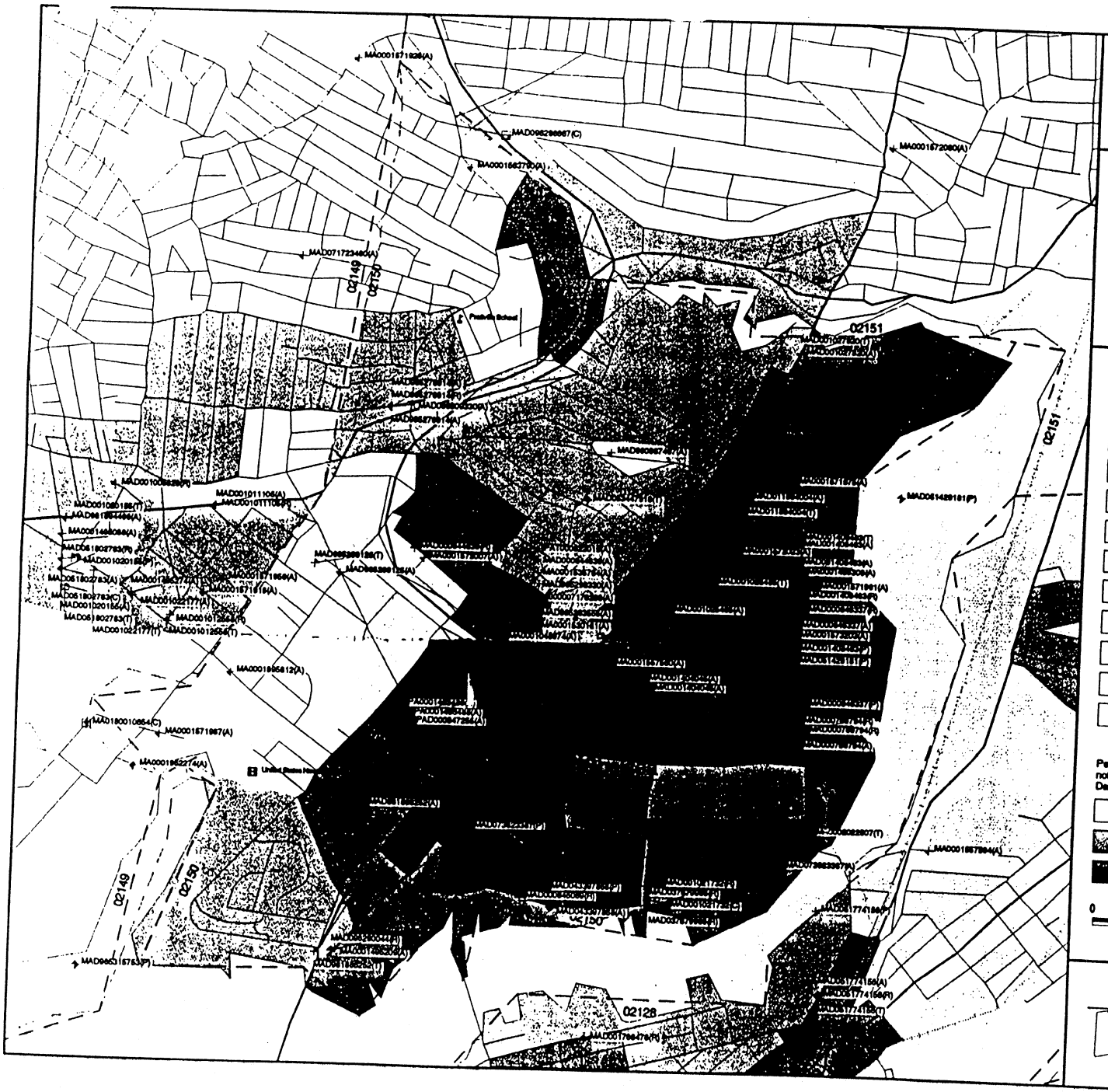
- 0 to 12 Percent
- 12 to 25 Percent
- 25 to 50 Percent
- 50 to 75 Percent
- Above 75 Percent
- No Persons

0 0.4
Miles
Albers Projection



EPA
U.S. Environmental Protection Age

Produced March 18, 1999
By ZIPINFO (Req z48072)



CHELSEA

Zip Code: 02150

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LEGEND

Note: Facility labeling turned OFF if more than 250 points.
Some facilities without good addresses may plot at zip code centroids.
Facility points have been restricted to user specified zip code area.

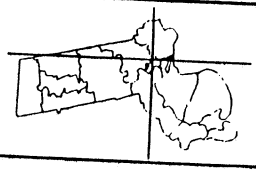
- CERCLIS NPL Site
- CERCLIS NPL Site (Proposed)
- CERCLIS Deleted From NPL Final Site
- CERCLIS Part of NPL Final Site
- CERCLIS Non-NPL Site Maybe located by zipcode
- Archived from CERCLIS
- RCRA TSD or LQG Site (Others Excluded)
- EPCRA TRI Site (Toxics Release Inventory)
- PCS Facility Site
- AFS/AIRS Site
- Undefined or Poor Locat Accuracy (More than 50
- Public Water Supply EPA SDWIS System
- Hospital (From 1995 GNIS names
- School (From 1995 GNIS names
- Basin Boundary USGS Catalog Unit
- County Boundary
- Zip Code Boundary Liscensed by GDT Inc.

1990 Census – Percent People of Color

People of Color was calculated by subtracting the White not of Hispanic origin count from the Total Persons count.
Data is summarized by 1990 Census Block Group areas.

- 0 to 12 Percent
- 12 to 25 Percent
- 25 to 50 Percent
- 50 to 75 Percent
- Above 75 Percent
- No Persons

0 0.4
Miles
Albers Projection



EPA
U.S. Environmental Protection Age

Produced March 18, 1999
By ZIPINFO (Req 248025)

INDUSTRIAL POLLUTION IN CHELSEA

AN ENVIRONMENTAL SURVEY BY

THE MASSACHUSETTS TOXICS CAMPAIGN FUND

November 1996

Funded by the U.S. Environmental Protection Agency

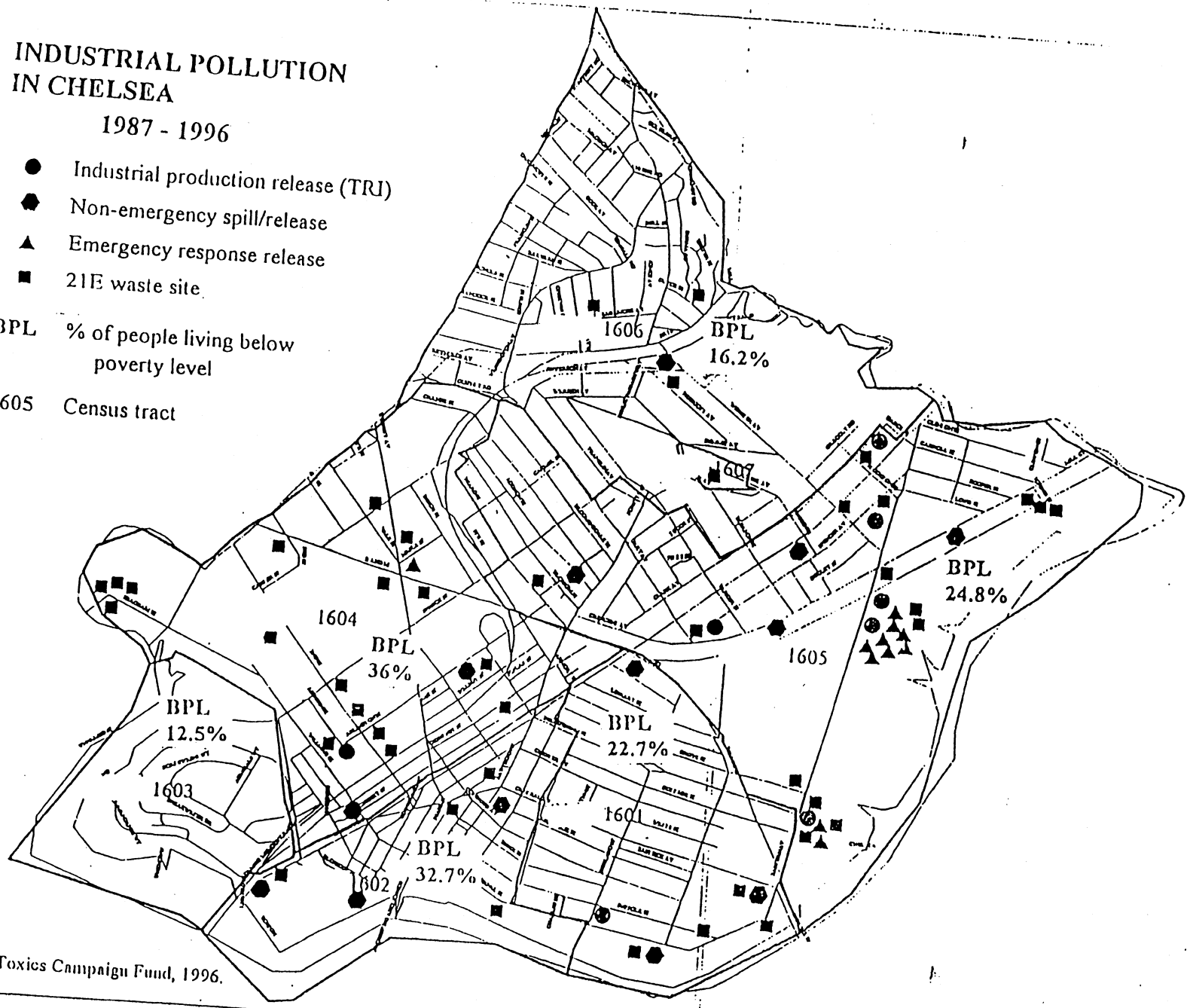
INDUSTRIAL POLLUTION IN CHELSEA

1987 - 1996

- ● Industrial production release (TRI)
- ⬟ Non-emergency spill/release
- ▲ Emergency response release
- ■ 21E waste site

BPL % of people living below poverty level

1605 Census tract



Mass. Toxics Campaign Fund, 1996.

Base map by City of Chelsea, 1995.

INDUSTRIAL POLLUTION IN CHELSEA

Summary

* From 1987 to 1994, as part of normal production, industrial companies in Chelsea reported that they released 666,188 pounds of toxic chemicals into the environment, or 83,274 pounds each year. Nearly all of this amount was released directly into the air. Over 95% of the air releases were made of three toxic chemicals: 1,1,1-trichloroethane, xylene, and toluene. These three chemicals can seriously damage human health. These companies are located mainly in the industrial area in the northeastern part of the city near Revere and the Chelsea River.
* Seven companies reported emergency releases of toxic chemicals (mainly fuel) during the 1987-1995 period. Some of these releases were very large. One was greater than 200,000 pounds of fuel. These companies are located mainly along Eastern Avenue and the waterfront area.
* Numerous other small, non-emergency releases of toxic chemicals took place, not only in industrial areas, but at several schools, too. High concentrations of lead and other toxins were turned up at the Williams and Shurtleff Schools.
* Chelsea is home to 44 toxic waste sites, also called "21E" sites, scattered throughout the western industrial area (near Everett) and the eastern waterfront industrial sections. Some of these sites contain hazardous waste, while most contain petroleum waste. These areas are known as "brownfields". Most of these sites are still far from being cleaned up.
* Chelsea's four biggest users of toxic chemicals used over 2.5 million pounds of reproductive toxins in 1993. These chemicals can damage the human reproductive system.
* Higher levels of pollution appear to be present in neighborhoods with a higher percentage of low income residents - particularly in low-income communities of color - while fewer sources of industrial contamination are found in higher income neighborhoods.

Scope of the Study

This study examines the extent of industrial pollution in Chelsea and its possible relation to socioeconomic status of Chelsea residents.

Lead poisoning is considered to be the main environmental health hazard in Chelsea, due to high incidence of older housing stock containing lead paint. In this study we do not quantify the extent of lead contamination and its health effects. We do recognize, however, the strong link between lead poisoning and a general lack of education about lead hazards and the lack of financial means among low income residents to have lead dangers removed.

Instead, we examine the extent of industrial toxic releases and their relation to socioeconomic status of Chelsea residents. Industrial and commercial pollution in Chelsea occurs in several ways:

1) As a frequent release into the environment from a factory or other business establishment. Businesses large enough are asked (voluntarily) to report what they emit into the environment each year to the U.S. Environmental Protection Agency. This information is compiled annually in the federal Toxic Release Inventory.

2) As an accidental release or spill. These are single events, not continuous or frequent releases over the period of one year, as is reported in the Toxic Release Inventory. Sometimes these releases are reported as an emergency, particularly if they are big. Other times, when they

are small and are not thought to pose a threat to the public, they are reported as non-emergency spills or releases.

3) As a "21E" waste site. 21E is a designation given by the Massachusetts Department of Environmental Protection to sites where significant amount of petroleum waste or hazardous waste have accumulated.

In addition, toxic chemicals used in production, and stored on-site at factories, are considered to be a potential health hazard, even if they are not actually released into the community.

Reported Toxic Releases from Industrial Production

According to the federal Toxic Release Inventory (TRI) Chelsea has experienced significant industrial toxic releases since reporting began in 1987. Tables 1 and 2 show toxic releases from the Toxic Release Inventory for each year from 1987 to 1994. Total reported environmental releases have risen from 53,555 lbs. in 1987, to a peak level of 167,539 lbs. in 1989, then declining somewhat through 1992, before dropping off significantly in 1993 and 1994. Nearly all of the pounds released were released to the air.

The three major pollutants - 1,1,1-trichloroethane, xylene, and toluene - are chemicals which, at high enough levels, can seriously damage human health, including causing cancer. See Table 3 for a brief description of the health effects from exposure to these chemicals.

The sources of this pollution are six industrial facilities. The largest emissions came from Emtex, Inc., and Glyptal, Inc., both located in the northeastern part of the city, near Chelsea Creek. At its peak, the largest polluter, Emtex (181 Spencer Ave.), released 140,844 pounds of 1,1,1-trichloroethane into the air in 1989 and 113,656 pounds into the air in 1992. Since 1992, however, there are no reported toxic releases from Emtex.

Glyptal (305 Eastern Ave.) released a peak level of 20,164 pounds of 8 chemicals into the air in 1989. Since then its releases have gradually dropped down to around 10,000 pounds in 1992-1994. The company's major pollutants are xylene and toluene.

Accidental Releases or Spills: Emergency and Non-Emergency

Seven companies reported emergency response releases or spills during the period of 1987-1995 (see Table 4). Most of these companies are located in the industrial areas along the Chelsea River. Nearly all of the releases or spills were gasoline or oil. Several releases were very large. Gulf Oil (281 Eastern Ave.) released 68,961 pounds of gasoline in 1992 and 13,200 pounds of kerosene in 1990. Amoco Oil (111 Eastern Ave.) released 203,000 pounds of fuel oil in 1993. B.A.T. Transportation (281 Eastern Ave.) released 15,250 pounds of gasoline in 1993. Coastal Oil (at Chelsea Dock) released 50,040 pounds of asphalt in 1994.

There were numerous smaller, non-emergency releases of toxic chemicals in the past several years alone, as documented by the Mass. Department of Environmental Protection. Table 6 locates these smaller releases by census tract. Some of these smaller releases include heavy metals - such as zinc, copper, and lead - and relatively small amounts of fuel oil or petroleum hydrocarbons. Several releases are notable. The Shurtleff School (76 Congress Ave.) experienced a release of petroleum hydrocarbons (860 parts per million) and lead (490 parts per million) in June, 1995. There was a release of lead at a very high concentration (13,000 parts per million) at the Williams School (170-180 Walnut St.) in September 1994.

"21E" Waste Sites

Chelsea is home to 44 "21E" waste sites, as identified by the Department of Environmental Protection (see **Table 5**). Most of these waste sites contain petroleum waste, while seven sites contain non-petroleum hazardous waste alone, and 12 sites contain both petroleum and hazardous wastes. These sites are in various stages of clean-up (or "remediation"). But it appears that most of the sites are not close to being cleaned up. The waste sites are located at a wide variety of facilities, from the Williams School to Amoco Petroleum to Forbes Lithographic to the Chelsea Housing Authority. They are found largely in the city's western industrial area and the northeastern industrial area along the Chelsea River.

Many of these sites are considered "brownfields". This means that they are on vacant land, contain abandoned or vacant buildings, and have a slight or moderate degree of contamination. Brownfields are typically not seriously contaminated waste sites, such as a "Superfund" (as designated by the U.S. Environmental Protection Agency). Rather they are lands that could be put to other uses after an effective cleanup takes place. What should happen to these brownfields in Chelsea after they are cleaned up is an important issue.

Toxic Chemicals Used in Industrial Production

In addition to toxic releases and waste sites, many companies use toxic chemicals in their day-to-day production activities. **Table 7** shows the four biggest industrial users of toxic chemicals in Chelsea. Each of these companies also uses toxic chemicals which have been proven to cause reproductive damage in humans. Biltrite Corp., Emtex, Glyptal, and Marson Corp., together used 2,511,424 pounds of reproductive toxins in their production activities in 1993, as documented by MASSPIRG and the Greater Boston Physicians for Social Responsibility (1996). Reporting of amount of toxic chemicals being used or stored or produced at a facility is not a strict legal requirement; reporting is only voluntary. This means that numerous other businesses in Chelsea, especially small businesses, are probably using or releasing toxic chemicals without reporting it.

Pollution and Socio-Economic Status

The most significant industrial pollution sources in Chelsea are found in the city's eastern sections, in close proximity to residential neighborhoods, and in the sparsely populated western industrial section. The northeastern section of the city (census tract 1605) has the highest percentage of communities of color living below the poverty line. According to the 1990 Census (see **Table 9**), 49% of African-Americans, 50% of Asians, and 50% of Hispanics lived below the poverty line in Census Tract 1605. This tract experienced the highest level of continuous toxic releases (from the Toxic Release Inventory) (see **Table 8**). Also located in this section of the city are three auto body shops and two dry cleaners, potential sources of highly toxic releases which typically go unreported. In addition, a greater incidence of petroleum fuel spills and leaks occurred in this section than elsewhere in the city.

The two census tracts with the highest percentage of Hispanic residents, tracts 1602 and 1604, also demonstrated a higher incidence of toxic releases than other parts of the city. Percentage of Hispanics living below the poverty line was 41% and 47% in these two tracts.

Recommendations

1) The Chelsea Fire Department should check the Toxics Use Reduction chemicals (used in industrial production) against their files in order to ensure emergency preparedness.

2) Exact status of 21E waste sites should be made known to Chelsea residents by the Department of Environmental Protection. It is not clear as to how close to completion of cleanup each of these sites is.

3) There needs to be far better public access to information on industrial toxic hazards. The Department of Environmental Protection's online database is not yet very user friendly. Getting access to environmental information at DEP is a very time-consuming process; the average citizen does not have this kind of time.

4) The companies releasing toxic chemicals into the environment need to be tracked further. For example, whatever happened to Emtex, Inc., which was once (up to 1992) the biggest releaser of toxic chemicals into the environment in Chelsea. Emtex is no longer reporting. Did the company move? Better tracking is critical. The City of Chelsea should help track these companies and provide that information to residents on a yearly basis.

5) There needs to be a closer examination of the proximity of current residential neighborhoods and schools to industrial environmental hazards.

For further information, contact:

Thomas Estabrook
Massachusetts Toxics Campaign Fund
(617) 666-1326
or write us at:
160 2nd Street
Cambridge, MA 02142

Information on waste sites and toxic releases can be obtained from:
Massachusetts Department of Environmental Protection, (617) 292-5500.
Ask for the waste site cleanup department, the air quality division, or the toxics use reduction department.

Letter 44
City of Chelsea
Preston G. Galarneau Jr., City Councillor

Code	Topic 1	Topic 2	Comment	Response
44.1	Noise	Model	... measured noise results in Chelsea have been year after year above 65 and the predicted number used by Massport to assess the noise impact on the community is below 65...Without an accurate noise assessment the true impact of health, environment and real estate value effects can not be clearly defined....	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
44.2	Noise	Model	...it should be noted that the noise monitor location (Figure 5.2-1) on Page 5-13 indicates there is a permanent noise monitor on Admiral's Hill in Chelsea, while all subsequent analysis of measured noise data is placed at "Shurtleff & Essex, Chelsea" a site that has not had a monitor since 1991, and then for only one year.	All the tables in the Airside Project Draft EIS/EIR that indicated that Monitor No. 15 is at Shurtleff & Essex have been changed in the Supplemental DEIS/FEIR to indicate that Monitor No. 15 is at Admiral's Hill.

Code	Topic 1	Topic 2	Comment	Response
44.3	Environmental Justice	Impacts	Another area of the EIR that is inadequate with respect to accuracy and thoroughness is the 4-page evaluation in Section 8.7 of the environmental justice issue. Chelsea will receive the brunt of the short term negative impacts of this proposal should you see fit to give your approval...The associated increase in noise is large enough that, even using the understated predicted noise measures, 1100 homes will be eligible for soundproofing.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation.
44.4	Environmental Justice	Impacts	The EIR concludes, "Given the reduction in the highest noise exposed population and this mitigation (soundproofing), the low income and minority population will not experience disproportionately high adverse impacts" in comparison to the affected population as a whole. This analysis is neither thorough, nor accurate, as the EPA Census maps on population density, minority concentration and people below poverty level [in Chelsea] show. The EIR's conclusion conflicts with President Clinton's Environmental Justice Executive Order 12898...	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.

Code	Topic 1	Topic 2	Comment	Response
44.5	Alternatives	Peak Period Pricing	Alternatives under discussion such as a comprehensive peak hour pricing analysis...[should use] a range of operations per hour...instead of the single higher operational threshold that underestimated the delay reduction.	The Airside Project analysis of PPP examined an operations threshold of 110 operations per hour, which is already below Logan Airport's normal operating capacity of 120 operations per hour. There is no legitimate operational justification for imposing a peak period surcharge at an operation level significantly lower than Logan Airport's normal operating capacity which is achieved 80 percent of the year without any delays. Even at 75 operations per hour, Logan Airport would be subject to delays from northwest wind conditions. The Airside Project analysis in the Draft EIS/EIR and in the Supplemental DEIS/FEIR indicates that, with the Preferred Alternative, Logan Airport can accommodate existing and foreseeable future levels of demand without imposing a drastic administrative restriction to artificially revise Logan Airport's existing capacity.
44.6	Regional Transportation	Regional Airports	Hanscom should not be ruled out as a piece of the regionalization solution, and a second major airport should have at least been considered.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the Hanscom GEIR (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to *Section 2.6 of* the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The statement referred to FAA reported (Opsnet) delays, which declined from 19,838 in 1993 to 16,403 in 1998. This decline in FAA delays was supported by the Airside Project modeling in the Supplemental DEIS/FEIR which showed a reduction in 1998 delays (120,000 hours) compared to 1993 (185,000 hours). Although total operations were nearly equivalent (519,000 in 1993 and 514,000 in 1998), the fleet mix and demand profile were significantly different. The high delays in 1993 were principally caused by a very peaked schedule with hourly operations exceeding 120 per hour.

Code	Topic 1	Topic 2	Comment	Response
44.7	Noise	Model	...Noise and air quality equipment should be along flight paths, Chelsea's air monitor is at the Soldiers Home — out of harm's way.	The DEP air quality monitoring stations, including the one located in Chelsea, are established to serve multiple functions. In some cases, the purpose is to record background concentrations, sometimes to evaluate neighborhood conditions, and in other situations to measure the impact of specific sources of air emissions. The Chelsea station is a neighborhood station and, therefore, the only relevant data to the airport area are the ozone data. By comparison, the DEP Bremen Street air monitoring station adjoins the airport and is in nearly the direct path of one of Logan Airport's runways. The data from both stations are reported in the EIS/R.
44.8	Ecosystems	Rare Species	The impact on the Upland Sandpiper. The plan to relocate or mitigate for this endangered species in inadequate and indefinite.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
44.9	Ground Transportation	Access to Logan Airport	...A study of the long-term traffic impacts on the surrounding communities should be as comprehensive as possible.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.
44.10	Alternatives	Impacts	A benefit cost analysis — how can you realistically and honestly mitigate the noise, health and real estate costs to residents.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..."

Code	Topic 1	Topic 2	Comment	Response
44.11	Alternatives	Runway 14/32	The commitment to maintain the new runway's unidirectional status — there isn't one.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
44.12	Analysis Assumptions	Base Year	Data used for this analysis is over 5 years old and doesn't reflect current conditions.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Chelsea City Council

LETTER 45

City Hall
500 Broadway
Chelsea, MA 02150
(617) 889-8210
(617) 889-8349 Fax

April 18, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As the City Councilor representing the residents of District 5 in Chelsea I thought I would write a comment about Massport's Airside Planning Project. Thank you for considering the opinion of the communities that will be impacted if the new runway is built.

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over heads, a salt pile on another side, oil tank and asphalt facilities on our shores, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood.

First and foremost, the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely underestimate it as well. We also feel that soundproofing would do little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park and does not help us as we try to enjoy a sea breeze through open windows in the summertime.

45.1

We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants – always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate. 45.2

While Massport refuses to admit the Airside Improvement Planning Project will expand capacity at Logan, Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations. Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea. 45.3

Chelsea is undergoing a modern day renaissance. We have had to fight harder than most to turn the City around. As this proposal is being examined we are watching the value of our homes rise. We have a new school system and a local government committed to undoing the past. We were recently honored as an "All America City," in recognition for our ability to address the problems confronting us. Our budget is balanced for the first time, and we are investing millions in our infrastructure in order to move forward into the next century. The proposed expansion of Logan Airport is the single largest threat we face. If this runway is built, years of hard work could be undone in an instant.

Sincerely,

Marilyn Portnoy
Chelsea City Councilor – District 5

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

Letter 45
City of Chelsea, Chelsea City Council
Marilyn Portnoy

Code	Topic 1	Topic 2	Comment	Response
45.1	Noise	Model	...the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely underestimate it as well. We also feel that soundproofing would do little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park and does not help us as we try to enjoy a sea breeze through open windows in the summertime.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights. Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
45.2	Environmental Justice	Impacts	We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants...We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us.	Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
45.3	Ground Transportation	Access to Logan	Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea.	The Airside Project does not result in additional aircraft operations because the Preferred Alternative would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. In addition, cargo operations account for only two percent of aircraft activity at Logan Airport since most all cargo aircraft operate during off-peak hours. Despite strong economic growth over the last few years cargo operations increased by less than two percent in 1999 and declined by 1.2 percent in 1998. Some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and our cargo activity at the regional airports.

Rochelle A. Bennett

Councillor, [redacted]
City of Chelsea

LETTER 46

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley, IV, EOEA NO. 10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Re: EOEA File No. 10458

Dear Sir:

I am writing to express my concerns regarding proposed new Runway 1432 at Logan Airport. I want to preface my letter by saying that I am not opposed to progress, but at what price? Has Massachusetts sunk so low that progress is higher on the list than the health, safety and environmental injustice of its citizens? I would hope not.

Chelsea is approximately 1.8 square miles. Within the boundaries of this small community, you find oil farms, asphalt storage, salt piles, air freight businesses, a fur tanning business, the Boston produce center, the Tobin Bridge, the MWRA headworks and several park and fly facilities. The City is also a cross route to several major MBTA stops. Because of this, Chelsea experiences a very high level of truck (several thousands daily) and auto (approximately 100,000 daily) traffic which I believe has an extremely detrimental environmental impact on the community. In addition, Chelsea is surrounded by Logan Airport, Massport's salt pile in Charlestown and the Edison Plant in Everett. Add these together and you have one extremely high risk area. By allowing Logan Airport to expand, the EPA would be driving another environmental nail into our coffin. 46.1

When the Tobin Bridge was built, Chelsea lost 179 taxable properties and went downhill to the point of receivership. Chelsea is now on its way back up. The perception to the outside world is that Chelsea has been turned around and is a desirable place to work and live. Property values have rebounded. New businesses have opened. New schools have been built. While other communities surrounding Chelsea have flourished, it has taken Chelsea more than 50 years to get where it is today. If you allow Runway 1432 to be built, it could put Chelsea back into the rut it just climbed out of but this time Chelsea will never rebound. The new runway will not only cause people 46.2

7 Boatswain's Way, Chelsea, Massachusetts 02150

(617) 889-0671

to leave the City, it will lower property values and could hamper future non-airport businesses from moving here.

As a recent Cancer patient, I am asking that MEPA not approve Massport's EIR for Runway 1432 until a complete study can be compiled by all of the surrounding cities and towns to determine what adverse health hazards currently exist in each community. 46.3

I ask you to keep in mind that your job is to protect us from an unhealthy environment. Therefore, after reading the above and after reading Executive Order No. 385, I hope you will agree with me that more studies need to be done before any decision is made on Runway 1432; and if the above health issues are not enough to sway you, I ask that you find the draft EIS/EIR inadequate because it uses outdated studies, does not adhere to FAA modeling and shows a lack of alternative studies for a regional airport. I also feel that the residents of Chelsea were not given fair consideration in connection with this project. 46.4 46.5

Sincerely,

Rochelle A. Bennett

Rochelle A. Bennett
Councilor-At-Large

cc: Mr. Robert A. Durand, Secretary
Mr. John C. Silva, Manager FAA
Mr. John DeVillars, EPA

Letter 46
City of Chelsea, Chelsea City Council
Rochelle A. Bennett

Code	Topic 1	Topic 2	Comment	Response
46.1	Ground Transportation	Access to Logan Airport	...Chelsea experiences a very high level of truck (several thousands daily) and auto (approximately 100,000 daily) traffic which I believe has an extremely detrimental environmental impact on the community...By allowing Logan Airport to expand, the EPA would be driving another environmental nail into our coffin.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates). The Airside Project does not result in additional aircraft operations because the Preferred Alternative would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. In addition, cargo operations account for only two percent of aircraft activity at Logan Airport since most all cargo aircraft operate during off-peak hours. Despite strong economic growth over the last few years cargo operations increased by less than two percent in 1999 and declined by 1.2 percent in 1998. Some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and our cargo activity at the regional airports.
46.2	Alternatives	Runway 14/32	The new runway will not only cause people to leave the City, it will lower property values and could hamper future non-airport businesses from moving here.	Comment noted.
46.3	Public Health	Effects	As a recent Cancer patient, I am asking that MEPA not approve Massport's EIR for Runway 14/32 until a complete study can be compiled by all of the surrounding cities and towns to determine what adverse health hazards currently exist in each community.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
46.4	Delay	Model	...the Draft EIS/EIR ...uses outdated studies, does not adhere to FAA modeling....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. This section of the Supplemental DEIS/FEIR also includes a description of computer models for estimating flight delays, including their limitations. FAA reviewed and approved the simulation models used in this study.
46.5	Regional Transportation	Regional Airports	...[the Draft EIS/EIR] shows a lack of alternative studies for a regional airport.	Chapter 2 of both the Airside Project Draft EIS/EIR and this Wupplemental DEIS/FEIR thoroughly address the role of the regional airports.

DAVID RAGUCCI
MAYOR

OFFICE OF THE MAYOR
EVERETT CITY HALL
484 BROADWAY
EVERETT, MASSACHUSETTS 02149-3694

PHONE: (617) 394-2270
FAX: (617) 381-1150

LETTER 47

April 12, 1999

Jane F. Garvey, Administrator
Federal Aviation Administration
National Headquarters
800 Independence Avenue
Washington, D.C. 20591

Dear Ms. Garvey:

I am writing to express my opposition to the proposed expansion of Logan International Airport, particularly the planned construction of Runway 14/32. Several reasons are apparent why the Environmental Protection Agency ("EPA") should advise the Federal Aviation Administration against the proposed expansion. Noise pollution, as well as other unfavorable environmental consequences, are among the many reasons to oppose this plan.

As you are aware, Massachusetts Port Authority prepared an Alternative 1A Draft Environmental Impact Statement that details the agency's plan to expand and improve Logan. This alternative plan includes the construction of Runway 14/32, as well as the construction of a new taxiway entitled Centerfield Taxiway. I also ask that you join me in the opposition of the Alternative 1A proposal.

Communities surrounding Logan International Airport have long been affected by unpleasant environmental conditions such as noise pollution, air pollution and ground traffic. One of the many undesirable circumstances has been the increase in noise pollution to neighboring communities such as Revere, Winthrop and East Boston. It has been an ongoing battle of these residents to decrease the high levels of air traffic over their communities. In accepting the proposed Runway 14/32, flight traffic will be shifted over the Greater Boston Area to include communities such as Everett who will bear a greater amount of air traffic. 47.1 47.2

It is believed that the state and federal government are responsible to create a plan that would divert the excess traffic at Logan to other commercial airports that would welcome passenger service. 47.3

I am in agreement with Mayor Menino that a "Blue Ribbon Panel" should be established to create a regional aviation transportation agency to thoroughly examine the status of our aviation transportation system before we implement any new changes at Logan. 47.4

Communities surrounding Logan International Airport will have serious adversarial affects from the acceptance of the proposed Runway 14/32. Therefore, based on the above information, I can not support the implementation of a new runway or the expansion of Logan Airport.

I appreciate your time regarding this matter. I look forward to receiving the EPA's response to these concerns.

I am available to further discuss this matter at your convenience.

Sincerely,

Mayor David Ragucci

Letter 47
David Ragucci, Mayor
Everett, Massachusetts

Code	Topic 1	Topic 2	Comment	Response
47.1	Noise	Impacts	Communities surrounding Logan International Airport have long been affected by unpleasant environmental conditions such as noise pollution, air pollution and ground traffic. One of the many undesirable circumstances has been the increase in noise pollution to neighboring communities such as Revere, Winthrop and East Boston.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
47.2	Alternatives	Runway 14/32	In accepting the proposed Runway 14/32, flight traffic will be shifted over the Greater Boston Area to include communities such as Everett who will bear a greater amount of air traffic.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels.
47.3	Regional Transportation	Regional Airports	It is believed that the state and federal government are responsible to create a plan that would divert the excess traffic at Logan to other commercial airports that would welcome passenger service.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.

Code	Topic 1	Topic 2	Comment	Response
47.4	Environmental Review Process	Blue Ribbon Panel	I am in agreement with Mayor Menino that a "Blue Ribbon Panel" should be established to create a regional aviation transportation agency to thoroughly examine the status of our aviation transportation system before we implement any new changes at Logan.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies have concluded that The Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high-speed rail are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of regional transportation alternatives to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999, attendance at a second summit in December 2000, and its assumption of operating responsibility for the Worcester Regional Airport in January 2000. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of Massport's initiatives in support regional transportation alternatives.

TOWN OF HINGHAM

OFFICE OF SELECTMEN

tharine W. Reardon, Chairman
Martin Crane, M.D.
Michael P. Holden

LETTER 48

Charles J. Cristello
Town Administrator

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley- EOEA
100 Cambridge Street, 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

The Hingham Board of Selectmen wishes to submit the following comment on Massport's proposal to construct a new runway at Logan Airport and the SDEIR/SDEIS for the Logan Airside Improvements Planning Project as presented by the Massachusetts Port Authority.

We have reviewed the Citizens Advisory Committee's Consultant Report and it appears that there are several aspects in which the SDEIS/R is deficient. These include the use of out of date base line data, omission of key issues included in the ENF and an overly limited analysis of alternatives.

Hingham is projected to sustain a 152% increase in flights over the town. Many residents are concerned about the incremental effects on personal health and quality of life. In addition we are concerned about increased traffic congestion caused by increasing the capacity of the airport. 48.1 48.2

The Hingham Board of Selectmen is further concerned that this short term porposal, ostensibly to reduce current delays, will surely only delay by a short time the point at which airport traffic will once again become unmanageable. We urge Massport to withdraw this proposal and to enter into a long term planning effort to meet the needs of the New England region without overburdening the Boston metropolitan area with the impacts of air travel. 48.3

Finally, it is our view that, if not withdrawn, this SDEIS/R shold be rejected as inadequate.

Sincerely,

Michael P. Holden

cc: Representative William Delahunt
Peter Blute, Executive Director, Massachusetts Port Authority

210 Central Street, Hingham, MA 02043-2757 • Telephone (781) 741-1400 • Fax (781) 741-1454

Letter 48
Town of Hingham, Office of Selectmen
Michael P. Holden

Code	Topic 1	Topic 2	Comment	Response
48.1	Public Health	Effects	Hingham is projected to sustain a 152% increase in flights over the town. Many residents are concerned about the incremental effects on personal health and quality of life.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
48.2	Ground Transportation	Access to Logan	In addition we are concerned about the increased traffic congestion caused by increasing the capacity of the airport.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates). Federal constitutional provisions (preemption, commerce clause, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to limit the number of aircraft operations. Since Aviation Deregulation in 1979, airlines have been free to select their own markets, schedules and equipment without Federal, State or local intervention.

Code	Topic 1	Topic 2	Comment	Response
48.3	Alternatives	Runway 14/32	The Hingham Board of Selectmen is further concerned that this short term proposal...will surely only delay by a short time the point at which airport traffic will once again become unmanageable. We urge Massport to withdraw this proposal and to enter into a long term planning effort to meet the needs of the New England region without over-burdening the Boston metropolitan area with the impacts of air travel.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies have concluded that The Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high-speed rail are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of regional transportation alternatives to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999, attendance at a second summit in December 2000, and its assumption of operating responsibility for the Worcester Regional Airport in January 2000. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of Massport's initiatives in support regional transportation alternatives.

Town of Hull

BOARD OF SELECTMEN

MUNICIPAL BUILDING
HULL, MASSACHUSETTS 02045
(617) 925-2000

April 22, 1999

LETTER 49

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

John C. Silva
Manager, Environmental Programs
Airport Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Project Name:	**Logan Airside Improvements Planning Project**
Project Location:	**Boston-Logan International Airport-Boston / Winthrop**
Project Proponents:	**Massachusetts Port Authority, Federal Aviation Administration**
Project Number:	**EOEA No. 10458**

Dear Mr. Pugsley and Mr. Silva:

On behalf of the Town of Hull Board of Selectmen I am writing to voice the Town of Hull's opposition to the Draft Environmental Impact Report (EIR)/ Draft Environmental Impact Statement (EIS) filed by Massport and the Federal Aviation Administration. The Town of Hull objects to the construction of a new runway at Logan Airport for the following reasons.

- The base year for the documents calculations and projections is 1993. It is now 1999, using a base year that is six years old is inconsistent with sound planning principals as many of the underlying analysis and modeling require more current data to accurately project future outcomes. For instance, one of the project proponents, the FAA, shows that the percent of operations experiencing delay actually decreased from 1993 to 1998. The projections in the DELAYSIM model developed specifically for this project does not accurately reflect the current state of delay. The failure to use current data causes the model to severely overestimate delay. 49.1

  In addition the success of Providence, Manchester and now Pease airports are not reflected in 1993 data. The failure to fully capture the success of these alternatives calls into question the projections that are contained in the report. 49.2

- The document offers a lengthy discussion on delay but fails to fully articulate all the causes for delay. For instance it is impossible from reading the document to determine what percentage of delay is due to mechanical failure. Without a breakdown for the causes of delay the true scope of the Northwest wind caused delay cannot be fully defined. Even the statistics on weather delay do not stratify the delay data by type of weather. 1993 was one of the heaviest snow total winters on record. If there was a day that had a significant snowfall and strong winds how was delay attributed: to the wind direction or the snow fall? The document is silent on this issue. 49.3

The failure to fully define delay not only by type, length and cause but also to deviate from the FAA standard or the Department of Transportation (DOT) standard is cause to reject the report as the nature of the problem that Massport is seeking to solve is not defined in the report.

Further, there is no explanation offered as to why it was necessary to create a new method of calculating delay when there are two federal agencies that have models in place to do so. It should be noted that the FAA and DOT models have a wide divergence and now the Massport model offers a third divergent viewpoint. Which, if any model are we to believe, and why. Additional by creating a new model the ability to compare projected solutions with solutions that may have been implemented or will be offered at other airports around the country is lost. In essence we are unable to compare apples to apples. 49.4

- The report attempts to analyze the cost of delay and puts a $300 million dollar cost on all delay. By default the cost of delay caused the Northwest wind condition must be somewhat less that $300 million dollars. However the report does not address the cost that residents of communities that live near the airport will experience in economic or quality of life terms. For instance, the total value of all real estate in Hull per the Massachusetts Department of Revenue is approximately $700 million dollars. If the proposed runway is constructed thus in part enabling additional 50,000 flights per year over Hull there will be a loss in property values. A conservative estimate of 10 percent would yield a $70 million dollar loss in value for Hull alone. They're at least seventeen communities that will be severely impacted by this proposal; the loss in real estate value will exceed well over a billion dollars. Additionally, there is a loss in the quality of life that is not fully reflected in the real estate value. The report is completely silent on this issue. The report should be rejected because there is an incomplete analysis of all the cost and benefits associated with the proposal. 49.5

- The flight tracks depicted in the EIR/EIS do not conform to actual flight tracks. Massport acknowledges that the actual fight tracks flown may vary significantly from the assigned flight tracks. The data for actual flight tracks flown and the corresponding noise levels were not incorporated into the modeling that produced projections regarding several types of impact, including noise, environmental impacts from fuel and fumes as well as air quality impacts over all affected communities. The report should be rejected because there is an inaccurate analysis of all the impacts of the projected flight paths associated with an additional runway. 49.6

- The report should be rejected because the preferred alternative is not the best alternative for reducing delay. Table 4.5-3 clearly illustrates that Alternative 2, an option that does not require building a runway has a greater impact on delay reduction than the preferred Alternative 1A. Alternative 2 puts in place "Peak Hour Pricing" that in essence charges the airlines a premium to land at premium hours. This alternative is far more equitable as the users of the airport would share some of the burden of the airport. Under the Alternative 1A many of the affected population may never use the airport but experience the full burden of the cost. Additionally, Peak Hour Pricing will help to promote Providence, Manchester and Pease Airports as more economical alternatives for some travelers thus further diminishing the adverse impacts of Logan on neighboring communities. Lastly, Peak Hour Pricing has a superior impact on air quality improvement as well as noise abatement. This option if further explored could lead to even greater reduction than outlined in the proposal and at a minimum MEPA should require an analysis with greater depth. 49.7 49.8 49.9

- The proposal projects operations through the year 2010. It indicates that by that time delay will significantly exceed current levels, total operations will have seen a dramatic increase and noise, air quality and impact to surrounding communities will not have improved. In short the building of a new runway dodges the bigger issues. How much is enough? What is the capacity of the airport? What do we do in 2011 when there are no more alternatives at Logan. The proposal is short-term solution to an issue that cries out for a long term solution and perspective. In the mid-nineteen seventies a court injunction was put in place agai8nst further expansion a Logan in the 25 years that have followed there have been two half-hearted attempts to seek a long term solution. Massport and all those responsible for seeking and executing long term solutions should not be allowed to continually provide nearsighted solutions without addressing the real issues. 49.10

Since the preparation of EIR/EIS several substantial developments have occurred that could dramatically alter the projections used in the report. These developments include:

- Operations at Providence and Manchester have exceeded Massport Projections considerably
- Pease Airport is completing a major expansion and is contracting with two major airlines for service
- Worcester Airport has just come under Massport's control and has upgraded its electronics to improve runway operations under all weather conditions.
- Governor Cellucci has committed to enhancing rail connections from Boston to TF Green Airport.
- New Bedford has offered to expand cargo service to its municipal airport.

49.11

Based on these new developments and the preceding issues we request that EIS/EIR be denied. In the event that denial is not granted then we request that the EIR/EIS be refereed back to Massport. Massport should at a minimum be required to address the inconsistencies and omissions outlined in this letter, the Community Advisory Committee' response and the numerous other letters in opposition. The regulatory agencies that have oversight of this process should demand that an undertaking that would impact the quality of life of over one million, or 1/6th of the Commonwealth's residents be comprehensive and complete. This proposal is neither.

On Behalf of the Town of Board of Selectmen

Philip E. Lemnios
Town Manager

CC:

Governor Cellucci
Senator Edward Kennedy
Senator John F. Kerry
Congressman William Delahunt
Congressman Joseph Moakly
Congressman Michael Cappuano
State Senate President Thomas Birmingham
State Speaker of the House Thomas Finneran
State Senator Robert Hedlund
State Representative Mary Jeanette Murray

Town of Hull

BOARD OF SELECTMEN

MUNICIPAL BUILDING
HULL, MASSACHUSETTS 02045
(617) 925-2000

April 22, 1999

LETTER 49

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

John C. Silva
Manager, Environmental Programs
Airport Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Project Name:	**Logan Airside Improvements Planning Project**
Project Location:	**Boston-Logan International Airport-Boston / Winthrop**
Project Proponents:	**Massachusetts Port Authority, Federal Aviation Administration**
Project Number:	**EOEA No. 10458**

Dear Mr. Pugsley and Mr. Silva:

On behalf of the Town of Hull Board of Selectmen I am writing to voice the Town of Hull's opposition to the Draft Environmental Impact Report (EIR)/ Draft Environmental Impact Statement (EIS) filed by Massport and the Federal Aviation Administration. The Town of Hull objects to the construction of a new runway at Logan Airport for the following reasons.

- The base year for the documents calculations and projections is 1993. It is now 1999, using a base year that is six years old is inconsistent with sound planning principals as many of the underlying analysis and modeling require more current data to accurately project future outcomes. For instance, one of the project proponents, the FAA, shows that the percent of operations experiencing delay actually decreased from 1993 to 1998. The projections in the DELAYSIM model developed specifically for this project does not accurately reflect the current state of delay. The failure to use current data causes the model to severely overestimate delay. 49.1

  In addition the success of Providence, Manchester and now Pease airports are not reflected in 1993 data. The failure to fully capture the success of these alternatives calls into question the projections that are contained in the report. 49.2

- The document offers a lengthy discussion on delay but fails to fully articulate all the causes for delay. For instance it is impossible from reading the document to determine what percentage of delay is due to mechanical failure. Without a breakdown for the causes of delay the true scope of the Northwest wind caused delay cannot be fully defined. Even the statistics on weather delay do not stratify the delay data by type of weather. 1993 was one of the heaviest snow total winters on record. If there was a day that had a significant snowfall and strong winds how was delay attributed: to the wind direction or the snow fall? The document is silent on this issue. 49.3

The failure to fully define delay not only by type, length and cause but also to deviate from the FAA standard or the Department of Transportation (DOT) standard is cause to reject the report as the nature of the problem that Massport is seeking to solve is not defined in the report.

Further, there is no explanation offered as to why it was necessary to create a new method of calculating delay when there are two federal agencies that have models in place to do so. It should be noted that the FAA and DOT models have a wide divergence and now the Massport model offers a third divergent viewpoint. Which, if any model are we to believe, and why. Additional by creating a new model the ability to compare projected solutions with solutions that may have been implemented or will be offered at other airports around the country is lost. In essence we are unable to compare apples to apples. 49.4

- The report attempts to analyze the cost of delay and puts a $300 million dollar cost on all delay. By default the cost of delay caused the Northwest wind condition must be somewhat less that $300 million dollars. However the report does not address the cost that residents of communities that live near the airport will experience in economic or quality of life terms. For instance, the total value of all real estate in Hull per the Massachusetts Department of Revenue is approximately $700 million dollars. If the proposed runway is constructed thus in part enabling additional 50,000 flights per year over Hull there will be a loss in property values. A conservative estimate of 10 percent would yield a $70 million dollar loss in value for Hull alone. They're at least seventeen communities that will be severely impacted by this proposal; the loss in real estate value will exceed well over a billion dollars. Additionally, there is a loss in the quality of life that is not fully reflected in the real estate value. The report is completely silent on this issue. The report should be rejected because there is an incomplete analysis of all the cost and benefits associated with the proposal. 49.5

- The flight tracks depicted in the EIR/EIS do not conform to actual flight tracks. Massport acknowledges that the actual fight tracks flown may vary significantly from the assigned flight tracks. The data for actual flight tracks flown and the corresponding noise levels were not incorporated into the modeling that produced projections regarding several types of impact, including noise, environmental impacts from fuel and fumes as well as air quality impacts over all affected communities. The report should be rejected because there is an inaccurate analysis of all the impacts of the projected flight paths associated with an additional runway. 49.6

- The report should be rejected because the preferred alternative is not the best alternative for reducing delay. Table 4.5-3 clearly illustrates that Alternative 2, an option that does not require building a runway has a greater impact on delay reduction than the preferred Alternative 1A. Alternative 2 puts in place "Peak Hour Pricing" that in essence charges the airlines a premium to land at premium hours. This alternative is far more equitable as the users of the airport would share some of the burden of the airport. Under the Alternative 1A many of the affected population may never use the airport but experience the full burden of the cost. Additionally, Peak Hour Pricing will help to promote Providence, Manchester and Pease Airports as more economical alternatives for some travelers thus further diminishing the adverse impacts of Logan on neighboring communities. Lastly, Peak Hour Pricing has a superior impact on air quality improvement as well as noise abatement. This option if further explored could lead to even greater reduction than outlined in the proposal and at a minimum MEPA should require an analysis with greater depth. 49.7 49.8 49.9

- The proposal projects operations through the year 2010. It indicates that by that time delay will significantly exceed current levels, total operations will have seen a dramatic increase and noise, air quality and impact to surrounding communities will not have improved. In short the building of a new runway dodges the bigger issues. How much is enough? What is the capacity of the airport? What do we do in 2011 when there are no more alternatives at Logan. The proposal is short-term solution to an issue that cries out for a long term solution and perspective. In the mid-nineteen seventies a court injunction was put in place agai8nst further expansion a Logan in the 25 years that have followed there have been two half-hearted attempts to seek a long term solution. Massport and all those responsible for seeking and executing long term solutions should not be allowed to continually provide nearsighted solutions without addressing the real issues. 49.10

Since the preparation of EIR/EIS several substantial developments have occurred that could dramatically alter the projections used in the report. These developments include:

- Operations at Providence and Manchester have exceeded Massport Projections considerably
- Pease Airport is completing a major expansion and is contracting with two major airlines for service
- Worcester Airport has just come under Massport's control and has upgraded its electronics to improve runway operations under all weather conditions.
- Governor Cellucci has committed to enhancing rail connections from Boston to TF Green Airport.
- New Bedford has offered to expand cargo service to its municipal airport.

49.11

Based on these new developments and the preceding issues we request that EIS/EIR be denied. In the event that denial is not granted then we request that the EIR/EIS be refereed back to Massport. Massport should at a minimum be required to address the inconsistencies and omissions outlined in this letter, the Community Advisory Committee' response and the numerous other letters in opposition. The regulatory agencies that have oversight of this process should demand that an undertaking that would impact the quality of life of over one million, or 1/6th of the Commonwealth's residents be comprehensive and complete. This proposal is neither.

On Behalf of the Town of Board of Selectmen

Philip E. Lemnios
Town Manager

CC:

Governor Cellucci
Senator Edward Kennedy
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Congressman Michael Cappuano
State Senate President Thomas Birmingham
State Speaker of the House Thomas Finneran
State Senator Robert Hedlund
State Representative Mary Jeanette Murray

Letter 49
Town of Hull
Philip E. Lemnios, Town Manager

Code	Topic 1	Topic 2	Comment	Response
49.1	Analysis Assumptions/ Methodologies	Base Year	The base year for the documents calculations and projections is 1993. It is now 1999, using a base year that is six years old is inconsistent with sound planning principals as many of the underlying analysis and modeling require more current data to accurately project future outcomes... The projections in the DELAYSIM model developed specifically for this project does not accurately reflect the current state of delay. The failure to use current data causes the model to severely overestimate delay.	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame.
49.2	Regional Transportation	Regional Airports	In addition the success of Providence, Manchester and now Pease airports are not reflected in 1993 data. The failure to fully capture the success of these alternatives calls into question the projections that are contained in the report.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
49.3	Delay	Model	The document offers a lengthy discussion on delay but fails to fully articulate all the causes for delay. For instance, it is impossible from reading the document to determine what percentage of delay is due to mechanical failure. Without a breakdown for the causes of delay the true scope of the Northwest wind caused delay cannot be fully defined.	The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
49.4	Delay	Model	Further, there is no explanation offered as to why it was necessary to create a new method of calculating delay when there are two federal agencies that have models in place to do so. It should be noted that the FAA and U.S. DOT models have a wide divergence and now the Massport model offers a third divergent viewpoint. Which, if any model are we to believe, and why. Additional by creating a new model the ability to compare projected solutions with solutions that may have been implemented or will be offered at other airports around the country is lost. In essence we are unable to compare apples to apples.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports.
49.5	Noise	Impacts	...the report does not address the cost that residents of communities that live near the airport will experience in economic or quality of life terms...there is an incomplete analysis of all the cost and benefits associated with this proposal.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..." In fact, the FAA models tend to overstate delays since they use weighted averages rather than continuous weather conditions.
49.6	Noise	Impacts	The flight tracks depicted in the EIR/EIS do not conform to actual flight tracks. Massport acknowledges that the actual flight tracks flow may vary significantly from the assigned flight tracks. The data for actual flight tracks flown and the corresponding noise levels were not incorporated into the modeling that produced projections regarding several types of impact, including noise, environmental impacts from fuel and fumes as well as air quality impacts over all affected communities.	The flight tracks used in the model were derived from radar data depicting actual flight tracks to be representative of the entire set of actual tracks. The tracks that were derived for departure operations off each runway represent the dispersion and turns of the actual tracks. The use of each derived track is weighted to reflect the actual use. It is believed that the number of tracks used in this study and in the Logan Airport 1999 ESPR (previously GEIR) leads to greater accuracy in estimating the noise impacts than is obtained with fewer tracks used in studies at many other airports.
49.7	Alternatives	Preferred Alter native	...the Preferred Alternative is not the best alternative for reducing delay... Alternative 2, an option that does not require building a runway, has a greater impact on delay reduction than the Preferred Alternative IA. Alternative 2 puts in place "Peak Hour Pricing" that in essence charges the airlines a premium to land at premium hours. This alternative is far more equitable as the users of the airport would share some of the burden of the airport.	The Airside analysis indicates that Peak Period Pricing is an effective option when airline's schedule beyond the normal hourly operating capacity of the airport. Peak Period Pricing is not recommended for implementation at this time, because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport is prepared to initiate a process, as described in Section 4.5.4 of the Supplemental Draft EIS/Final EIR, to initiate the rule-making process to implement Peak Period Pricing at that time.

Code	Topic 1	Topic 2	Comment	Response
49.8	Alternatives	Peak Period Pricing	...Peak Hour Pricing will help to promote Providence, Manchester and Pease Airports as more economical alternatives for some travelers thus further diminishing the adverse impacts of Logan on neighboring communities.	Additional analysis of PPP is set out in Section 4.5 the Supplemental DEIS/FEIR. While the regional airports at Manchester and T.F. Green/Providence have experienced exceptional traffic growth over the past several years, traffic at Logan Airport has continued to grow. In the future, continued development at the regional airports should relieve some of the traffic growth pressures at Logan Airport, resulting in a reduced rate of traffic growth. Nevertheless, regional alternatives do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Refer to response to Comment 6.17.
49.9	Alternatives	Peak Period Pricing	...Peak Hour Pricing has a superior impact on air quality improvement as well as noise abatement.	The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5 of the Supplemental DEIS/FEIR.
49.10	Analysis Assumptions/ Methodologies	Planning Period	The proposal projects operations through the year 2010. It indicates that by that time delay will significantly exceed current levels, total operations will have seen a dramatic increase and noise, air quality and impact to surrounding communities will not have improved...What do we do in 2011 when there are no more alternatives at Logan...Massport and all those responsible for seeking and executing long term solutions should not be allowed to continually provide nearsighted solutions without addressing the real issues.	Section 1.4 and Appendix C of the Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals. Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
49.11	Regional Transportation	Regional Airports	...several substantial developments that have occurred [since the preparation of EIR/EIS] that...dramatically alter the projections used in the report [and should be considered]. These developments include: operations at Providence and Manchester have exceeded Massport Projections considerably; Pease Airport is completing a major expansion and is contracting with two major airlines for service; Worcester Airport has just come under Massport's control and has upgraded its electronics to improve runway operations under all weather conditions; New Bedford has offered to expand cargo service to its municipal airport; Governor Cellucci has committed to enhancing rail connections from Boston to T.F. Green Airport.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Town of Hull
225 Atlantic Avenue
Hull, Massachusetts 02045

Planning Board
781-925-2117

April 21, 1999

LETTER 50

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street 20th floor
Boston, MA 02205

Re: **OPPOSED to Runway 14/32**

Dear Mr. Pugsley:

I am writing on behalf of the Town of Hull Planning Board to express our strong opposition to Massport's proposed new runway, 14/32. Our concern is that the new runway will allow more flights into and out of Logan Airport. As elected officials, we believe that Runway 14/32 will substantially increase the air traffic over our community which will result in significant negative impact to our quality of life and the economics of our town. 50.1

The Town of Hull has been undergoing a renaissance over the past several years. We have developed a vision statement for our community that defines our goals and aspirations for Hull. The elected officials and citizens have worked diligently with many Commonwealth of Massachusetts agencies to develop an Economic Master Plan, a Harbor Management Plan, and an Open Space and Recreation Plan. We are one of only a few communities in the state that have an approved Open Space and Recreation Plan and we will soon be one of only a few communities that will have a Harbor Management Plan. We have also seen a significant investment by the MDC in our community to revitalize Nantasket Beach.

As you can see, we have made a significant investment in our community. The result has been a positive impact on Hull's fiscal position and improved socioeconomics of our community. The increase in noise and air pollution as a result of Runway 14/32 will negate many of the benefits we have been able to achieve from our efforts.

Government is by the people and for the people. Government agencies should not be independent from the will of the people. Elected officials and surrounding communities have voiced their opposition to this new runway. Please consider the negative impact that Runway 14/32 will have in terms of quality of life and economics for all of the surrounding communities. Most importantly, please heed the voice of the people. Thank you.

Sincerely,

David P. Carlon

David P. Carlon
Chairman

Letter 50
Town of Hull, Planning Board
David P. Carlon, Chairman

Code	Topic 1	Topic 2	Comment	Response
50.1	Alternatives	Runway 14/32	...we believe that Runway 14/32 will substantially increase the air traffic over our community which will result in significant negative impact to our quality of life and the economics of our town.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and Appendix E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

Town and County of Nantucket
Board of Selectmen • County Commissioners

Arthur L. Desrocher, Chairman
Charles "Jack" Gardner
Georgia Ann Snell
Timothy M. Soverino
Vincent M. Vacca

Town & County Building
16 Broad Street
Nantucket, Massachusetts 02554

Telephone (508) 228-7255
Facsimile (508) 228-7272

C. Elizabeth Gibson
Town & County Administrator

April 7, 1999

LETTER 51

Secretary of Environmental Affairs
ATTN: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
Cambridge Street
20th Floor
Boston, MA 02202

Mr. John Silva
Manager, Environmental Programs
Airport Division
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Pugsley and Mr. Silva:

On behalf of the Town of Nantucket, I write to you today to express the Town of Nantucket's support of Massport's preferred alternative for reducing delays at Logan International Airport and to reaffirm our strong opposition to peak period pricing.

Although efforts to reduce congestion and delay are laudable, the method chosen is poorly conceived and potentially disastrous for the Massachusetts regional airports that depend on efficient economical air service for community success. We can agree on the need for a new runway to ease congestion, but tying it to peak period pricing is not acceptable.

Nantucket, other Cape and Island communities, and smaller cities throughout New England are dependent on Logan as the "hub" of a "hub and spoke" system of airports which acts as a gateway to the rest of the world. To place high fees on the regional airlines upon which we are dependent for tourist and business travel during the hours when most people need to travel, is to deny us a fair chance at economic survival. 51.1

Nantucket enplanes more passengers than any other airport in Massachusetts after Logan. We are the fifth among all cities in New England in that same regard. This proposed fee structure will harm our residents and visitors severely because of the increase in landing fees for the smaller

aircraft which serve us and other Cape and Island communities. Those fees must be passed on to the traveler. The effect will be to send the discretionary traveler elsewhere, and for off-season service to be eliminated or curtailed.

Nantucket is working along with the other commercial service airports of Massachusetts to convince MASSPORT to eliminate peak period pricing as an option. The five airports of the Cape and Islands contribute 100% of the intrastate commercial airline passengers who will be affected adversely by this proposition. The actions by MASSPORT to curtail travel in a time of economic recovery for the State is unconscionable.

Sincerely,

Arthur L. Desrocher

Arthur L. Desrocher, Chairman
Nantucket Board of Selectmen

pc: Senator Edward M. Kennedy
Senator John F. Kerry
State Senator Henri Rauschenbach
State Representative Eric T. Turkington
Nantucket Airport Commission

Letter 51
Town and County of Nantucket
Board of Selectman
Arthur L. Desrocher, Chairman

Code	Topic 1	Topic 2	Comment	Response
51.1	Alternatives	Peak Period Pricing	On behalf of the Town of Nantucket, I write to you today to express the Town of Nantucket's support of Massport's Preferred Alternative for reducing delays at Logan International Airport and to reaffirm our strong opposition to peak period pricing...To place high fees on the regional airlines upon which we are dependent for tourist and business travel during the hours when most people need to travel, is to deny us a fair chance at economic survival...This proposed fee structure will harm our residents and visitors severely because of the increase in landing fees for the smaller aircraft which serve us and other Cape and Island communities. Those fees must be passed on to the traveler. The effect will be to send the discretionary traveler elsewhere, and for off-season service to be eliminated or curtailed.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England. Massport considers Logan Airport to be part of a regional system of airports that includes T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of the roles of Logan Airport and these regional airports in the eastern New England aviation system.

TOWN OF ORLEANS

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BOARD OF SELECTMEN

TOWN ADMINISTRATOR

LETTER 52

May 7, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attn: Arthur Pugsley, MEPA Unit

John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

EOEA #10458

Dear Sirs:

On behalf of the Town of Orleans, the Board of Selectmen would like to comment on the Draft Environmental Impact Report (EIS/EIR) for the Logan Airside Improvements Planning Project. We concur with the findings and conclusions in the report that Peak Period Pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport and therefore should be eliminated from further consideration.

The economic and environmental well being of Cape Cod's residents and businesses depends on continued safe and efficient air transportation access to Logan. Peak Period Pricing, if implemented, would create a severe hardship on airlines such as Cape Air that use small aircraft and would increase automobile travel between Cape Cod and Boston, adding to the congestion at the Bourne and Sagamore Bridges, on Route 3 and Route 6. In addition, for the communities of the Outer Cape, the potential loss of air carrier service by Cape Air as a result of Peak Period Pricing would threaten the health and safety of residents by eliminating medical care flight service that many rely on, forcing ambulances to drive up to an hour away to Cape Cod Hospital and two and one half hours to Boston.

52.1

Thank you for the opportunity to comment on this report.

Very truly yours,

Beverly G. Singleton, Chairman
Orleans Board of Selectmen

Letter 52
Town of Orleans
Beverly G. Singleton, Chairman

Code	Topic 1	Topic 2	Comment	Response
52.1	Alternatives	Peak Period Pricing	We concur with the findings and conclusions in the report that Peak Period Pricing is not an appropriate strategy for reducing aircraft delay at Logan Airport and therefore should be eliminated from further consideration. The economic and environmental well being of Cape Cod's residents and businesses depends on continued safe and efficient air transportation access to Logan. Peak Period Pricing, if implemented, would create a severe hardship on airlines such as Cape Air that use small aircraft...[F]or the communities of the Outer Cape, the potential loss of air carrier service by Cape Air as a result of Peak Period Pricing would threaten the health and safety of residents by eliminating medical care flight service that many rely on, forcing ambulances to drive up to an hour away to Cape Cod Hospital and two and one half hours to Boston.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England. A conceptual exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5 of the Supplemental DEIS/FEIR.

Town of Provincetown

Town Hall, 260 Commercial Street
Provincetown, Massachusetts 02657
Facsimile (508) 487-9560
Telephone (508) 487-7000

BY FACSIMILE AND CERTIFIED MAIL

LETTER 53

April 21, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202
ATTN: Arthur Pugsley, MEPA Unit
EOEA #10458

Mr. John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive park
Burlington, MA 01803

SUBJ: Logan Airside Improvements Planning Project: *Provincetown Supports Runway 14/32 in Alternative 1A, But Opposes Peak Period Pricing at Logan Airport*

Dear Sirs:

The Town of Provincetown and its Board of Selectmen wish strongly to support the proposal for construction of a new unidirectional runway 14/32 at Logan Airport, contained in Alternative 1A of the Draft Environmental Impact Report/Impact Statement for the Logan Airside Improvements Planning Project. We wish to be on record in support of the preferred alternative which the DEIR/IS finds as the single most effective action in addressing weather-related delays at Logan.

With that said, however, Provincetown wishes strongly to oppose any inclusion of peak period pricing in Alternative 1A or otherwise. As we have long said, peak period pricing could seriously– perhaps fatally– undermine the economic viability of Provincetown Municipal Airport. The Cape Cod Commission's Transportation Committee has cited prior Massport consultant findings of the "real possibility" that peak-period pricing could put Cape Air out of business. From Provincetown's unique perspective– since Cape Air operates our municipal airport under the auspices of our Airport Commission– putting Cape Air out of business has the "real possibility" of putting Provincetown Municipal Airport out of business. For Provincetown-- where the closest ambulance drive is an hour away to Cape Cod Hospital and two-and-a-half hours away to Boston– the loss of our airport would fundamentally threaten the health and safety of our residents. We cannot allow that to happen.

53.1

Thank you for your consideration.

Sincerely,

Keith A. Bergman
Town Manager

Cc: Board of Selectmen
Provincetown Airport Commission
Cape Air c/o Mr. Dan Wolf
State Senator Henri Rauschenbach
State Representative Shirley Gomes
Governor A. Paul Cellucci
Congressman William Delahunt
Senator Edward M. Kennedy
Senator John Kerry

Letter 53
Town of Provincetown
Keith A. Bergman, Town Manager

Code	Topic 1	Topic 2	Comment	Response
53.1	Alternatives	Peak Period Pricing	...Provincetown wishes strongly to oppose any inclusion of peak period pricing in Alternative 1A or otherwise. As we have long said, peak period pricing could seriously—perhaps fatally—undermine the economic viability of Provincetown Municipal Airport...the loss of our airport would fundamentally threaten the health and safety of our residents.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England. A conceptual exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5 of the Supplemental DEIS/FEIR.

Town of Provincetown

The First Landing Place of the Pilgrims

MASSACHUSETTS

AIRPORT COMMISSION

PROVINCETOWN MUNICIPAL AIRPORT
Race Point Road, P.O. Box 657
Provincetown, MA 02657

LETTER 54

April 21, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Ma. 02202
ATTN: Arthur Pugsley, MEPA Unit
EOEA #10458

Mr John Silva, Manager
Environmental Programs
FAA Airports Division,ANE-600
New England Region
12 New England Executive Park
Burlington, Ma. 01803

Re; Logan Airport Airside Improvements

Dear Sirs:

The Provincetown Airport Commission is putting our full support behind the proposed construction of the unidirectional runway 14/32 at Logan International Airport. This item is found in the Draft Environmental Impact Report / Impact Statement for Logan Airport Airside Improvements Planning Project (Alternative 1A). We are convinced that the unidirectional runway is the most effective way to address traffic delays at Logan. This is especially important during weather delays.

The Provincetown Airport Commission also wants to be put on record that we strongly oppose any inclusion of Peak Period Pricing in Alternative 1A of the Logan DEIR/IS and any other Peak Period Pricing information or planning in the future. We believe Peak Period Pricing would devastate the Provincetown Municipal Airport and very possibly drive our only commuter air carrier (Cape Air) out of the Provincetown market or even out of business. We all know how fragile the economic viability of Lower Cape Cod is and when you add the health and safety of our residents and tourists we cannot allow this to happen.

54.1

Town of Provincetown

The First Landing Place of the Pilgrims

MASSACHUSETTS

AIRPORT COMMISSION

PROVINCETOWN MUNICIPAL AIRPORT
Race Point Road, P.O. Box 657
Provincetown, MA 02657

Sincerely,

Leonard Alberts
Provincetown Municipal Airport
Commission Chairman

Cc. Provincetown Board of Selectmen
Provincetown Town Manager, Keith Bergman
Cape Air c/o Mr Dan Wolf
State Senator Henri Rauchenbach
State Representive Shirley Gomes
Governor A. Paul Cellucci
Congressman William Delahunt
Senator Edward Kennedy
Senator John Kerry

Letter 54
Town of Provincetown, Municipal Airport Commission Leonard Alberts, Chairman

Code	Topic 1	Topic 2	Comment	Response
54.1	Alternatives	Peak Period Pricing	The Provincetown Airport Commission is putting our full support behind the proposed construction of the unidirectional Runway 14/32 at Logan International Airport...The Provincetown Airport Commission also wants to be put on record that we strongly oppose any inclusion of Peak Period Pricing in Alternative 1A of the Logan DEIR/IS and any other Peak Period Pricing information or planning in the future. We believe Peak Period Pricing would devastate the Provincetown Municipal Airport and very possibly drive our only commuter air carrier (Cape Air) out of the Provincetown market or even out of business.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England. A conceptual exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5 of the Supplemental DEIS/FEIR.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

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Acronyms

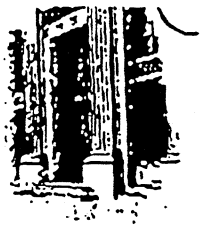
Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

City of Quincy, Massachusetts

OFFICE OF THE COUNCIL

BRUCE J. AYERS
WARD VI COUNCILLOR

RESIDENCE 472-9877
VOICE MAIL 376-1356



April 12, 1999

Jane Garvey, Administrator
Federal Aviation Admin.
800 Independence Ave. SW
Washington, DC 20591

Re: Logan Airport Expansion Resolve

Dear Ms. Garvey:

Enclosed please find a copy of the Resolve I introduced at the Quincy City Council meeting April 5, 1999, entitled "Resolutions Indicating City of Quincy Opposition To Airside Expansion At Logan Airport And Construction Of Runway 14-32". This Resolve was unanimously passed.

Sincerely,

Bruce J. Ayers,
WARD SIX COUNCILLOR

BJA/jm

Encl.

City of Quincy, Massachusetts
In
CITY COUNCIL

Presented by: *City Councillor and State Representative Bruce J. Ayers*
Monday, April 5, 1999

LETTER 55

RESOLUTIONS INDICATING CITY OF QUINCY OPPOSITION TO AIRSIDE EXPANSION AT LOGAN AIRPORT AND CONSTRUCTION OF RUNWAY 14-32

WHEREAS, the Massachusetts Port Authority operates Logan International Airport and has initiated plans to increase airplane capacity through the construction of an additional runway known as "14-32" by its navigational compass points; and

WHEREAS, the stated reason for construction of this proposed new runway is to reduce delays at Logan Airport; and

WHEREAS, Massport is forecasting such a significant increase in the overall number of aircraft operations over the next five years that delays will reach current levels within that time even if the runway expansion is undertaken; and

WHEREAS, Massport has not fully examined alternatives to airport expansion like diverting more cargo and planes to Hanscom Field and Worcester Airport; and 55.1

WHEREAS, Massport has not yet fully investigated other ways to alleviate the strain on capacity at Logan like increasing transportation access to other regional airports like T.F. Green in Rhode Island and Manchester Airport in New Hampshire; and 55.2

WHEREAS, Massport has not taken advantage of certain internal management tools that could be used to alleviate delays such as a Peak Period Management Program that would save money for those passengers who can travel at a time when the airport typically experiences less service demand and less delays; and 55.3

WHEREAS, Massport has indicated that operation of the new runway would impact several neighborhoods in the City of Quincy, especially, Squantum, West Quincy, North Quincy, Germantown, Houghs Neck, Merrymount, Montclair, Quincy Point and Wollaston; and 55.4

WHEREAS, Massport has not conducted or officially offered to hold any local meetings to better explain this project to our residents, listen to their concerns and to answer their complaints about current problems with air traffic noise and air pollution; and 55.5

WHEREAS, Massport has already filed an Environmental Impact Statement with the support of the Federal Aviation Administration (FAA) to secure the environmental approvals necessary to begin construction on this project; and

WHEREAS, two public hearings will be held this week to discuss the environmental impact that expansion of Logan Airport would cause; and

WHEREAS, all plans to expand Logan Airport must be approved by federal environmental regulators before any construction activity can begin; and

WHEREAS, the City Council of the City of Quincy agrees with the concerns of its citizens about increased noise, vibration and potential health and safety hazards that arise from additional airline traffic and has serious reservations about the need and benefits of proposed runway 14-32; therefore be it

55.6

RESOLVED, that the City Council hereby requests the Federal Aviation Administration to withdraw its support for expansion of Logan Airport at least until the questions of neighboring communities have been answered in better detail; and be it further

RESOLVED, that the addition of more air traffic over the city is unacceptable and the City Council strongly urges that the transportation and environmental needs of the metropolitan Boston area be reviewed in a much broader scope than the proposal currently under consideration; and be it further

55.7

RESOLVED, that in order to take steps to help preserve quality-of-life in our community, the City Council records it objection to expansion of Logan Airport by means of this resolution and urges that it not be granted authorization to proceed; and be it finally

RESOLVED, that the Clerk of the City of Quincy forward a copy of these resolutions to the following parties:

- Mayor James A. Sheets
- Congressman William D. Delahunt, 24 Cottage Avenue, Quincy, MA 02169
- Senator Michael W. Morrissey, The State House, Room 413-E, Boston, MA 02133
  Representative A. Stephen Tobin, The State House, Room 166
  Representative Ronald Mariano, The State House, Room 234
  Representative Liz Malia, The State House, Room 540
- Jane Garvey- Administrator, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, D.C. 20591
- Peter I. Blute, Executive Director and CEO, Massachusetts Port Authority, One Harborside Drive, Suite 200, East Boston, MA 02128
- Betty Desrosiers, Director of Aviation Planning, Massachusetts Port Authority, One Harborside Drive, Suite 200, East Boston, MA 02128
- Neighborhood Centers
- Marie Stamos, Stop the Runway Committee, 747 East Squantum St., Quincy, MA 02171

Based on Feed back -

- Summit written Comment
- City Council Supported this Resolve.
- Squantum Civ

City joins Logan runway opposition

Council asks U.S. to block construction

GAVIN McCORMICK
Patriot Ledger

QUINCY — City councilors last night added Quincy's voice to the chorus of communities protesting the addition of a runway at Logan International Airport.

In unanimous vote the council asked federal environmental officials to block construction of a new $22 million runway, which councilors said would increase air traffic over several Quincy neighborhoods.

The Massachusetts Port Authority, which

[redacted]

[redacted] Quincy neighborhoods are directly in the path of this runway," Ward 4 Councilor Michael D'Amico, said. "This would directly impact the quality of life in our neighborhoods. It's important for the city to go on record as being opposed."

Massport officials have pledged that the runway would serve only planes approaching and departing over the Atlantic Ocean.

Their plan would boost traffic over Hull but cut the number of planes flying over Quincy, Braintree, Weymouth, parts of Hingham and most parts of Milton.

But while Massport has said it plans to use the runway largely for small planes and only in one direction — toward Boston Harbor — city officials and some residents fear that will change as plane traffic increases over the decade.

"Logan simply can't continue to exp within the city of Boston," Councilor-at-l Paul Harold said. "The only city in the w with a major airport in the middle of the was Hong Kong, and the Chinese just clo that. There's a need for a second airp especially for cargo and small passenger tr fic."

City Council President Peter Kolson a the runway would increase flights 10-fold o Germantown and Houghs Neck. He pledged testify against the plan at environmen hearings.

Please see RUNWAY — Page

Letter 55
City of Quincy, City Council
Bruce Ayers

Code	Topic 1	Topic 2	Comment	Response
55.1	Regional Transportation	Regional Airports	...Massport has not fully examined alternatives to airport expansion like diverting more cargo and planes to Hanscom Field and Worcester Airport...	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.
55.2	Alternatives	Regional Airports	...Massport has not yet fully investigated other ways to alleviate the strain on capacity at Logan like increasing transportation access to other regional airports like T.F. Green in Rhode Island and Manchester Airport in New Hampshire...	Massport is supportive of ground transportation improvements to the regional airports, The MassHighway is analyzing alternative routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport. MassHighway is in the process of preparing the EIS/EIR for these highway improvements. Massport supports this project.
55.3	Alternatives	Peak Period Pricing	...Massport has not taken advantage of certain internal management tools that could be used to alleviate delays such as a Peak Period Management program that would save money for those passengers who can travel at a time when the airport typically experiences less service demand and less delays;....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
55.4	Noise	Impacts	...Massport has indicated that operation of the new runway would impact several neighborhoods in the City of Quincy, especially Squantum, West Quincy, North Quincy, Germantown, Houghs Neck, Merrymount, Montclair, Quincy Point and Wollaston;....	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Similarly, overflights affecting Winthrop (Runway 27 arrivals and Runway 9 departures) will decline from 88,224 in 1998 to 55,805. As a result of the relief for these communities, flights over the water and flights over less impacted communities will increase.
55.5	Environmental Review Process	Public Process	...Massport has not conducted or officially offered to hold any local meetings to better explain this project to our residents, listen to their concerns and to answer their complaints about current problems with air traffic noise and air pollution;....	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
55.6	Alternatives	Runway 14/32	...the City Council of the City of Quincy agrees with the concerns of its citizens about increased noise, vibration and potential health and safety hazards that arise from additional airline traffic and has serious reservations about the need and benefits of proposed Runway 14/32;....	A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
55.7	Environmental Review Process	MEPA	...the addition of more air traffic over the city in unacceptable and the City Council strongly urges that the transportation and environmental needs of the metropolitan Boston area be reviewed in a much broader scope than the proposal currently under consideration;....	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.

The City of REVERE, MASSACHUSETTS

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
FRANK STRINGI • DIRECTOR
281 BROADWAY, REVERE, MA 02151

ROBERT J. HAAS, JR.
Mayor

(617) 286-8181 FAX (617) 286-8180

AT

LETTER 56

April 12, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

RE: Draft EIR Logan Airside Improvements Planning Projects - EOEA #10458

Dear Mr. Pugsley:

The City of Revere Department of Planning and Community Development in conjunction with the Mayor's Office has reviewed the above referenced EIR and offers the following comments:

Massport's prediction that the airport will grow from the 1996 level of 25 million to between 37.5 million and 45 million passengers per year by 2010 can only result in a substantial increase in air traffic and attempts to increase capacity at Logan. This no doubt will be the case should Massport not aggressively pursue a realistic plan to coordinate this projected growth in operations with other airports accessible to the Boston metropolitan area within the Route 495 belt. This growth factor is of grave concern to the City of Revere given its geographical and topographical relation to Logan Airport. In particular, the Beachmont neighborhood is only 1 1/2 miles from the touchdown point on Runway 22 Left and is presently heavily impacted by air traffic. In general, any attempts to add air traffic and increase operations at Logan to the already overburdened schedule will be harmful to Revere in terms of both noise and operational difficulties including increased vehicular traffic through the community.

The proposed airside improvements and administrative modifications outlined in the EIR are designed to accomplish one purpose - the need to accommodate more air traffic at Logan. If this is accomplished, it will be at the expense of the health, safety and welfare of neighboring communities.

Proposed Lowering of Weather Minimums for Landing on Runway 22L

Lowering the decision heights for landing on Runway 22 Left in poor visibility weather would allow greater air traffic over the Beachmont Hill under poor visibility conditions. The present decision height is 420 ft. and is directly over Beachmont Hill along the glideslope. Aircraft which are told to abort landings due to poor visibility would not impact Beachmont Hill - meaning there would be less aircraft flying over Beachmont Hill in poor visibility conditions. With the decision height brought down to 217 ft. along the glideslope, more air traffic would be flying over Beachmont Hill under worse weather conditions. In poor visibility weather the pilots do not have to see Beachmont Hill in their approach. Given the already narrow envelope between the existing approach path at the top of Beachmont Hill, it is feared that a lowered decision height would increase the potential of a hazard for Beachmont residents during poor visibility conditions. 56.1

Proposed Runway 14-32

Runway 14-32 as proposed would allow Logan to become more efficient during moderate to strong northwest winds and allow more flexibility in shifting air traffic away from Runway 22 Left which has the greatest impact on Revere. Revere is more concerned with the implications an additional runway would have on additional air traffic than Massport's proposal to just make existing operations more efficient. The EIR is not totally convincing that less air traffic would result over Revere with the construction of Runway 14-32. It appears the new runway will increase airport capacity at Logan which will obviously result in increased air traffic over Logans neighboring communities. 56.2

Proposed Centerfield Taxiway

The new Centerfield Taxiway will not alleviate traffic on other runways. This proposal would allow for additional aircraft to occupy runways which would in turn increase airport congestion during take offs and landings. This scenario would only further impact the neighboring communities of Revere, Winthrop and East Boston by allowing more flights under tighter conditions. 56.3

Peak Period Pricing

Peak period pricing would have a negative financial impact imposed on the smaller commuter airlines and the communities they serve. This would impact commuter flights and possibly limit these flights during peak periods allowing for increased larger jet traffic. 56.4

In addition to the aforementioned comments, the following mitigation measures must be improved within the City of Revere:

- The air pollution monitor is placed at the shore near the ocean where particulate matter dissipates. This location does not provide for a true reading on air pollution, therefore the monitor should be relocated to a more appropriate location. 56.5

- A new noise monitor is needed at the playing fields of the Beachmont School where school children are effected. 56.6

- Aircraft continues to cause considerable soot over the Beachmont area. This must be monitored and analyzed more carefully by Massport. 56.7

- The soundproofing program must be expanded beyond the 65db contour to include such areas as Point of Pines, Shirley Avenue Hill and the rest of Beachmont and the Beachfront. Central airconditioning should be included in the scope of the soundproofing program within the more impacted areas. 56.8

- The need exists to firmly enforce the regulation of flights between 10 pm and 7 am and recertification for Stage 3 aircraft. Many aircraft have been recorded over 95db between 10 pm and 7 am. Over 95db is extremely loud, especially in nighttime and early morning conditions. A definite need exists for recertification if aircraft cannot stay within current noise limits. 56.9

Revere is impacted by Logan Airport in many ways and the need exists for a clear understanding of the valid concerns raised in these comments and assurance of the implementation of the necessary mitigation measures. Given the long history of conflicts with Massport's plans to increase capacity and efficiency at Logan, it is clear that the demands placed on Logan must continue to be distributed to underutilized regional airports.

Respectfully,

Frank Stringi

Frank Stringi
DPCD Director

C: Mayor Robert J. Haas, Jr.
Revere City Council
Debbie McHatton, Airside Review Committee

Letter 56
City of Revere, Dept. of Planning & Community Development Frank Stringi, Director

Code	Topic 1	Topic 2	Comment	Response
56.1	Alternatives	Reduced Approach Minimums	Lowering the decision heights for landing on Runway 22 Left in poor visibility weather would allow greater air traffic over the Beachmont Hill under poor visibility conditions...With the decision height brought down to 217 ft. along the glideslope, more air traffic would be flying over Beachmont Hill under worse weather conditions...Given the already narrow envelope between the existing approach path at the top of Beachmont Hill, it is feared that a lowered decision height would increase the potential of a hazard for Beachmont residents during poor visibility conditions.	Reducing the current landing minimums for Runway 22L at Logan Airport does not equate to a reduction in the existing levels of safety and doesn't change noise levels. Aircraft would follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made would be moved closer to the airport. Both Appendix D and Section 3.4 include discussions of reduced minimums. Figure 3.4-1 and Figure 3 of Appendix D of the Supplemental DEIS/FEIR show that even under existing approach minimums, aircraft are already beyond Beachmont Hill before reaching the decision height.

Code	Topic 1	Topic 2	Comment	Response
56.2	Alternatives	Runway 14/32	Revere is...concerned with the implications an additional runway would have on additional air traffic...The EIR is not totally convincing that less air traffic would result over Revere with the construction of Runway 14/32. It appears the new runway will increase airport capacity at Logan which will obviously result in increased air traffic over Logan's neighboring communities.	Implementation of unidirectional Runway 14/32 significantly reduces the most severely impacted populations within the 70 and 75 dB noise contours in Winthrop and Revere (refer to Section 6.2 of the Supplemental DEIS/FEIR). Revere is nearest the flight paths of Runway 4L/R departures and Runway 22L/R arrivals. The Supplemental DEIS/FEIR indicates that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, reducing the current dependence on northeast/southwest operations. This will lead to a decreased percentage of equivalent operations over Revere. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals, cutting dwell and persistence over Revere significantly. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated by passenger or airlines, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts examined in the airside operational and environmental analyses would capture any potential variation in future passenger and aircraft activity at Logan Airport.
56.3	Alternatives	Taxiway Improvements	The new Centerfield Taxiway will not alleviate traffic on other runways. This proposal would allow for additional aircraft to occupy runways which would in turn increase airport congestion during takeoffs and landings. This scenario would only further impact the neighboring communities of Revere, Winthrop and East Boston by allowing more flights under tighter conditions.	The purpose of the proposed Centerfield Taxiway system is to improve the flow of taxiing aircraft and to reduce aircraft ground delay. With the Centerfield Taxiway in place, neighbors in Winthrop and East Boston adjacent to the taxiways will experience small reductions in ground noise. These are different from the noise level reductions that occur in parts of East Boston, Revere, South Boston, and Dorchester with the Preferred Alternative. Improvements in those communities are derived from the added flexibility afforded by Runway 14/32. It allows the redistribution of traffic so that there are fewer landings on Runway 4L and 4R and fewer takeoffs on Runways 22L and 22R. The taxiway itself has no bearing on these flights. Dispersion Modeling indicates no violations of the NAAQS at any of the sites shown on Figure 6.3-1 of the Supplemental DEIS/FEIR, including those at public beaches and recreational areas.

Code	Topic 1	Topic 2	Comment	Response
56.4	Alternatives	Peak Period Pricing	Peak period pricing would have a negative financial impact imposed on the smaller commuter airlines and the communities they serve. This would impact commuter flights and possibly limit these flights during peak periods allowing for increased larger jet traffic.	The Airside analysis indicates that PPP is an effective option when airline's schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
56.5	Air Quality	Monitoring	The air pollution monitor is placed at the shore near the ocean where particulate matter dissipates. This location does not provide for a true reading on air pollution, therefore the monitor should be relocated to a more appropriate location.	The closest PM_{10} monitor, located and operated by the DEP, is on Bremen Street. In the Supplemental DEIS/FEIR, receptor sites, some near the ocean-side residential communities adjacent to Logan Airport, were modeled with real meteorological conditions.
56.6	Noise	Monitoring	A new noise monitor is needed at the playing fields of the Beachmont School where school children are affected.	Requests for new noise monitors should be addressed to Massport.
56.7	Air Quality	Soot	Aircraft continues to cause considerable soot over the Beachmont area. This must be monitored and analyzed more carefully by Massport.	Although PM_{10} emission factors for aircraft are generally not available, a conservative estimate was used for the Supplemental DEIS/FEIR. The dispersion modeling indicates there will be no violations of the NAAQS for fine PM_{10}. The modeling included Logan Airport emissions and background emissions. Furthermore, PM_{10} in urban areas is composed of compounds from a variety of sources, primarily roadways. Monitoring of airborne soot levels in the vicinity of Logan Airport has shown that the airport is a very small (less than 1 percent) contributor. The air quality analysis, based on EPA/DEP models and guidelines, is considered to be comprehensive and state-of-the-art.

Code	Topic 1	Topic 2	Comment	Response
56.8	Noise	Sound Insulation	The soundproofing program must be expanded beyond the 65 dB contour to include such areas as Point of Pines, Shirley Avenue Hill and the rest of Beachmont and the Beachfront. Central air conditioning should be included in the scope of the soundproofing program within the more impacted areas.	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences. Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update.* Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.
56.9	Noise	Nighttime Noise	The need exists to firmly enforce the regulation of flights between 10 pm and 7 am and recertification for Stage 3 aircraft. Many aircraft have been recorded over 95db between 10 PM and 7 AM. Over 95db is extremely loud, especially in nighttime and early morning conditions. A definite need exists for recertification if aircraft cannot stay within current noise limits.	In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.

The City of Revere Massachusetts

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City Council

LETTER 57

April 15, 1999

Secretary of Environmental Affairs
Mr. Arthur Pugsley - IOEA No 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Attention: MEPA Office

Dear Mr. Pugsley:

On February 19, 1999 the City of Revere received the Draft Environmental Impact Statement and Draft Environmental Impact Report ("Draft EIS/EIR") relative to the Logan Airside Improvements Planning Project, ("Project"), submitted by the Massachusetts Port Authority and the Federal Aviation Administration.

Upon receiving the "Draft EIS/EIR" the City of Revere requested the Massachusetts Port Authority to provide the City of Revere with the financial assistance to evaluate the "project" impact on the City.

Inasmuch as the City of Revere has not received a response to its request from the project proponents, on April 05, 1999 the Revere City Council adopted the following resolution:

Whereas: The Massachusetts Port Authority has not responded to Revere City Council Order #99-73, requesting that the Massachusetts Port Authority provide the City of Revere with funding to review the impact of the Draft Environmental Impact Report (Logan Airside Improvements) dated February 19, 1999; and 57.1

Whereas: the further expansion of Logan International Airport will result in additional landings and take-offs at Logan resulting in additional adverse noise impact to the City of Revere; and 57.2

Whereas: the Massachusetts Port Authority has declined, thus far, the City of Revere's invitation to work with the City to address the City's concerns about noise pollution impacts from jets landing and taking off at Logan Airport. 57.3

Now, Therefore, Be It Resolved: That the City of Revere record its opposition to further expansion at Logan Airport as, contained in the Massachusetts Port Authority's Draft Environmental Impact Report and further that the City of Revere join with the Mayor of the City of Boston, the Honorable Thomas M. Menino, in calling for a moratorium on airport expansion until an independent commission can develop a regional transportation strategy. 57.4

Please include the City of Revere's comments as a response to the "project Draft EIS/EIR".

Very truly yours,

John J. Henry
City Clerk
on behalf of the Revere City Council

c: City Council
Mayor
C.O. 99-73/99-73A

Letter 57
City of Revere, Revere City Council
John J. Henry, City Clerk

Code	Topic 1	Topic 2	Comment	Response
57.1	Environmental Review Process	Public Process	...The Massachusetts Port Authority has not responded to Revere City Council Order #99-73, requesting that the Massachusetts Port Authority provide the City of Revere with funding to review the impact of the Draft Environmental Impact Report (Logan Airside Improvements) dated February 19, 1999,....	To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Revere is represented in the CAC.
57.2	Noise	Impacts	...the further expansion of Logan International Airport will result in additional landings and take-offs at Logan resulting in additional adverse noise impact to the City of Revere;....	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
57.3	Environmental Review Process	Public Process	...the Massachusetts Port Authority has declined, thus far, the City of Revere's invitation to work with the City to address the City's concerns about noise pollution impacts from jets landing and taking off at Logan Airport.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
57.4	Environmental Review Process	Blue Ribbon Panel	...the City of Revere...[calls] for a moratorium on airport expansion until an independent commission can develop a regional transportation strategy.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. As summarized in the Airside Project Draft EIS/EIR, a number of studies that address regional transportation planning issues have been conducted over the last ten years. These studies have concluded that the Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high speed rail are all necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Chapter 2 of the Supplemental DEIS/FEIR discusses the entire region's air transportation system, along with a discussion of alternative modes, specifically high-speed rail, and describes the regional study and its major conclusions.

CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF HOUSING & COMMUNITY DEVELOPMENT
WILLIAM ROCHE
ACTING MAYOR

JAMES J. BRETTA
EXECUTIVE DIRECTOR

LETTER 58

DIRECTORS
Mary Jo Bohart
Paul Connolly
Todd M. Fontanella
Sherri N. Geldersma
Paula Stuart

April 23, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
MEPA Unit
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

RE: EOEA # 10458 - COMMENTS ON DRAFT EIR/EIS - AIRSIDE IMPROVEMENTS PROJECT, LOGAN AIRPORT

Dear Secretary Durand::

This letter serves to transmit additional comments from the City of Somerville on the above referenced project. Enclosed, please find the City's comments previously submitted for your records.

The City is already on record regarding certain components of the Airside Improvements Project, in particular the construction of Runway 14/32. Here, I'd rather raise some general issues which focus more on the completeness and adequacy of the draft EIR/EIS.

Our overall impression is that Logan is developing Runway 14/32 because it hopes to put a major dent in the low-fare airline wars. Repeatedly throughout the document, it is clear that Massport is not cooperating with the other regional airports - it is competing for their business. **Competition is the key ingredient driving Logan's expansion.** This fact is bolstered by Massport's own use of the term "leakage" in the document. For us, that explains Massport's emphasis on expansion of this facility. It is assumed to be the path of least resistance and expense. The facility is also

58.1

one that is under Massport's control.

The EIR/S is instructive. It illustrates well that other airports are absorbing some market share, and reducing the need for passengers to fly to Logan in order to connect to other markets. The other airports have been successful in luring low-fare carriers - possibly more so than Logan? I'm assuming that this is a market Massport feels it must grow at Logan, or it will continue to see its role in the marketplace decline.

I especially found it interesting that Section 2 continuously discusses "recapture" of passengers. Massport uses this term as if the passengers were Logan's to begin with. This is erroneous: some of these passengers are new trips, others would have chosen alternative transportation or other airports besides Logan. Massport takes every opportunity to tell the reader how important Logan is. Remember, there are new employers and residents in Rhode Island (for example) who did not consider Logan as an alternative - T.F. Green is at their back door.

The details on air/rail ridership changes projected when the Northeast Corridor project is completed are encouraging. It should be noted that Massport has been reluctant to recognize the Northeast Corridor rail project in the past; in fact, the previous Secretary of Environmental Affairs cited that as a deficiency of the annual GEIR two years ago.

Repeatedly, Massport makes determinations about people's mode choice on the basis of travel time and mileage. Discuss the Portland-Boston route, for example. There aren't many choices except for autos at this time. If workable alternatives are developed and promoted, the public will use them.

Massport makes some very true statements about its agency's role in shaping transportation policy. However, it should be noted that agencies above and around Massport have a great deal to do with shaping transportation policy which is favorable to Massport's objectives. The FAA is a clear champion of the airline industry, and has clout. Perhaps FAA cannot "dictate which airports an airline may serve, the schedules or fares a carrier charges", but it can exercise control over airport design, capacity and operation which have a lot to do with an airline's decision to provide service at a given facility, or to pursue a regional policy which decides the role a particular airport will play in a region.

The noise analysis referred to states that the 5,000 foot runway better met Massport's overall objectives, particularly in the area of noise reductions to impacted sensitive receptors. However, Section 3-10 does not go into great detail concerning the performance of each alternative. I'd like to see the "clear benefits" substantiated. Assumed, this means that a larger runway can accomodate more aircraft types, thus removing those aircraft from the other runways which fly over greater numbers of sensitive receptors. 58.2

With respect to the centerfield taxiway - I don't have any disagreements with what is stated, but it

is important to point out that this improvement will also increase airport traffic capacity - and, taxiway delays/apron congestion will be relieved for a temporary period. And, with more queue space available, noise and air pollution impacts to adjacent communities will also increase. 58.3

The statement is made that "delay statistics for Logan Airport confirm that it is unable to accommodate existing demand levels without incurring unacceptable levels of delay". Unacceptable to whom? FAA, passengers, Massport? It goes right back to proposing projects which will reduce delay effectively, for a reasonable time period - otherwise, it is dishonest to propose this improvement as a worthwhile delay reduction measure, especially without noting that delays will resume previous levels if an airport-wide growth and expansion plan is to be pursued. **The problem is not adequately defined. In fact, the problem appears to be misrepresented.** 58.4

Regarding ambient sound levels. It is true that nighttime aircraft operations are more noticeable and annoying because the ambient sound level is lower. In surrounding, less urbanized communities, the sound is even more noticeable. This problem will increase with additional flight activity, and may be tempered somewhat by aircraft improvements. 58.5

Passenger Facility Charges (PFC's) - although Massport received approval to assess this fee on each passenger in 1993, is the fee being collected? It was unclear from reading the document. 58.6

It's noted that elevated terrain has an affect on sound propagation - particularly in East Boston. This has been raised in other communities, including Somerville. 58.7

In Summary, the EIS/R fails to address the following:

Project cost to the environment and to human health. Where is the risk analysis, particularly for the anticipated noise exposure and air pollution which will result from this project? Particularly, we believe that the increased activity at Logan Airport will propagate additional traffic - in already congested areas. We have always believed that creating and/or expanding other facilities in the region would cut down trip miles to/from the airport, and would aid overall environmental quality. This is particularly important when the EIR/EIS states that over 50% of Logan passengers originate in the Route 128 and 495 highway regions. Regional employers will appreciate this, too. 58.8 58.9

Project cost to property owners. Increased traffic at this location will impact all classes of property owners in the area, particularly those which are sensitive receptors. 58.10

Inadequacy of noise standards. Reliance on an average Day-Night Sound Level (DNL) contour inadequately characterizes true noise impacts associated with the Project. Other reviewers have stated that the use of this average downplays the actual noise levels experienced by sensitive receptors - it is the individual (higher) noise emissions which more negatively impact surrounding residential receptors - not the average level. HUD and FAA definitions are at fault here. We ask 58.11

that MEPA address this issue.

Connection to Landside Improvements. The focus of this Draft EIS/EIR is on the Airside Improvements. The City, after reading the documents, does not believe that improvements to gates, terminals and other landside facilities have been properly presented within the context of this document. That is a serious flaw, because the landside and airside facilities are interdependent and **should not be separated** insofar as both contribute to the state of overall airport operations and the true operational objectives for this facility. The City believes that if this is done, the problem definition will change significantly. 58.12

For the above reasons, we respectfully request that the Draft EIR/EIS be withdrawn. We also recommend that a regional approach be taken to dealing with what is a regional issue. My administration is willing to participate in such an effort.

Thank you.

Sincerely,

William Roche

William Roche
Acting Mayor

cc: Anastasia Lyman, Massport Citizens' Advisory Committee
Allison Stieber
Todd Fontanella, Somerville CAC representative
James Bretta, OHCD
U.S. Representative Michael Capuano
Senator Thomas Birmingham
Senator Charles Shannon
Representative Patricia Jehlen
Representative Timothy Toomey
Representative Vincent Ciampa
Somerville Board of Aldermen

CITY OF SOMERVILLE, MASSACHUSETTS
WILLIAM ROCHE
ACTING MAYOR

February 11, 1998

Peter Blute, Executive Director
Massachusetts Port Authority
One Harbourside Drive, Suite 200S
East Boston, Massachusetts 02128-2909

RE: PROPOSED AIRSIDE IMPROVEMENTS, LOGAN AIRPORT

Dear Mr. Blute:

This letter is in response to the presentations made by Massport concerning the future of Logan Airport. It is also to comment on the draft Environmental Impact Report/Statement for the proposed Airside Improvements Project for Logan Airport.

The analyses which have been done (and the recent Massport presentation) all support the fact that Logan Airport will continue to grow - in size as well as activity. This presents long-term planning and environmental issues for the communities that live, on a daily basis, with the environmental consequences of Logan's present operations.

I believe that most, if not all parties involved in this issue, appreciate the fact that Logan Airport is important to the region's economic health. However, its role in serving the region's air transportation needs must be balanced regionally if the surrounding environment is to remain habitable.

Somerville is on record as supporting equitable development and distribution of regional air travel and air operations. The information we've been given concerning growth rates at other New England airports looks positive when presented as percentages of growth; however, the numbers

from which these are derived (which are more important) definitely indicate that a great deal of undeveloped capacity exists at other regional airports. The percentages are misleading to the public. Thus, we support the Citizens' Advisory Committee positions - namely to look for regional solutions to the capacity problem, procurement of funds to make other facilities competitive, such as at Hanscom Field and at Worcester. 58.13

We have been told that the airline industry does not prefer to develop facilities at several airports in a given market. I would believe that any airline would prefer to do business at facilities where their customer base may enjoy better access, less flight delay and more modern facilities. **Focus development efforts on a new facility away from downtown - where many of the travelers originate.**

Any airport project which ultimately increases operational capacity, particularly for air traffic which will impact nearby communities, is of serious concern. In fact, with or without construction of Runway 14/32, Massport will continue to promote a policy of development and continued growth at Logan. This growth will attract new air traffic - and the delays which have been one of Logan's most often cited problems will remain. The reclaimed capacity on the larger runways will simply be devoted to future air traffic growth which Massport has admitted it is planning for. 58.14

With regard to review of the draft EIR/S, it has come to my attention that the document is being revised continuously as Massport is receiving input at public meetings. Therefore, reviewers of this document, including members of the Citizens Advisory Committee, are working with an outdated version. It is customary once a draft environmental document is released to include comments and to incorporate responses to those comments after the public review period is closed. This continuous process deprives reviewers of a fair and meaningful review, and should be rejected on principle.

I see no need to debate the finer points of numerous technical documents further. Therefore, I ask to be put on record as opposed to the continued expansion of Logan Airport, particularly at present against the proposed expansion of Runway 14/32. Thank you.

Sincerely,

William Roche

William Roche
Mayor

cc: Anastasia Lyman, CAC Chair
U.S. Representative Michael Capuano
U.S. Senator Edward Kennedy
Senator Thomas Birmingham
Senator Charles Shannon
Argeo Paul Cellucci, Governor
Representative Timothy Toomey
Representative Patricia Jehlen
Mayor Thomas M. Menino
Vincent A. Scarano, FAA Airports Division Manager
James Bretta, City of Somerville OHCD
Alison Stieber
The Somerville Board of Aldermen

runways.wro

Letter 58
City of Somerville
William Roache, Acting Mayor

Code	Topic 1	Topic 2	Comment	Response
58.1	Regional Transportation	Regional Airports	... it is clear that Massport is not cooperating with the other regional airports. ... it is competing for their business. Competition is the key ingredient driving Logan's expansion.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.
58.2	Noise	Model	The noise analysis referred to states that the 5,000 foot runway better met Massport's overall objectives, particularly in the area of noise reductions to impacted sensitive receptors. However, Section 3-10 does not go into great detail concerning the performance of each alternative. I'd like to see the "clear benefits" substantiated. Assumed, this means that a larger runway can accommodate more aircraft types, thus removing those aircraft from the other runways which fly over greater numbers of sensitive receptors.	In addition to providing more delay reduction, the 5,000 foot runway also reduces the number of people exposed to a DNL of 70 dB or greater. Refer to Section 3.2.1 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
58.3	Alternatives	Taxiway Improvements	...[T]he centerfield taxiway...will also increase airport traffic capacity - and, taxiway delays/ apron congestion will be relieved for a temporary period. And, with more queue space available, noise and air pollution impacts to adjacent communities will also increase.	The Centerfield Taxiway will not increase the number of ground operations at Logan Airport. It will simply increase controller flexibility and reduce delays. The number of aircraft on the taxiway system is directly related to the number of flights operating at Logan Airport and will not change because there is another taxiway. Neither the airlines nor the FAA desire to have extra aircraft idling on the taxiway system, as this would cause unnecessary costs to the airlines, unnecessary environmental impacts, and increased taxiway congestion which would inhibit the ability of controllers to move aircraft to and from the runways. The Centerfield Taxiway will not change the taxiway demand, and by reducing taxiway congestion will reduce the environmental impacts on the surrounding communities
58.4	Purpose And Need	Delay	The statement is made that "delay statistics for Logan Airport confirm that it is unable to accommodate existing demand levels without incurring unacceptable levels of delay". ...[D]elays will resume previous levels if an airport-wide growth and expansion plan is to be pursued. The problem is not adequately defined. In fact, the problem appears to be misrepresented.	The goals of the Airside Project are to reduce delay, increase airport efficiency and improve airfield safety in an environmentally responsible manner. They do not reflect an "airport-wide growth and expansion plan", nor increase the capacity of the airport. Future passenger and operations levels can be accommodated by Logan Airport without any airside improvements but not without delays and resulting adverse environmental impacts. Long-term aviation growth is a recognized worldwide condition that is beyond Massport's control, which means that the sooner the airfield efficiencies are implemented, the more benefits they will accrue over the future. Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.
58.5	Noise	Impacts	... It is true that nighttime aircraft operations are more noticeable and annoying because the ambient sound level is lower. In surrounding, less urbanized communities, the sound is even more noticeable. This problem will increase with additional flight activity, and may be tempered somewhat by aircraft improvements.	Check that this is till valid. Table 6.2-17 of the Supplemental DEIS/FEIR shows nighttime jet operations projected to increase from 144 in 1998, to as many as 231 under the No Action Alternative with the 2015 High Regional Jet Fleet. However, regardless of the fleet, many of the future night operations are the result of delays that will occur as demand at Logan Airport continues to increase. One of the direct benefits of the Preferred Alternative is that it will reduce these night operations by 32 to 43 flights depending on the fleet forecast, though *any* alternative to the No-Action scenario will help alleviate some of the projected delays. In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.

Code	Topic 1	Topic 2	Comment	Response
58.6	Purpose and Need	Economic Impacts	Passenger Facility Charges (PFCs) - although Massport received approval to assess this fee on each passenger in 1993, is the fee being collected? It was unclear from reading the document.	Yes. Maspsort is collecting PFCs from enplaning passengers at Logan, as authorized by the FAA. PFCs are being used to fund a number of projects at Logan including: the International Gateway Project; Terminal E Modernization; improvements to circulating roadways; construction of elevated pedestrian walkways; residential sound insulation; and the Terminal A Master Plan.
58.7	Noise	Model	It's noted that elevated terrain has an affect on sound propagation - particularly in East Boston. This has been raised in other communities, including Somerville.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights.
58.8	Public Health	Effects	...[the EIS/R fails to address] Proiect cost to the environment and to human health. Where is the risk analysis, particularly for the anticipated noise exposure and air pollution which will result from this project?	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.

Code	Topic 1	Topic 2	Comment	Response
58.9	Ground Transportation	Access To Logan	...we believe that the increased activity at Logan Airport will propagate additional traffic - in already congested areas. We have always believed that creating and/or expanding other facilities in the region would cut down trip miles to/from the airport, and would aid overall environmental quality.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates). Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
58.10	Ground Transportation	Access To Logan	[The EIS/R fails to address] Project cost to property owners, Increased traffic at this location will impact all classes of property owners in the area, particularly those which are sensitive receptors.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives.
58.11	Noise	Model	Reliance on an average Day-Night Sound Level (DNL) contour inadequately characterizes true noise impacts associated with the Project. Other reviewers have stated that the use of this average downplays the actual noise levels experienced by sensitive receptors - it is the individual (higher) noise emissions which more negatively impact surrounding residential receptors - not the average level.	For environmental sounds of all types, the EPA adopted the Day-Night Sound Level (DNL) to account for both the magnitudes and duration of the various sounds. The DNL penalizes sounds made during the nighttime (chosen in the United States to be 10 PM to 7 AM) by adding 10 dB to the measured values. It is unfortunate that it is often characterized as the "average level" and therefore some people believe that it does not represent the levels of individual events. Actually, it represents the total noise exposure in a 24-hour day, including a nighttime penalty of 10 dB. Thus, it accounts for all the individual sound events during the 24-hour period. EPA's review of the available case studies on the effects of environmental noise on humans found that DNL correlates better with the effects than any measure of the various individual events.

Code	Topic 1	Topic 2	Comment	Response
58.12	Environmental Review Process	MEPA	[The EIS/EIR fails to address] Landside Improvements. The focus of this Draft EIS/EIR is on the Airside Improvements. The City, after reading the documents, does not believe that improvements to gates, terminals and other landside facilities have been properly presented within the context of this document. That is a serious flaw, because the landside and airside facilities are interdependent and should not be separated insofar as both contribute to the state of overall airport operations and the true operational objectives for this facility. The City believes that if this is done, the problem definition will change significantly.	The proposed improvements analyzed in the Supplemental DEIS/FEIR involve both construction and administrative actions that will facilitate aircraft operations (landings, takeoffs and taxiing). None of the improvements involve landside facility improvements (*e.g.*, terminals and roadways) or related operations. The Supplemental DEIS/FEIR analyzes in detail the impacts from aircraft operations, including analysis of noise and air quality impacts during the years 1993, 1998 and under future forecast scenarios as well as environmental benefits from certain of the improvement concepts under review. In this respect, the Supplemental DEIS/FEIR conforms with scoping directives from the lead federal agency (the FAA) and with applicable FAA environmental orders, all issued in accordance with NEPA, and with directives from EOEA issued under MEPA. The various GEIR documents, including the *Logan Airport 1998 Annual Update* and the *1999 Environmental Status and Progress Report* (previously GEIR), provide additional analytic context by examining cumulative impacts from airside (*i.e.*, aircraft) operations and landside (*e.g.*, vehicular traffic, terminal service vehicles) operations at Logan Airport as well as Massport's comprehensive mitigation program. The ESPR/GEIR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR as a background document. Each GEIR/ESPR submission is subject to public review and comment. The *Logan Airport 1998 Annual Update* and the *1999 ESPR* analysis is based on the same forecast levels used in the Supplemental DEIS/FEIR. The GEIR/ESPR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Supplemental DEIS/FEIR. Consistent with past practice, Massport expects that the FAA will take the GEIR/ESPR analysis into account during its deliberations and ultimate decision on the Supplemental DEIS/FEIR.
58.13	Regional Transportation	Regional Airports	... we support the Citizens' Advisory Committee positions - namely to look for regional solutions to the capacity problem, procurement of funds to make other facilities competitive, such as at Hanscom Field and at Worcester. Focus development efforts on a new facility away from downtown – where many of the travelers originate.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
58.14	Purpose And Need	Delays	...with or without construction of Runway 14/32, Massport will continue to promote a policy of development and continued growth at Logan. This growth will attract new air traffic - and the delays which have been one of Logan's most often cited problems will remain. The reclaimed capacity on the larger runways will simply be devoted to future air traffic growth which Massport has admitted it is planning for.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport.

CITY OF SOMERVILLE, MASSACHUSETTS
BOARD OF ALDERMEN

LETTER 59 April 22, 1999

WILLIAM A. WHITE, JR.
ALDERMAN AT LARGE

Delivered by hand
Mr. Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202

Dear Mr. Pugsley:

The following are my comments to the Draft Environmental Impact Statement for Logan Airside Improvements Planning Project dated February 1999 ("DEIS"). This response first provides an overview of the current impact of air traffic from Logan Airport on the City of Somerville (the "City"). Next, it details the defects in the noise analysis of the DEIS, paying particular attention to the absolute failure of Massport to analyze current noise impacts on the City by any realistic measures. It then addresses the defects in the DEIS' analysis of the future noise impacts on the City that would result from the construction of the additional runway.

I. OVERVIEW

The City is the most densely populated community in the Commonwealth of Massachusetts with a population of about 80,000. The City stands directly in the path of planes departing from Runway 33 L. (5-30 of DEIS) This runway directs flights over the City when the FAA utilizes the one runway configuration during strong Northwest winds and when the FAA utilizes the two runway configuration during moderate northwesterly winds. (1-19, 1-20 of DEIS) This configuration also is used during weekends, especially mornings beginning at 6:15 a.m., in what Massport illogically describes as the "equitable adjustment of the burdens of air traffic." The City also has a number of hills directly under the flights from Logan

Airport. While northwesterly winds prevail, the City suffers from constant air traffic, especially during the late evenings until well after midnight followed by early mornings beginning at 6:15 a.m. Massport recognizes that these winds prevail during 37% of the year. (DEIS figure 1.5-7) Because the FAA also uses this configuration during the weekends, affected City residents are unable to receive any respite from this traffic frequently during the fall, winter and spring months.

The topography of the City is such that a number of hills are directly under flights from Logan. Although the City begins about 3 miles from the end of runway 33 L, these elevated areas in the City receive substantial noise impact similar to other areas located much closer to Logan. For example, as a resident of Winter Hill, during the winter I have observed aircraft flying so close to dwellings that noise vibration caused snow to fall off of pitched roofs.

Over the recent past, I and other Aldermen have consistently received numerous phone calls from constituents who have suffered from air traffic noise over the City, including distraught parents of young children who are unable to get 8 hours of sleep. My Winter Hill venue has allowed me personally to experience the impact of air traffic, especially the effects of constant dwell in the evenings and following mornings, that creates a situation where numerous residents are unable to receive a decent night's sleep over extended periods of time. This lost sleep cannot be made up during the weekends because the FAA intentionally directs air traffic over the City on weekends beginning at 6:15 a.m. These concerns have been relayed to Massport's noise complaint telephone line. Massport offers no remediation program for the City and actually downplays the noise impact both in statements to the media and in the DEIS.

Because of growing complaints by residents over noise, the Board of Aldermen last summer invited representatives of Massport to appear before the Board of Aldermen. When asked if Massport had any monitoring devices within the City or had sent anyone to personally observe the noise level, especially over the hilly areas with dense populations, Massport responded negatively. Massport further stated that it would not provide any noise monitors in the City of Somerville. Instead, Massport relies on computer modeling to measure noise in the City. There is no evidence, however, to demonstrate whether Massport's computer modeling accurately reflects the noise born by residents where there are hilly configurations. Clearly, Massport's cavalier attitude toward the City should be

fatal to the DEIS since it shows that Massport has no objective data to demonstrate the real impact of noise on the City's many residents.

II. THE DEIS FAILS TO PROVIDE ANY OBJECTIVE DATE ON CURRENT NOISE OVER THE CITY

Although the heart of the flight tracks from 33L is over the City and is located less than four miles from the end of Runway 33-L, (5-30), Massport locates no noise monitoring equipment within the City or within any reasonable distance from the City. (5-13) Interestingly, many of the noise monitors located to the south of Logan are at greater distances from runways than impacted areas of Somerville. (Id.) Moreover, although many more departures from 33L fly over the City than Everett (see 5-30), Massport does not even consider Somerville to be an area for evaluation (5-19). Despite this lack of objective data over current noise conditions in Somerville, Massport argues that the proposed expansion will "more equitably adjust air traffic" by tripling the volume over the City of Somerville. 59.1

To support its claims relating to noise impact, Massport uses a noise measure which bears no reasonable relationship to the actual noise experienced by people nor the effects of this noise on people. The Day-Night Sound Level (DNL) used by Massport is "a weighted sound level of a steady-state noise during a 24-hour day which contains the same sound exposure as does the summation of the sound exposures from all of the individual events that occur during a 24-hour period, with the provision that noises occurring at night are increased by 10dB." Without doubt, those areas with a high DNL suffer from excessive noise. But because it is a 24 hour average, the DNL understates the actual impact of noise on many affected communities such as Somerville. 59.2

For example, Somerville suffers from severe air traffic on many evenings between the hours of 10:30 p.m. through 12:30 a.m. and the following mornings between 6:15 a.m. through 8:00 a.m. with little traffic for the rest of the day. Needless to say, the affected residents suffer from sleep deprivation with physical impacts the next day. Another community could experience constant air traffic from 10:00 a.m. through 6:00 p.m. A reasonable person might conclude that the first community bore the more severe consequences of air traffic since the noise

would come at night and the early morning against a quieter background when most people are at home and trying to sleep. In the second community, most people would be at work, out of the house, or doing activities which do not require quiet (unlike sleep) Under DNL as used by Massport, however, the first community would not appear to suffer any adverse consequences. Likewise, under Massport's definitions of dwell and persistence, the first community would not even qualify for relief. (See 5-18, 5-19 for Massport's definitions).

To an elected official in an affected community, it is beyond belief that the DEIS does not measure and discuss the amount of noise that communities may experience when there is late evening flight traffic followed by early morning flight traffic. In such situations, affected residents cannot realize a decent night' sleep. Perhaps this oversight is understandable, since such a study would show many thousands of people in the Greater Boston Area are subject to severe sleep deprivation many times during the year as a result of air traffic from Logan Airport.

A more reasonable method to determine the impact of noise upon a community should take the noise level, time of day and population density into account. If a dense community is subjected to noise which would awaken an average person during the late evenings and early mornings, large numbers of people may have their sleep affected for extended periods of time. Most people would agree that such an area would be suffering from severe environmental consequences. In the DEIS, however, Massport has not undertaken such an analysis. A realistic figure should be developed to measure the "cost" of noise, measuring the number of people affected by noise, the level of noise, and the consequences of noise (such as hours of lost sleep, inability to enjoy one's home, etc.). Such a measure should then be contrasted with the economic costs which the DEIS claims result from delays. 59.3

Since Massport has no noise monitoring devices in Somerville, it is impossible for anyone to obtain actual hard data for noise levels, especially in hilly areas, during the late evening and early morning hours to arrive at such a measure on their own. In an effort to obtain some hard data, I used a Radio Shack Sound Level Meter to take measurements at Winter Hill. Depending on the altitude of planes, I measured up to 110 dB out doors and 75dB indoors with windows closed during late night and early morning hours. This hard data confirms my personal

experience and the experience of constituents suffering from this air traffic. For example, I have been awoken on numerous mornings by flights departing at 6:00 a.m. after suffering from persistent flights that occurred from after 11:00 through midnight (and even 1:00 a.m.) the prior evening. In fact, on Sunday, April 10, 1999 three flights traveled over Winter Hill from approximately 1:00 a.m. through 1:15 a.m.. The following morning, flights started at 6:15 a.m., which awoke me. The last four Sundays in a row air traffic has begun at 6:15 a.m. During the past week, I was awoken twice after 3:00 a.m. and received complaints from constituents who were also awoken. I have personally contacted the noise complaint telephone line on a number of these occasions, even Thanksgiving and Christmas morning at 6:30 a.m. Of course, Massport takes the information but provides no relief. (Copies of some notices are attached hereto as Exhibit A). Given my personal experience with noise and the experiences of my constituents, I can affirmatively state that the DEIS is totally defective in its analysis with respect to the current noise impacts on the City and elsewhere.

III. THE DEIS FAILS TO ADEQUATELY ADDRESS THE NOISE CONSEQUENCES TO THE CITY IF THE PROPOSED RUNWAY IS BUILT

Since the DEIS fails to objectively measure the current noise impacts on the City, it is impossible to reasonably evaluate the impact of the proposed expansion on the City. As discussed above, Massport relies on its general discussions of decibel levels over areas, but does not provide a realistic evaluation of the impact of the additional noise on real people in the City. Interestingly, although departures from 33L are expected to triple, and the heart of this flight pattern is over the City, (6-13), Massport does not specifically address the impact on the City from this tripling in air traffic. Instead, Massport provides charts showing increases in dwell exceedence and persistence exceedence for the various runways. (Figures 6.2-5 through 6.2-8). 59.4

These charts demonstrate that dramatic increases in dwell and persistence over the City will result from departures from 33L if the runway is constructed. There is, however, no description of the impact of the new runway on heavy late night overflights followed by heavy early morning overflights. The discussion in Part II above showed that Massport and the DEIS does not measure or address the level of late night overflights followed by heavy early morning overflights on the

City. My own experience, however, demonstrates that such level is substantial during much of the year. Since 33 L is the only runway that can be used when there are severe northwest winds, if the runway is built, the City will continue to suffer from such late night overflights followed by early morning overflights when such winds predominate. But, the City will then also suffer from excessive dwell and persistence during the rest of the day resulting from the use of the new runway. A fair reading of the DEIS, however, shows that these clear noise environmental impacts to the City are not adequately addressed.

Not only is there a clear danger of severe noise environmental impacts on the City, but the remedial measures proposed by Massport are ineffective. For a community like Somerville which suffers from substantial late night followed by early morning overflights, Massport offers no soundproofing. The only remedial measure discussed in the DEIS is the projected increase in the use of Stage 3 aircraft. (6-9). However, use of stage 3 aircraft is already required during the late night and early mornings. But it is the noise from these stage 3 aircraft that currently awakens people in the City after 11:00 p.m. and after 6:00 a.m. And without actual hard data from noise measurements in places such as Winter Hill in the City, there can be no objective analysis of the noise experienced by people when these stage 3 jets are used. Unfortunately, it appears that the proposed remediation requiring the use of stage 3 jets would be nothing more than an empty palliative for the residents of the City. 59.5 59.6

IV. SUMMARY

In summary, the DEIS utterly fails to address the current impact of noise from Logan on the City, despite the fact that the City is the densest community in the Commonwealth. Likewise, the DEIS fails to address the current level of late evening followed by early morning overflights, despite the fact that this type of air traffic results in substantial sleep deprivation over extended periods of time.

Lastly, the DEIS fails to address the future noise impact of the proposed runway on the City. As a result, the Secretary of Environmental Affairs should insure that the Final EIR measures and discusses these present and future noise impacts on the City as set forth herein

Very truly yours,

William A. White, Jr., Chairman
Committee on Housing and
Community Development

CITY OF SOMERVILLE, MASSACHUSETTS
BOARD OF ALDERMEN

WILLIAM A. WHITE, JR.
ALDERMAN AT LARGE

Via Fax 727-1598
Mr. Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202

Dear Mr. Pugsley:

Today I filed with your office a letter setting forth my comments to the Draft Environmental Impact Statement on the proposed expansion of Logan Airport. I inadvertently failed to attach Exhibit A to those comments. As a result, I am faxing you a copy of Exhibit A and ask that you attach it to my letter to you. Thank you for your cooperation.

Very truly yours,

William A. White, Jr.

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. William White
16 Browning Rd.
Somerville, MA 02145

Telephone: 617-625-2600

Disturbance Date and Time: 06:42 on 11 Apr 99 to
06:42 on 11 Apr 99

Conditions:

Wind Direction: 300 deg
Ceiling: 25000 Ft
Wind Speed: 9 Knots
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 33L

Complaint Description: The last aircraft last night went over at 1:30 am. It is only 6:42 am and there are more aircraft flying over already.

Massport Report of Investigation: You are affected by jet departures on Runway 33L, in use with northwesterly winds. A change of runway configuration occurred at 10:10 am.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

EXHIBIT 1A

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. William White
16 Browning Rd.
Somerville, MA 02145

Telephone: 617-625-2600

Disturbance Date and Time: 03:44 on 13 Apr 99 to
03:44 on 13 Apr 99

Conditions:

Wind Direction: 320 deg
Wind Speed: 13 Knots
Ceiling: 15000 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 33L

Complaint Description: An aircraft flew over at 3:30 am. Please identify the stage. Who authorized the flight? Why not over the water?

Massport Report of Investigation: You were affected by an LR35 departure from Runway 33L. The aircraft was Stage 3 and used Runway 33L with the strong northwesterly winds. The FAA has been notified of your observations and concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: No

cc: FAA Boston Tower Chief

Letter 59
City of Somerville, Board of Alderman William A White Jr., Chairman, Committee on Housing and Community Development

Code	Topic 1	Topic 2	Comment	Response
59.1	Noise	Monitoring	Although the heart of the flight tracks from 33L is over the City and is located less than four miles from the end of Runway 33-L, (5-30), Massport locates no noise monitoring equipment within the City or within any reasonable distance from the City.	Requests for new noise monitors should be addressed to Massport.
59.2	Noise	Model	The Day-Night Sound Level (DNL) used by Massport is "a weighted sound level of a steady-state noise during a 24-hour day which contains the same sound exposure as does the summation of the sound exposures from all of the individual events that occur during a 24-hour period, with the provision that noises occurring at night are increased by 10dB." Without doubt, those areas with a high DNL suffer from excessive noise. But because it is a 24 hour average, the DNL understates the actual impact of noise on many affected communities such as Somerville.	For environmental sounds of all types, the EPA adopted the Day-Night Sound Level (DNL) to account for both the magnitudes and duration of the various sounds. The DNL penalizes sounds made during the nighttime (chosen in the United States to be 10 PM to 7 AM) by adding ten dB to the measured values. It is unfortunate that it is often characterized as the "average level" and therefore some people believe that it does not represent the levels of individual events. Actually, it represents the total noise exposure in a 24-hour day, including a nighttime penalty of ten dB. Thus, it accounts for all the individual sound events during the 24-hour period. EPA's review of the available case studies on the effects of environmental noise on humans found that DNL correlates better with the effects than any measure of the various individual events.
59.3	Noise	Impacts	A realistic figure should be developed to measure the "cost" of noise, measuring the number of people affected by noise, the level of noise, and the consequences of noise (such as hours of lost sleep, inability to enjoy one's home, etc.). Such a measure should then be contrasted with the economic costs which the DEIS claims result from delays.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
59.4	Alternatives	Runway 14/32	...although departures from [Runway] 33L are expected to triple, and the heart of this flight pattern is over the City, ([Page] 6-13), Massport does not specifically address the impact on the City from this tripling in air traffic. Instead, Massport provides charts showing increases in dwell exceedence and persistence exceedence for the various runways. (Figures 6.2-5 through 6.2-8). These charts demonstrate that dramatic increases in dwell and persistence over the City will result from departures from 33L if the runway is constructed. There is, however, no description of the impact of the new runway on heavy late night overflights followed by heavy early morning overflights.	There are five jet departure tracks from Runway 33L. Of these, two tracks turn over Somerville (refer to Figure 6.2.3 of the Supplemental DEIS/FEIR). These two tracks carry less than 30 percent of the departures from Runway 33L. The increase in effective jet departures from Runway 33 over Somerville is from about 3.3 percent to 3.6 percent in the 29M Low Fleet scenario and from 2.7 percent to 3.2 percent in the 37.5M Low Fleet scenario (refer to Table 6.2-2 of the Supplemental DEIS/FEIR). This increase of about ten percent would not dramatically increase either dwell or persistence. The increases attributed to "Arr 15/Dep 33" in Figures 6.2-5 through 6.2-8 of the Supplemental DEIS/FEIR result primarily from increased arrivals on Runway 15 (refer to Table 6.2.2 of the Supplemental DEIS/FEIR). Since these arrivals do not fly over Somerville there will be little increase in noise in Somerville from the proposed changes at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
59.5	Noise	Sound Insulation	Not only is there a clear danger of severe noise environmental impacts on the City, but the remedial measures proposed by Massport are ineffective. For a community like Somerville which suffers from substantial late night followed by early morning overflights, Massport offers no soundproofing.	If the Preferred Alternative is implemented, Somerville's overflights will increase in comparison to the No-Action Alternative. However, the highest resulting noise exposure in that community is estimated to be on the order of 55 dB DNL, well beyond the 60 dB DNL contours shown in Figures 6.2-8 and 6.2-10 through 6.2-14 of the Supplemental DEIS/FEIR.
59.6	Noise	Impacts	The only remedial measure discussed in the DEIS is the projected increase in the use of Stage 3 aircraft. (6-9). However, use of Stage 3 aircraft is already required during the late night and early mornings. But it is the noise from these Stage 3 aircraft that currently awakens people in the City after 11:00 p.m. and after 6:00 a.m.	The average noise of Stage 3 aircraft operating at Logan Airport is expected to decrease with time as the low bypass JT8D powered aircraft, which have been hushkitted to meet Stage 3 requirements, are retired from the fleet and replaced by the quieter new high bypass powered Stage 3 aircraft. The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Table 6.2.15 of the Supplemental DEIS/FEIR reports these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4.1 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts. In addition, Massport proposed the following noise mitigation measures: Runway 14/32 would be designed, constructed, and operated to handle over-water operations only (unidirectional). Massport would seek to construct Runway 14/32 to reflect unidirectional use. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. Massport has developed PRAS goals to which the FAA attempts to achieve given weather and safety conditions. Section 4.3 of the Supplemental DEIS/FEIR provides an evaluation of existing measures for monitoring PRAS achievement and demonstrates that the FAA has improved its performance relative to the PRAS goals. The Preferred Alternative mitigation program includes additional reporting requirements recommended to enhance the Massport monitoring effort.

CITY OF SOMERVILLE, MASSACHUSETTS

CITY CLERKS OFFICE

WILLIAM ROCHE
ACTING MAYOR

ARTHUR McCUE
CITY CLERK

LETTER 60

Mr. Arthur Pugsley
MEPA Unit
Executive Office of
Environmental Affairs
100 Cambridge St.
Boston, MA 02202

Dear Sir:

Enclosed please find a certified copy of a Resolution unanimously adopted by the Somerville Board of Aldermen at their April 22, 1999 meeting.

Alderman-at-Large William A. White, Jr. the resolution's sponsor, also has requested that a copy of the video tape of the public hearing regarding Logan runway expansion which was held on April 13, 1999 at Somerville City Hall be forwarded to you. Accordingly both documents are included herewith.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

Arthur B. McCue
City Clerk

Board of Aldermen
City of Somerville
Massachusetts

City Hall
Tel. - 625-6600

April 22, 1999

RESOLUTION

RESOLVED, That this Board of Aldermen hereby adopts the comments of Alderman William A. White Jr. on the Draft Environmental Impact Statement for Logan Airside Improvements Planning Project as set forth in the attached letter from Alderman White to Mr. Arthur Pugsley, dated April 22, 1999; **AND BE IT FURTHER** 60.1

RESOLVED, That this Board requests that a copy of this Resolution be sent to Mr. Pugsley for inclusion in MEPA's record.

A TRUE COPY ATTEST:
Esther B. McCue
CITY CLERK

Submitted By:

President Joseph A. Curtatone

Alderman Grace A. Abruzzio

Alderman John R. Buonomo

Alderman William A. White Jr.

Alderman Kevin A. Tarpley II

Alderman Thomas F. Taylor

Alderman Walter F. Pero

Alderman Stanley M. Kotty Jr.

Alderman John M. Connolly

Alderman James F. Halloran

Letter 60
City of Somerville, City Clerk's Office
Arthur B. McCue, City Clerk

Code	Topic 1	Topic 2	Comment	Response
60.1	General Opposition			Comment noted.

TOWN OF WINTHROP

GERALD B. OGUS, Chairman
ROBERT L. DRISCOLL, JR.
MATTHEW D. LANZA

PATRICIA A. FRAZIER
Administrative Secretary

TOWN HALL
WINTHROP, MA 02152-3156

TEL: 617-846-1077
FAX: 617-846-5458

OFFICE OF THE
BOARD OF SELECTMEN

LETTER 61 April 22, 1999

BY HAND (EOEA) and VIA AIRBORNE OVERNIGHT (FAA)

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, Massachusetts 01803

Secretary of Environmental Affairs
Attention: MEPA Unit, Mr. Arthur Pugsley
100 Cambridge Street
20th Floor
Boston, Massachusetts 02202

Re: Boston, Logan International Airport
Logan Airside Improvements Project
Draft Environmental Impact Statement/
Environmental Impact Report
EOEA No. 10458

Gentlemen:

This letter provides the comments of Board of Selectmen of the Town of Winthrop, Massachusetts ("Selectmen") on the Draft Environmental Impact Statement/Report ("DEIS/R") for the above-referenced project ("Project") under the Massachusetts Environmental Policy Act ("MEPA"), the National Environmental Policy Act of 1969 ("NEPA") . It also provides the comments of the Selectmen under Section 4(f) of the Department of Transportation Act of 1966 ("4f"). Finally, it provides the comments of the Selectmen on the Notice of Project Change for the Project, submitted by the Massachusetts Port Authority ("Massport") on February 19, 1999.

The Selectmen find the DEIS/R wholly inadequate under both NEPA and MEPA. The

Selectmen urge the United States Environmental Protection Agency ("EPA") to give the DEIS/R a ranking of "Environmentally Unsatisfactory" and "Inadequate." The reasons for these findings by the Selectmen are as follows:

A. The DEIS/R completely ignores the "induced demand" issue highlighted by the EPA in its comments on the Environmental Notification Form/Scope of Work ("ENF") and required to be studied and included in the DEIS under the regulations of the Council on Environmental Quality. The Project clearly increases capacity and fosters the growth of both passenger volume and aircraft operations at Logan. Yet, the DEIS/R pretends that the Project is somehow "demand neutral." 61.1

B. As a result, virtually all of the environmental impact analyses for the Project are inaccurate because they are based on the same passenger levels for both the preferred alternative and the no-build alternative. This means that the DEIS/R significantly understates both the environmental impacts of the Project and the potential for passenger diversion of various alternatives. 61.2

C. Whole categories of impacts on Winthrop, such as land use patterns, historical and cultural resources and wetlands are ignored. 61.3

D. Several reasonable alternatives have not been included or analyzed in any meaningful way. 61.4

E. The DEIS/R ignores major impacts on 4f resources. 61.5

F. It also ignores public health issues. 61.6

G. The DEIS/R fails to meet the requirements of both MEPA and NEPA with respect to mitigation. 61.7

1. The Basic Flaw: This Project Increases Capacity and Induces Growth Rather Than Just Reducing Delays

A. Induced Demand

The stated purpose of the Project is to reduce delays at Logan. Even assuming for the sake of argument that the Project would address that problem, it is quite clear that the very existence of the Project will also induce passenger demand. The EPA stated this issue quite succinctly in its November 8, 1995 comments on the ENF for the Project:

> EPA is concerned that airside and landside improvements will attract more passengers to the airport ("induced demand"), as opposed to merely

accommodating the already anticipated passengers.

The Regional Administrator, John DeVillars, echoed this theme in his November 13, 1995 comment on the ENF:

> ...the expected increase in passenger volume that will be accommodated by these projects will affect regional and local transportation patterns and consequently, air quality.

EPA did not raise these concerns in a regulatory vacuum. The regulations of the Council on Environmental Quality ("CEQ") for implementing NEPA require an EIS to analyze both direct and indirect effects. An "indirect effect" is defined by CEQ to include:

> ...growth inducing effects and other effects related to induced changes in the...growth rate, and related effects on air and water and other natural systems, including ecosystems.

40 CFR Section 1508.8 (b). Thus, it is hardly surprising that EPA was so concerned about "induced demand" in 1995. The NEPA regulations require the DEIS/R to deal with the issue.

The project proponents, Massport and the FAA, inexplicably try to pretend that this requirement does not exist. They cling to the notion that the same number of passengers will fly in and out of Logan whether or not the airside "improvements" are built, claiming that "[n]either the runway nor any other improvements associated with the... Project will induce demand by new passengers who would not otherwise come to Logan." This "demand neutral" approach flies in the face of common experience and common sense. It is well established that major regional transportation initiatives such as highways or runways induce demand. Indeed, the Boston business community and Massport have been promoting the Project in the press with the claim that Boston will lose conventions, tourists, jobs and business meetings if the Project is not built. If, for the sake of argument, one accepts theses claims by Project backers, then it is quite clear that the Project will induce tourists, conventioneers and business people to come to Boston, using Logan to do so.

61.8

Conversely, if the Project is not built, these same passengers will (according to the business community and Massport) avoid Boston at all costs. Thus, the no-build alternative clearly has a "negative inducement" factor. For example, the DEIS/R claims that if the Project is not built, the average delay at Logan for each takeoff and landing may well reach almost an hour. If that is the case, then the time differential between flying and taking the alternative of high speed rail between Boston and New York is virtually eliminated. Clearly, the effect of such a leveling of the transportation playing field will be to induce more Boston-New York passengers to take the train instead of the shuttle. However, the DEIS/R completely ignores this effect.. It pretends that air travel will still have a more than one hour time advantage over high speed rail (Table 2.4-5). Are Massport and the FAA seriously arguing that average delays of one hour per

flight will have no effect on Logan's passenger and operations levels? Put another way, there is little or no chance that Logan's passenger level would ever approach 45 million under the no-build scenario with average delays of almost an hour per operation.

The DEIS/R also fails to look at induced demand issue with regard to the cumulative effects of the combination of Logan 2000 landside program and the airside Project. Massport and FAA employed the same demand neutral argument with respect to the billion dollar Logan 2000 landside project.. Now Massport and FAA claim that putting a billion dollars into improving ground access, parking and terminal space at Logan (Logan 2000), contributing $300 million to a new harbor tunnel and related highways designed to improve interstate highway access to Logan (Third Harbor Tunnel and Route 1A), and finally creating a new runway and various airside improvements (the Project), all at the same time and in the same location will have absolutely no effect on passenger demand at the airport.

It is time for Massport and the FAA to abandon that "theory." The Secretary's decision on the ENF clearly stated that the DEIS/R "should include analysis of cumulative impacts, and should clearly explain the relationship between the Logan 2000 landside program and the Airside Improvements." The EPA went further. The Regional Administrator stated that the DEIS/R would "provide the critical opportunity" (emphasis in original) to examine the synergistic or cumulative effects of Logan 2000 and the Project. The EPA comments on the ENF described the FAA's environmental review for Logan projects as "segmented." EPA was very clear in its recommendation that the DEIS needed to evaluate the possibility "that more people will drive to the airport if there is a new garage, and that more passengers will choose to fly from Logan...if Logan's capacity is increased as a result of airside improvements such as a new runway." EPA questioned the Massport and FAA position that none of the landside/airside projects would induce demand, and called for a DEIS/R that would analyze the inducement factor in a "comprehensive landside/airside" context. 61.9

The DEIS/R pays lip service to these comments by including a section entitled "Cumulative Impacts." However, it ignores the substance of the comments. In the "Cumulative Impacts" section of the DEIS/R, Massport and FAA simply return to their prior position that "[a]irside improvements ...do not relate to or affect any of the landside facilities or operations, and consequently, do not change any of the" environmental analyses. This again flies in the face of the expert opinions of the Secretary of Environmental Affairs and the EPA, as well as common experience and common sense. For example, if Massport cannot find ways to get 45 million or even 37.5 million passengers to and from Logan, then it is certainly reasonable to assume that less people will fly into and out of Logan and the need for the airside Project diminishes. Similarly, if you do not build the airside Project and, as a result, delays increase dramatically, then it is also reasonable to assume that passenger and operation levels will decrease and you may not need, for instance, the second phase of the West Garage. In short, the entire Logan package, Logan 2000 and the Project, will work together and be anything but "demand neutral." That package will induce demand; or, by its absence will cumulatively reduce demand.

The DEIS/R needs to examine all of the ramifications of the induced demand factor and its corollary, the negative inducement factor. It must examine if any airport has ever functioned with delays averaging almost one hour per flight and a ground access system that simply cannot handle the tens of millions of cars that Massport and FAA project will be headed for Logan even if Massport achieves its ambitious HOV and transit goals. It must determine how many passengers and operations such a level of delay (or anything close to it) getting to and flying out of the airport would eliminate as passengers choose other modes or perhaps avoid Boston altogether. Then, and only then, can the environmental impacts of the Project versus other alternatives, including the no-build alternative, be compared. 61.10

2. Capacity Enhancement by Design

The demand-inducing aspects of the mere existence of the Project (and its related projects) are exacerbated by the Project's very design, which strongly suggests that it's main purpose is to provide for an increase in operational capacity at Logan rather than just addressing the current delay situation. For example, Massport and FAA claim that Runway 14/32 is designed primarily to deal with the problem of wind-related delays. However, according to the DEIS/R, such delays occur only 11% of the time. What will be the effect of using Runway 14/32 the other 89% of the time? Severe wind delays (1 runway) occur only 10 days per year. What will 14/32 be used for on the other 355 days? Runway 14/32 is designed to handle 70,000 operations per year. Do you need to handle 70,000 flights (13% of all operations) just to deal with 14/32's projected share of the delay reduction activity? It certainly seems that Runway 14/32 is designed to allow Logan to increase its overall capacity rather than to just address wind-related delays. 61.11

The same can be said for the taxiway improvements. According to the DEIS/R, the taxiway improvements have no effect on runway-related (or wind -related) delays. Further, taxiway traffic issues are only a very small part of the delay problem. If the purpose of the Project, as stated in the DEIS/R, is "[t]o address the delay problem at Logan" then the taxiway improvements are not necessary. Clearly, the taxiway improvements are necessary and are designed to enable the project proponents to push more people and planes through Logan, not to deal with the delay problem. 61.12

Indeed, if delays at Logan are the problem that the Project is supposedly designed to address, then it appears to be a poor solution. Even with all of the airside "improvements," the DEIS/R only projects a 30% improvement in the delay picture. What is being done about the other 70% of the problem? The Secretary's decision on the ENF recognized this incongruity. That decision required the DEIS/R to discuss delays from non-wind related conditions, such as delays started at other airports. The DEIS/R fails to meet this requirement. 61.13

Are new runways and other airside "improvements" really the only answer to the delay problem? According to the DEIS/R, there are five airports in the U.S. which have a greater level of delay than Logan. Are those airports proposing new runways and taxiway improvements? 61.14

The DEIS/R does not tell us. Are those airports addressing their more severe delay problems with other alternatives? Again the DEIS/R is silent. Are the cities that experience more delay than Logan suffering from a lack of tourist, convention and business travel? The reader of the DEIS/R is not provided with such information, but he or she is told that such will be the fate of Boston if the Project is not built.

If wind-related delay reduction is not the major goal of the Project, then what is? Note that Logan ranks 6th in delays and 11th in operations, but only 17th in passenger volume. Clearly, delays are not attributable to the crush of tourists, conventioneers and businesspeople that the Project's backers insist will disappear if the Project is not built. If that were the case, then the passenger volume ranking would not be so low. These rankings suggest that the real problem which the Project is aimed at may be the crush of small commuter and shuttle flights which cause the high operations to passenger ranking ratio. 61.15

Thus, the Project appears to be anything but "demand neutral." Its very existence in isolation would induce demand by virtue of the fact that it will make air travel from Logan significantly more attractive than it would be absent the Project. That inducement is compounded by the synergy of the Project with the Logan 2000 landside improvements and the Third Harbor Tunnel, which allow passengers to get to and from the flights that the airside "improvements" will accommodate. The Project is also designed to accommodate, handle and thus induce much more than air traffic affected by wind-related delays. It is designed to enable Logan's managers to pump an ever-increasing amount of operations through the airport. That is the only way that the demand projections for the year 2010 can be met.

2. The Project's Environmental Impacts are Understated

A. Fleet and Passenger Levels Cannot be the Same for All Alternatives

Once one acknowledges the fact that the Project is not "demand neutral," but instead represents a powerful engine for accommodating and inducing the growth of operations at Logan, it is clear that environmental analyses in the DEIS/R for every medium or pollutant significantly understate the impacts of the Project. This stems from the fact that the DEIS/R assumes that the Project will have absolutely no impact on demand at Logan and therefore applies the same fleet and passenger levels to each alternative analyzed, including the no build alternative. With this simplistic approach (questioned by both the EPA and EOEA), Massport and FAA can claim that the Project will produce environmental "benefits." These "benefits" stem from the fact that if fleet and passenger levels are equal for every alternative, then the preferred alternative will always move that equal number of planes and passengers through the airport more quickly and thus more cleanly. The aircraft will move beyond the relevant airshed, noiseshed, etc. more rapidly, thereby "reducing" impacts. However, alternatives 2, 3 and 4 (all of which exclude the new runway and two of which exclude all of the physical "improvements") should not be compared to the preferred alternative at the same fleet and passenger levels. This is because, as demonstrated above, the very "efficiency" of the preferred alternative, and the 61.16

delays associated with the "inefficiencies" of alternatives 2, 3 and 4 would change the demand levels (and thus the fleet and passenger levels) at any point in time.

Take for example the impact on Court Road residences in Winthrop from taxiway noise. Under alternative 1A (the preferred alternative) a certain level of passengers and operations will produce a level of impact. That level should be greater than the level produced under alternative 4 (the true "no build" alternative) at any given time because under alternative 4 there should be less demand for air travel and thus less passengers and operations. The DEIS/R, however, ignores the induced demand and capacity enhancement attributes of the preferred alternative and simply assumes that the same number of people will fly into and out of Logan under alternatives 1A and 4, even as delays approach one hour for each operation as projected under alternative 4. The result is that both the alleged environmental "advantage" of the preferred alternative and the environmental impacts of alternative 4 are overstated.

B. Even Without the Induced Demand Factor, Impacts are Ignored or Miscalculated

(i). Noise

Noise is a particularly troublesome factor for Winthrop. The DEIS/R presents a confusing and often inconsistent picture of the Project's noise impacts. This approach fails to meet MEPA/NEPA standards as well as certain specific requirements of the comments and decision on the ENF. 61.17

The noise data and the conclusions derived therefrom in the DEIS/R are flawed. Massport continues to employ its computer noise models even when it knows that the models understate actual noise, especially in Winthrop. For example, the DEIS/R utilizes noise data for 1993 from the models when actual, real life data from noise monitors is available which shows higher noise levels.

Why does the DEIS/R utilize 1993 as the noise baseline year? That year featured the highest number of operations until last year, the highest delay ranking in Logan's history, a lower percentage of Stage 3 aircraft in the fleet than you would find in subsequent years, and in 1993 the INM model had not yet been corrected to cure the understatement of noise. In short, 1993 seems to be a fairly "dirty" and inaccurate baseline choice. Its use may overstate the alleged "improvements" from the Project. 61.18

A basic premise of the DEIS/R is that without the airside "improvements" Logan will become a "north-south" airport. Winthrop is to the east of Logan. Presumably, Winthrop would be a candidate for more noise with the "improvements." Yet the DEIS/R purports to demonstrate that Winthrop gets less noise with the Project. That does not make sense. 61.19

Ground taxi noise is a particular problem for Winthrop residents, especially at Court Road. Indeed, the DEIS/R shows that the highest level of ground taxi noise is found at Court 61.20

Road, from aircraft taxiing to the 22 runways for departure. How then, can Massport and FAA claim that a centerfield taxiway which brings more planes per hour to the 22s for departure somehow reduces noise on Court Road? The answer should not be just "increased efficiency" because the data show that even with all of the airside improvements delays will increase by a factor 1.4.

The Secretary's decision on the ENF specifically requested that the DEIS/R should include the 60 dB contour. This is important for Winthrop and many other communities since the DEIS/R acknowledges that the population within the 65 dB contour actually goes up with the addition of the airside "improvements." Naturally, one wonders if the same is true for the 60 dB contour. It is. While the DEIS/R does not include the 60 dB contours throughout the main text, hidden away in Appendix L, Table 1.1 is data demonstrating that the population exposed to 60 dB with the airside "improvements" goes up in every fleet scenario. 61.21

Even utilizing Massport/FAA's flawed assumption that the Project has nothing to do with demand and passenger levels, it is clear that the airside "improvements" do not deliver the promised noise benefits for portions of Winthrop. The important "night time equivalent" sound level values go up in Winthrop in the 29 million low fleet scenario at 4 out of 5 monitoring locations when you add Runway 14/32. In the 37.5 million low fleet scenario, adding 14/32 makes these values go up at 2 out of the 5 locations in Winthrop. Similarly, sound from ground operations increases in Winthrop with the addition of airside "improvements." At both the Somerset and Johnson as well as the Loring and Court Road locations noise goes up with the "improvements" versus the no action alternative. 61.22

(ii). Air/Odor Pollution

Massport and FAA do not seem to have taken EPA's comments on the air pollution issue seriously. EPA called for an inventory of total air toxics. Where is it? EPA requested a combination of all landside and airside emissions. It is difficult to determine if that analysis is included in the DEIS/R. 61.23

The issue of the Project's conformity with the federal Clean Air Act is an important one. As with the issue of demand and cumulative impacts, Massport and FAA simply assume the issue away. They come to the rather tortured conclusion that no Conformity Determination is required under the Clean Air Act, even though emissions go up for just about every category of pollutant if the Project is built. Their "reasoning," once again, is that the preferred alternative results in an alleged "reduction" of air pollutants when compared to the no action alternatives <u>at the same fleet and passenger levels.</u> Such reasoning, as demonstrated above, completely ignores the induced demand issue and the cumulative effects issue that EPA noted. It further ignores the simple common sense argument that it is highly unlikely (if not impossible) that anything close to 45 million or even 37.5 million passengers will utilize Logan if delays for each takeoff and landing average about an hour and ground access is a nightmarish experience. 61.24

The Massport and FAA "theory" that the Project does not require a Conformity Determination is simply asserted in the DEIS/R without any citation or reference to provisions of the Clean Air Act, its implementing regulations or case law that allow such a conclusion. The fact is that the Project will cause emissions to go up. One such emission is NO x. NO x is one of the precursors of ozone. Massachusetts is a "serious non-attainment" state for ozone under the Clean Air Act, as noted by Administrator DeVillars in his comments on the ENF. The Project will allow or accommodate ever-increasing numbers of Stage 3 aircraft to fly into and out of Logan. Stage 3 aircraft, while quieter, produce more NO x than the noisier planes that they are replacing. Therefore, it is clear that the Project will have a decidedly negative effect on the Commonwealth's ability to meet Clean Air Act requirements. A Conformity Determination should certainly be required. The "theory" in the DEIS/R used to avoid such a Determination finds little support in the facts and the DEIS/R provides no legal support for such a position. 61.25

The DEIS/R goes on at great length to make the case that delays at Logan are extremely costly. However, it is silent on the economic impact of the failure of Massachusetts to achieve required results under the Clean Air Act. Such costs could be astronomical. Failure to achieve the requirements of the Act can result in the loss of federal highway funds. Given the cost of the Central Artery, what would be the impact of such a loss on the Massachusetts economy? Logan is one of the largest generators of pollution in Massachusetts. If Logan helps to trigger a failure to achieve Clean Air Act goals, what will be the costs in terms of added air pollution requirements for private stationary sources, such as utilities and factories? Will businesses relocate because tougher air pollution standards imposed on them as a result of emissions emanating from Logan? 61.26

The dispersion model results do not seem to conform to the inventory model results. For example, at the 37.5 million low fleet scenario, 3 out the 8 pollutants in 2010 for the true no-build alternative are either less than or the same as the results for the preferred alternative. The same holds true for the 37.5 million high fleet scenario in 2010. For the 45 million high fleet scenario, a full half (4/8) of the pollutants measured are less for the true no-build alternative than they are for the preferred alternative. These results draw into question the argument in the DEIS/R that the "efficiency" of the preferred alternative provides clear air pollution benefits over no-build alternatives. 61.27

Finally, the discussion in the DEIS/R of the dispersion modeling results is completely disingenuous and casts further doubt about the air pollution conclusions in the DEIS/R. When the results show that the preferred alternative has a slight advantage over the no-action alternative, the DEIS/R proclaims that the "the lowest levels occur in association with" the preferred alternative. However, when, as noted above, the results show that the no-action alternative has virtually the same advantage over the preferred alternative, the DEIS/R comes to the very different conclusion that "there will be no detectable differences in air quality impacts among the four alternatives," or "there is no significant difference." This lack of consistency in analysis draws into question the conclusions of the DEIS/R. Is it an advocacy document or an impartial environmental disclosure document? 61.28

(iii). Land Use

Both MEPA and NEPA require the DEIR/S to discuss impacts on land use. The CEQ regulations implementing NEPA are quite specific on this requirement. They provide that an environmental impact statement "shall include discussions of:

> (c) possible conflicts between the proposed action and the objectives of... local...land use plans, policies and controls for the area concerned...(g) Urban quality, historic and cultural resources, and the design of the built environment...

40 CFR Section 1502.16 (emphasis added).

There can be no doubt that Winthrop is part of the "area concerned." There can also be no doubt that Winthrop's "built environment," "urban quality," and "historic and cultural resources are heavily impacted by the airport and will be affected by the Project. Indeed, part of the airport lies within Winthrop. Major runways are located only a stone's throw from Winthrop residential neighborhoods and from the Belle Isle Marsh, an important historic and cultural resource. The overflights from Logan have had a considerable impact on land use and land values in certain parts of Winthrop. Airport-related noise and air pollution impacts have helped to shape the "built environment" and "urban quality" of such neighborhoods. A school building listed on the National Register of Historic Places is either in or quite near to the 65 dB contour, as is a park. The use and enjoyment of one of Winthrop's greatest resources. the beach, is heavily impacted by noise from aircraft. 61.29

Yet, the DEIS/R includes the rather astonishing statement that the airside improvements will "not alter existing land use patterns." This is preposterous. Airport development and expansion have already had a major effect on land use in Winthrop. Further expansion associated with the Project will definitely impact land use patterns in Winthrop.

The DEIS/R must explore this. At a minimum it should look into the land use impacts on Winthrop brought about historically by Logan development and passenger growth. That historical experience should be utilized to develop a picture of what impacted portions of Winthrop will be like in 2010 at various passenger and fleet scenarios.

(iv). Wetlands/wildlife habitat/waterways

The DEIS/R claims that the project is not within any wetlands resource area. However, it also states that the Project will need an Order of Conditions from the Boston Conservation Commission. Obviously, then, there is at least a presumption of impact on a resource area. Such impacts need to be discussed. 61.30

There is no mention in the DEIS/R of the possibility that the Project would require an

Order of Conditions from the Winthrop Conservation Commission. Clearly the Project will have an impact on wetlands areas in Winthrop. Noise and exhaust pollution will impact on Belle Isle Marsh. Runoff and outflow increases from new taxiways may wash up on Winthrop shores. These issues should be discussed in the DEIS/R. 61.31

The DEIS/R discusses the issue of the Upland Sandpiper nesting areas, but not in the context of the wildlife habitat portion of the Wetlands Protection Act 61.32

The Project is planned to be constructed on filled tidelands or waterways. It represents a significant expansion of structure on existing fill. The DEIS/R does not discuss any possible need for a Chapter 91 license and/or compliance with the Rivers and Harbors Act or the Clean Water Act. . 61.33

(v). 4f/Article 97

While historic resources in Chelsea are discussed, as noted above, impacted historic and cultural resources in Winthrop are ignored. We note further that the DEIS/R summarily dismisses the acknowledged impacts on historic buildings in Chelsea with the proposed soundproofing of the historic residences affected. Soundproofing is a "band aid" approach. It does not fully mitigate the impacts of repeated noise assaults from jet aircraft. It is quite useless during warm weather when windows will be open and it does nothing for sound impacts outside of the building. It hardly represents all feasible mitigation measures. 61.34

While the DEIS/R correctly points out that the legislation creating the Boston Harbor Islands park reservation may have exempted the islands from the provisions of 4f, the quoted legislation does not exempt the park reservation from MEPA and NEPA. In short, just because Congress saw fit to eliminate the Harbor Islands park area as a potential resources for purposes of 4f litigation in connection with airport activities, it does not mean that Congress meant that the environmental impacts on the islands from airport expansion should be ignored for MEPA and NEPA purposes. The Project will clearly have a major impact on the Harbor Islands parkland. It will create major noise problems for those making use of the islands and change the entire experience of anyone exploring the Harbor Islands. Such impacts need to be discussed and analyzed. 61.35

Further, while federal legislation may have exempted the Harbor Islands from 4f litigation, it did not explicitly exempt the Islands for Article 97 purposes. The possible applicability of Article 97 of the Massachusetts Constitution should be explored in the DEIS/R. 61.36

(vi). PRAS benefits

The DEIS/R makes much of the assertion that the Project will enable Massport and the FAA to better achieve PRAS goals. Assuming, for the sake of argument, that this proposition is true, the DEIS/R should take into account the fact that the PRAS goals are almost 20 years old. 61.37

The world has changed a great deal in 20 years. Achievement of the PRAS goals should not, then, be deemed such a terrific benefit automatically. The DEIS/R should discuss whether or not the PRAS goals need revision in order to actually maximize environmental benefits. 61.37 (cont.)

It is also unclear from the DEIS/R just how much compliance with PRAS goals the Project might actually produce. The data in the DEIS/R is all over the map. For some runways the no-action alternative actually results in better PRAS compliance when compared to the preferred alternative. These discrepancies should be laid out and discussed fully in the DEIS/R. 61.38

(vii). Public health

Public health issues relating to airport activity remain a major concern in Winthrop and in other "close-in" communities. Massport was required to present public health issues in its GEIR process for Logan 2000. The result was far from adequate. It was mostly a recitation of Massport monitoring meetings convened by other agencies. The Department of Public Health commented that Massport's presentation was not particularly useful or accurate.

The DEIS/R fails to advance the inquiry into airport-related public health issues. The Project will clearly enhance capacity at Logan and thus increase noise and emissions. According to the report of the Natural Resources Defense Council, Flying Off Course (NRDC 1996), a 1993 EPA study (EPA, Estimation and Evaluation of Cancer Risks Attributable to Air Pollution in Southwest Chicago) ranked aircraft engine emissions ahead of steel mills, hazardous waste treatment plants and other industrial facilities as a potential health hazard. That study concluded that aircraft engines are responsible for 10.5% of the cancer cases in southwest Chicago caused by toxic air pollution. It noted that "it is no surprise that emissions from aircraft engines may have a significant impact on the people living in the study area, especially to people living at receptors adjacent to the airport." The NRDC report also notes that the United Nations is concerned about NO x emissions from airplanes and has considered tightening international controls. 61.39

The DEIS/R should note these studies, update them and present a comprehensive review of what is known about the health effects of airport noise and emissions. Massport and the FAA should work closely with Massachusetts and federal health agencies to address the legitimate health concerns of Winthrop residents who are exposed to potentially harmful emissions. Since the Project will increase those emissions, the DEIS/R must deal with this subject. Massport failed to do so adequately in the GEIR. It is time address the issue properly.

3. Reasonable Alternatives are Not Considered

When Massport's Executive Director came to Winthrop prior to the publication of the DEIS/R to discuss the Project, he was asked if Massport had any alternatives to the proposed Project. His rather surprising answer was quite simply, "No." In other words, Massport had already made up its mind that the Project was the only possible way to address air transportation

in the Boston area. Before the Executive Director had even seen the impacts of the Project, he had already made up his mind that there were no viable alternatives.

Such a statement flies in the face of the purposes of MEPA and NEPA. It is not surprising, then, that the DEIS/R ignores several reasonable alternatives. Rather than discussing and comparing such alternatives, the entire alternatives discussion in the DEIS/R centers on various combinations of airside "improvements" and the no-build alternative. It neglects true alternatives to the Project.

61.40

Two such alternatives involve other airports. There is no discussion in the DEIS/R about a second major airport. Given the ground access and other constraints confronting Logan, a second airport is clearly an option that is worth consideration. It is also clearly reasonable, since second airports have been employed with success in other situations similar to Boston. Dulles Airport in Washington is an example.

Another airport alternative ignored by the DEIS/R is Hanscom Field. This facility is owned by Massport, has adequate runways, is convenient to Boston and is underutilized. The DEIS/R does not explore the possibility of opening up Hanscom to commercial passenger and/or freight traffic. It does not discuss the fact that Federal Express once operated out of Hanscom or that the Hanscom Master Plan, agreed to by the surrounding towns, allows for an increase in operations over the current level. It also fails to acknowledge that many of the so-called "operations" at Hanscom are "touch and go" training exercises where each "touch" and each "go" is considered a separate operation, thus greatly inflating the operational level at Hanscom.

61.41

Another alternative is that of stopping the proposed centerfield taxiway at Runway 15/33. This alternative would greatly reduce taxiway noise and pollution for Winthrop residents. It is not even mentioned in the DEIS/R.

61.42

The DEIS/R makes an attempt at discussing "support" for other transportation modes which can divert air passenger traffic from Logan, but on close inspection the discussion reveals a complete lack of effort in this regard. Most of the studies that are cited in the DEIS are several years old. Massport's participation in reviews of projects such as high speed rail, the North Station-South Station Rail Link ("NSRL") and others consists of simply sending a low-level official to attend meetings and keep a seat warm. The DEIS/R should explore <u>real</u> participation by Massport in promoting projects like high speed rail and the NSRL, including the expenditure of funds. The DEIS/R claims that Massport lacks jurisdiction to get involved in such matters. However, Massport has found the "jurisdiction" when it so desires to spend funds on rail infrastructure to Fort Devens, running a bus public transit operation (Logan Express), building highways ($300 million for the Artery/Tunnel project) and advertising to promote Logan Express and other alternative means for ground access to the airport. Why is Massport incapable of promoting and spending money on alternatives to the Project such as high speed rail to New York and Portland, the NSRL and better highway access to the Worcester Airport?

61.43

California and many European countries utilize the Community Noise Equivalent Level ("CNEL") instead of the DNL. The DSEIS/R should present CNEL data. 61.44

Massport and FAA refuse to even consider applying for curfews under the Airport Noise and Capacity Act of 1990. While such an application may be fraught with difficulty, it is still legally available and thus still a reasonable alternative. 61.45

4. Concrete Mitigation Measures are Missing

The MEPA regulations require the DEIS/R to contain Section 61 findings. The document does not meet this requirement. Mitigation commitments are sorely lacking. 61.46

As noted above, soundproofing is not adequate mitigation. It is a "band aid" approach which is completely ineffective for much of the year and totally ineffective outside of a soundproofed building. Yet, the DEIS/R notes repeatedly that soundproofing is the mitigation answer to all noise problems. 61.47

Massport has had years to deal with the Upland Sandpiper habitat problem. Instead of coming up with a plan for mitigation that can be reviewed in the DEIS/R, the document just notes that Massport is working with another state agency to develop options. That is not good enough. 61.48

The DEIS/R assumes that Runway 14/32 will be "unidirectional" only. However, it does not provide any detailed discussion as to how that restriction will be put in place and maintained over time. Indeed, the DEIS/R simply recites that FAA "policy" will keep 14/32 unidirectional. Policies come and go. 61.49

5. Notice of Project Change

Massport filed a Notice of Project Change on February 16, 1999. The Selectmen support a Notice of Project Change and urge that the Secretary require Massport to refile the ENF and recommence the EIR process. More than three years have elapsed between the filing of the ENF and the publication of the DEIS/R. That gap has created significant environmental and procedural consequences that require additional analysis.

First, the ENF for this Project was not a typical ENF filing. It was a detailed scope of work that contained a great deal of environmental analysis which truly structures and defines the DEIS/R. It triggered a tremendous amount of controversy and comment. The Certificate of the Secretary was not a simple determination that an EIR was required. It was an 8-page document that was based on the information and analysis contained in the ENF and the issues raised by the comments. All of that information, analysis and commentary is now "stale." The general public has long forgotten the information and analysis set forth in the ENF. The public is entitled to have the benefit of a fresh ENF.

Obviously, the world of Logan has changed over the last three years. For example, in 1995 (a year for which results may have been available for purposes of the 1996 ENF) Logan's delay ranking was 8th in the U.S. That is considerably different from the 1997 ranking that the DEIS/R emphasizes. Passengers and operations have increased significantly. Projections from the GEIR process for passengers and operations which formed the basis of much of the ENF analysis have been shown to be inaccurate over time and have been revised. In short, the facts presented and debated at the time of the ENF and which formed the basis of the 8-page scoping decision have changed.

Other factors have changed as well. High speed rail will come to Boston this year. Boston-Portland rail service is soon to be a reality. Green and Manchester airports have expanded tremendously. Highway improvements to Worcester are underway. All of these changes suggest a different scope and a different EIR.

Environmental issues have also changed. For example, ozone concerns have become more pronounced. Administrator DeVillars in his comments on the ENF noted that the EIR was to be published in approximately 18 months and he pointed out that during that time there will be an increase in "overall airport-related emissions." That increase has now gone on for more than twice the projected time period, doubling Mr. DeVillar's concerns.

The EPA also stressed concerns about funding. Mr. DeVillars pointed out that the Project was competing for funds with other transportation projects, which may have air quality benefits. That funding pool has dramatically shrunk over the last three years as a result of the combination of the escalation of Central Artery costs and reduced overall federal funding.

Accordingly, the Secretary should determine that things have changed and the ENF process must be repeated.

For all of the foregoing reasons, the DEIS/R must be deemed inadequate.

Sincerely,

Robert L. Driscoll, Jr. (NBG)
Robert L. Driscoll, Jr., Selectman

Gerald B. Ogus (NBG)
Gerald B. Ogus, Selectman

Matthew D. Lanza (NBG)
Matthew D. Lanza, Selectman

cc: Senator Kennedy
Senator Kerry
Congressman Markey
Congressman Moakley
Congressman Capuano
Adminstrator Jane Garvey
Administrator John DeVillars
Representative DeLeo
Senator Travaglini
Mayor Menino
Winthrop Airport Hazards Committee
CARE
CAC
Anastasia Lyman

Letter 61
Town of Winthrop, Board of Selectmen
Robert L. Driscoll Jr., Selectman

Code	Topic 1	Topic 2	Comment	Response
61.1	Analysis Assumptions	Passenger Forecasts	The DEIS/R completely ignores the "induced demand" issue highlighted by the EPA in its comments on the Environmental Notification Form/ Scope of Work ("ENF") and required to be studied and included in the DEIS under the regulations of the Council on Environmental Quality. The Project clearly increases capacity and fosters the growth of both passenger volume and aircraft operations at Logan. Yet, the DEIS/R pretends that the Project is somehow "demand neutral."	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Logan Airport Airside analysis and GEIRs.

Code	Topic 1	Topic 2	Comment	Response
61.2	Analysis Assumptions	Passenger Forecasts	...[V]irtually all of the environmental impact analyses for the Project are inaccurate because they are based on the same passenger levels for both the Preferred Alternative and the no-build alternative. This means that the DEIS/R significantly understates both the environmental impacts of the Project and the potential for passenger diversion of various alternatives.	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The analysis in the SDEIS/FEIR includes diversions. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.
61.3	Environmental Review Process	MEPA	Whole categories of impacts on Winthrop, such as land use patterns, historical and cultural resources and wetlands are ignored.	The FAA and Massport have consulted with the Massachusetts Historical Commission (MHC). The MHC has concurred with the FAA's determination that the Preferred Alternative will have no adverse effect on significant historic properties. Refer to Section 6.3.2 of the Supplemental DEIS/FEIR for a description of historic properties, project impacts and mitigation. As described in Sections 6.3 and 6.5 of the SDEIS/FEIR, no impacts to land use or wetlands would result from the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
61.4	Environmental Review Process	MEPA	Several reasonable alternatives have not been included or analyzed in any meaningful way.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
61.5	Open Space/ Parkland	Section 4(f)	The DEIS/R ignores major impacts on 4f resources.	The proposed improvements at Logan Airport will neither incorporate land from the Section 4(f) resource nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site. Therefore, the Preferred Alternative does not constitute a use of Section 4(f) resources. In addition, the FAA has determined that there are no feasible or prudent alternatives to the Preferred Alternative that would achieve the delay reduction, safety, transportation, noise distribution, and other objectives of the Preferred Alternative. Therefore, even if the noise levels associated with the Preferred Alternative were determined to interfere with the normal activity associated with the identified Section 4(f) resources (which they do not), the FAA concludes that the sound insulation mitigation proposed for the affected Section 4(f) structures includes all possible planning to minimize harm from that increase in noise. The Massachusetts Historical Commission (MHC) has concurred that the Proposed Project will have no adverse effect on significant historic properties (MHC letter to FAA, December 21, 1999 Sections 6.3.2 and 6.3.3 of the Supplemental DEIS/FEIR provide a summary of Section 4(f) resources within the project area.
61.6	Public Health	Effects	The DEIS/R ignores public health issues.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
61.7	Environmental Review Process	FAA/NEPA MEPA	The DEIS/R fails to meet the requirements of both MEPA and NEPA with respect to mitigation.	Mitigation is addressed in detail in Chapter 8 of the Supplemental DEIS/FEIR The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Chapter 8 of this Supplemental Draft EIS/FEIR outlines Massport's mitigation commitments associated with the Airside Improvements Planning Project.

Code	Topic 1	Topic 2	Comment	Response
61.8	Analysis Assumptions	Passenger Forecasts	It is well established that major regional transportation initiatives such as highways or runways induce demand. Indeed, the Boston business community and Massport have been promoting the Project in the press with the claim that Boston will lose conventions, tourists, jobs and business meetings if the Project is not built. If...one accepts these claims by Project backers, then it is quite clear that the Project will induce tourists, conventioneers and business people to come to Boston, using Logan to do so. Conversely, if the Project is not built, these same passengers will (according to the business community and Massport) avoid Boston at all costs. Thus, the no-build alternative clearly has a "negative inducement" factor. For example, the DEIS/R claims that if the Project is not built, the average delay at Logan for each takeoff and landing may well reach almost an hour. If that is the case, then the time differential between flying and taking the alternative of high speed rail between Boston and New York is virtually eliminated. Clearly, the effect of such a leveling of the transportation playing field will be to induce more Boston-New York passengers to take the train instead of the shuttle. However, the DEIS/R completely ignores this effect. There is little or no chance that Logan's passenger level would ever approach 45 million under the no-build scenario with average delays of almost an hour per operation.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
61.9	Analysis Assumptions	Passenger Forecasts	The DEIS/R also fails to look at induced demand issue with regard to the cumulative effects of the combination of Logan 2000 landside program and the Airside Project. Massport and FAA claim that putting a billion dollars into improving ground access, parking and terminal space at Logan (Logan 2000), contributing $300 million to a new harbor tunnel and related highways designed to improve interstate highway access to Logan (Third Harbor Tunnel and Route 1A), and finally creating a new runway and various airside improvements (the Project), all at the same time and in the same location will have absolutely no effect on passenger demand at the airport. The Secretary's decision on the ENF clearly stated that the DEIS/R "should include analysis of cumulative impacts, and should clearly explain the relationship between the Logan 2000 landside program and the Airside improvements." The EPA Regional Administrator stated that the DEIS/R would "provide the critical opportunity" (emphasis in original) to examine the synergistic or cumulative effects of Logan 2000 and the Project. The EPA comments on the ENF described the FAA's environmental review for Logan projects as "segmented." ...The DEIS/R ignores the substance of the comments. ...The entire Logan package, Logan 2000 and the Project, will work together and be anything but "demand neutral." That package will induce demand; or, by its absence will cumulatively reduce demand.	The proposed improvements analyzed in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR involve both construction and administrative actions that will facilitate aircraft operations (landings, takeoffs and taxiing). None of the improvements involve landside facility improvements (e.g., terminals and roadways) or related operations. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze in detail the impacts from aircraft operations, including extensive analysis of noise and air quality impacts during the years 1993, 1998 and under future forecast scenarios as well as environmental benefits from certain of the improvement concepts under review. In this respect, the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR conform with scoping directives from the lead federal agency (the FAA) and with applicable FAA environmental orders, all issued in accordance with NEPA, and with directives from EOEA issued under MEPA. The various GEIR documents, including the most recent *Logan Airport 1998 Annual Update* and the *1999 ESPR*, provide additional analytic context by examining cumulative impacts from airside (i.e., aircraft) operations and landside (e.g., vehicular traffic, terminal service vehicles) operations at Logan Airport as well as Massport's comprehensive mitigation program. The GEIR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR as a background document. Each GEIR submission is subject to public review and comment. The *Logan Airport 1998 Annual Update* and the *1999 ESPR* analyses are based on the same forecast levels used in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. The GEIR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. The GEIR is specifically referenced in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. These documents also discuss the relationship of the GEIR/ESPR analysis to the Airside Project analysis. Consistent with past practice, Massport expects that the FAA will take the GEIR/ESPR analysis into account during its deliberations and ultimate decision on the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
61.10	Analysis Assumptions	Passenger Forecasts	The DEIS/R needs to examine all of the ramifications of the induced demand factor and its corollary, the negative inducement factor. It must examine if any airport has ever functioned with delays averaging almost one hour per flight and a ground access system that simply cannot handle the tens of millions of cars that Massport and FAA project will be headed for Logan even if Massport achieves its ambitious HOV and transit goals. It must determine how many passengers and operations such a level of delay (or anything close to it) getting to and flying out of the airport would eliminate as passengers choose other modes or perhaps avoid Boston altogether.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
61.11	Purpose and Need	Delays	The Project's design strongly suggests that its main purpose is to provide for an increase in operational capacity at Logan rather than just addressing the current delay situation. For example, Massport and FAA claim that Runway 14/32 is designed primarily to deal with the problem of wind-related delays. However, according to the DEIS/R, such delays occur only 11% of the time. What will be the effect of using Runway 14/32 the other 89% of the time? Severe wind delays (1 runway) occur only 10 days per year. What will 14/32 be used for on the other 355 days? Runway 14/32 is designed to handle 70,000 operations per year. Do you need to handle 70,000 flights (13% of all operations) just to deal with 14/32's projected share of the delay reduction activity? It certainly seems that Runway 14/32 is designed to allow Logan to increase its overall capacity rather than to just address wind-related delays.	Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway would substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays would represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in current and future passenger and aircraft activity at Logan Airport.
61.12	Purpose and Need	Delays	According to the DEIS/R, the taxiway improvements have no effect on runway-related (or wind-related) delays. Further, taxiway traffic issues are only a very small part of the delay problem. If the purpose of the Project, as stated in the DEIS/R, is "[t]o address the delay problem at Logan" then the taxiway improvements are not necessary. Clearly, the taxiway improvements are necessary and are designed to enable the project proponents to push more people and planes through Logan, not to deal with the delay problem.	While taxiway delays are much lower than runway delays, the taxiway improvements will provide 15,000 to 21,000 annual hours of delay reduction in future scenarios. Just as importantly, the taxiway improvements will increase airfield safety and operational efficiency. Finally, by decreasing ground delays, these improvements will also result in small reductions in noise and air quality impacts of the airfield.

Code	Topic 1	Topic 2	Comment	Response
61.13	Purpose and Need	Delays	Even with all of the airside "improvements," the DEIS/R only projects a 30% improvement in the delay picture. What is being done about the other 70% of the problem? The Secretary's decision on the ENF recognized this incongruity. That decision required the DEIS/R to discuss delays from non-wind related conditions, such as delays started at other airports. The DEIS/R fails to meet this requirement.	The Airside Project is designed to reduce delays from to adverse winds and taxiway congestion. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach the 1999 passenger forecast (29 million) presented in the Draft EIR/EIR until 2002 or 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts will not be achieved until after 2020. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts." To "Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.
61.14	Purpose and Need	Delays	Are new runways and other airside "improvements" really the only answer to the delay problem? According to the DEIS/R, there are five airports in the U.S. which have a greater level of delay than Logan. Are those airports proposing new runways and taxiway improvements? The DEIS/R does not tell us. Are those airports addressing their more severe delay problems with other alternatives? Again the DEIS/R is silent. Are the cities that experience more delay than Logan suffering from a lack of tourist, convention and business travel? The reader of the DEIS/R is not provided with such information, but he or she is told that such will be the fate of Boston if the Project is not built.	Airports with greater delays than Logan Airport (ranked by total OPSNET delays) include Atlanta, Newark, La Guardia, Chicago O'Hare, and San Francisco International. According to the 1998 Aviation Capacity Enhancement Plan, a fifth parallel commuter runway is under design for Hartsfield Atlanta International Airport, and Newark International Airport is constructing an extension for Runway 4L/22R. Other major airports studying or constructing runway improvements include Lambert St Louis, Philadelphia, Dallas – Fort Worth, Detroit Metropolitan Wayne County, Washington Dulles, Minneapolis-St. Paul, and Seattle-Tacoma, all which are ranked in the top 20 airports in terms of total OPSNET delays in 1998.

Code	Topic 1	Topic 2	Comment	Response
61.15	Purpose and Need	Delays	Note that Logan ranks 6th in delays and 11th in operations, but only 17th in passenger volume. Clearly, delays are not attributable to the crush of tourists, conventioneers and businesspeople that the Project's backers insist will disappear if the Project is not built. If that were the case, then the passenger volume ranking would not be so low. These rankings suggest that the real problem which the Project is aimed at may be the crush of small commuter and shuttle flights which cause the high operations to passenger ranking ratio.	The delay measures and Massport's modeling both show that Logan Airport continues to suffer from serious airside delays despite the regional carrier consolidation and the decline in regional carrier operations. Regional carrier consolidation did not substantially reduce delays at Logan Airport because airline overscheduling is not a significant cause of delays at Logan Airport. As the Airside Project analysis shows, the lack of a three-runway configuration to handle arriving flights during periods of northwest winds is a major source of Logan Airport delays. Furthermore, the impact of regional carrier consolidation on future delay levels was explicitly examined through the analysis of several future "Low" fleet scenarios, which assume that commuter aircraft comprise a smaller share of Logan Airport's fleet compared to the "High" fleet scenario (new fleet, incorporating a significant proportion of regional jets was also analyzed). Even future Low fleet scenarios show significant levels of delays at Logan Airport. Based on actual experience and the Airside Project modeling, further regional carrier consolidation is not expected to have a significant impact on delay levels in Low fleet conditions. In high fleet conditions, when airline overscheduling is a major contributor to delays, regional carrier flight consolidation reduces delay levels. Massport proposes to monitor airline overscheduling conditions and to seek voluntary schedule adjustments from airlines to reduce delays caused by overscheduling. If airlines do not voluntarily comply, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
61.16	Analysis Assumptions	Passenger Forecasts	Alternatives 2, 3 and 4 (all of which exclude the new runway and two of which exclude all of the physical "improvements") should not be compared to the Preferred Alternative at the same fleet and passenger levels. This is because, the very "efficiency" of the Preferred Alternative, and the delays associated with the "inefficiencies" of alternatives 2, 3 and 4 would change the demand levels (and thus the fleet and passenger levels) at any point in time.	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Logan Airport Airside analysis and GEIRs.

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61.17	Noise	Model	The DEIS/R presents a confusing and often inconsistent picture of the Project's noise impacts. This approach fails to meet MEPA/ EPA standards, as well as certain specific requirements of the comments and decision on the ENF. The noise data and the conclusions derived therefrom in the DEIS/R are flawed. Massport continues to employ its computer noise models even when it knows that the models understate actual noise, especially in Winthrop. For example, the DEIS/R utilizes noise data for 1993 from the models when actual, real life data from noise monitors is available which shows higher noise levels.	The standard FAA INM is known to produce results that are lower than the Day-Night Sound Levels measured at some of the Massport microphones. To minimize this error, the measured data for 1993 at the close-in monitors were compared to calculated values for the actual 1993 operations using 1993 runway use, day-night split. 1993 is representative of historic high fleet operating conditions at Logan Airport. The results showed that the monitors at the edge of the airport, which were primarily affected by noise radiated during aircraft ground roll, were low by an average of 6.5 dB. Those monitors, primarily affected by landing noise, were low by an average of 4 dB. However, those affected by takeoff noise radiated after the aircraft was airborne (noise levels in Point Shirley, for example) were ±1 dB. Accordingly, in preparation for this study, Massport requested that the FAA approve an adjustment to the INM 5.0 database to add six dB to the noise radiated during ground roll and 4 dB to the noise radiated during the final phase of approach. These corrections were approved and were implemented throughout the Logan Airport Airside Project planning studies.
61.18	Analysis Assumptions	Base Year	Why does the DEIS/R utilize 1993 as the noise baseline year? That year featured the highest number of operations until last year, the highest delay ranking in Logan's history, a lower percentage of Stage 3 aircraft in the fleet than you would find in subsequent years, and in 1993 the INM model had not yet been corrected to cure the understatement of noise. In short, alleged "improvements" from the Project.	The Airside Project has independent utility from existing and proposed landside projects at Logan Airport.
61.19	Noise	Impacts	A basic premise of the DEIS/R is that without the airside " improvements" Logan will become a "north-south" airport. Winthrop is to east of Logan. Presumably, Winthrop would be a candidate for more noise with the "improvements." Yet the DEIS/R purports to demonstrate that Winthrop gets less noise with the Project. That does not make sense.	The principal noise impacts to Winthrop occur in the Point Shirley neighborhoods from departures on Runway 9 and arrivals on Runway 27, in the Court Road neighborhood by departures on Runway 22L/7R, and in the Amelia and Morton location by Runway 4R departures and Runway 22L arrivals and departures. Examination of the effective jet departures for the various alternatives and fleets in Table 6.2.2 of the Supplemental DEIS/FEIR shows that the effective jet departures on Runway 9 are significantly reduced by the Preferred Alternative. This is consistent with the North-South flow since the principal runways used in the northerly flow are Runway 4 for arrivals and Runway 9 plus Runway 4 for departures, with the main load on Runway 9. In Table 6.2.2 of the Supplemental DEIS/FEIR, the effective jet arrivals on Runway 27 are increased by four percent in the 29M Low Fleet scenario and decreased by 3.7 percent in the 37.5M Low Fleet scenario. These data are consistent with the analysis of the Day-Night Sound Levels values at Point Shirley. Examination of Runway 22 effective jet departures in Table 6.2.2 of the Supplemental DEIS/FEIR shows an increase of 0.7 percent for the Preferred Alternative in the 29M Low Fleet scenario and a decrease of 9.2 percent in the 37.5M Low Fleet scenario. Departures on Runway 4 show increases of 0.1 percent and 0.2 percent in those two years. Effective jet arrivals on Runway 22L show decreases of 0.1 percent and 1.9 percent, respectively.

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61.20	Alternatives	Taxiway Improvements	Ground taxi noise is a particular problem for Winthrop residents, especially at Court Road. Indeed, the DEIS/R shows that the highest level of ground taxi noise is found at Court Road, from aircraft taxiing to the 22 runway for departure. How then, can Massport and FAA claim that a centerfield taxiway which brings more planes per hour to the 22s for departure somehow reduces noise on Court Road?	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays, thereby reducing associated noise and emissions. Section 3.3 of the Supplemental DEIS/FEIR describes several operating situations that would benefit from these improvements. Unidirectional Runway 14/32 would allow more evenly distributed runway use, reducing the use of the Runways 4/22 from 60 to 70 percent to 35 to 40 percent. When using Runways 22L/R for departures, the Centerfield Taxiway would be used for Runway 22L departures to bypass the queue for Runway 22R.
61.21	Noise	Model	The Secretary's decision on the ENF specifically requested that the DEIS/R should include the 60 dB contour. While the DEIS/R does not include the 60 dB contours throughout the main text, hidden away in Appendix L, Table 1.1 is data demonstrating that the population exposed to 60 dB with the airside "improvements" goes up in every fleet scenario.	Refer to Tables 5.2-3 and 6.2-3 through 6.2-5 of the Supplemental DEIS/FEIR for population data down to DNL values of 60 dB. Also, refer to newly included and newly excluded populations attributable to the Preferred Alternative in Tables 6.2-5 through 6.2-7 of the Supplemental DEIS/FEIR.
61.22	Alternatives	Runway 14/32	... [I]t is clear that the airside "improvements" do not deliver the promised noise benefits for portions of Winthrop. The important "night time equivalent" sound level values go up in Winthrop in the 29 million low fleet scenario at 4 out of 5 monitoring locations when you add Runway 14/32. In the 37.5 million low fleet scenario adding 14/32 makes these values go up at 2 out of the 5 locations in Winthrop.	Refer to Tables 5.2-3 and 6.2-3 through 6.2-5 of the Supplemental DEIS/FEIR for population data down to DNL values of 60 dB. Also, refer to newly included and newly excluded populations attributable to the Preferred Alternative in Tables 6.2-5 through 6.2-7 of the Supplemental DEIS/FEIR. The nighttime equivalent sound levels (LeqN) at the two microphones at Point Shirley are estimated to change by +0.4 dB and -0.7 dB at Monitor Nos. 4 and 5 for the 29M Low Fleet scenario, and by -0.4 dB and -0.9 dB at the same monitors for the 37.5M Low Fleet scenario. More importantly, the Day-Night Sound Levels (DNLs) at these locations change by -0.9 dB and –1.7 dB for the 29M Low Fleet scenario and by –1.3 dB and –.2 dB for the 37.5M Low Fleet scenario. This area also has a significant reduction in both persistence and dwell for these two fleets (refer to "Arr 27/Dep 9" on Figures 6.2-5 through 6.2-8 of the Supplemental DEIS/FEIR). These changes are improvements in the noise environment. The nighttime noise (LeqN) at Monitor No. 6 at Somerset and Johnson are estimated to change by +0.1 dB for the 1999 29M Low Fleet scenario, and –0.4 dB for the 37.5M Low Fleet scenario. The DNLs at this location change by +0.2 dB for the 29M Low Fleet scenario and by 0 dB for the 37.5M Low Fleet scenario. These changes represent no perceptible change in the noise environment. The LeqN at the two microphones near Runway 4R/22L are estimated to change by +3.2 dB and +0.9 dB at Monitor Nos. 7 and 8 for the 29M Low Fleet scenario, and by +0.9 dB and by -0.9 dB at the same monitors for the 37.5M Low Fleet scenarios. The DNLs at these locations change by +1.5 dB and –0.1 dB for the 29M Low Fleet scenario and by –0.3 dB and -1.1 dB for the 37.5M Low Fleet scenarios. These changes show an increase at Monitor No. 7 at Court Road and no net change at Monitor No. 8 at the Amelia and Morton location in 1999, but generally show decreases for the 37.5M Low Fleet scenarios for a net improvement in the noise environment in 2010. This area also has a significant reduction in both persistence and dwell for these two fleet scenarios (refer to "Arr 22/Dep 4" in Figures 6.2-5 through 6.2-8 of the Supplemental DEIS/FEIR).

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61.23	Air Quality	Model	Massport and FAA do not seem to have taken EPA's comments on the air pollution issue seriously. EPA called for an inventory of total air toxics. Where is it? EPA requested a combination of all landside and airside emissions. It is difficult to determine if that analysis is included in the DEIS/R.	The emission inventory in the Supplemental DEIS/FEIR includes both landside and airside emissions associated with Logan Airport.
61.24	Air Quality	State Implementation Plan	The issue of the Project's conformity with the federal Clean Air Act is an important one. Massport and FAA come to the conclusion that no Conformity Determination is required under the Clean Air Act, even though emissions go up for just about every category of pollutant if the Project is built. Their "reasoning," once again, is that the Preferred Alternative results in an alleged "reduction" of air pollutants when compared to the no action alternatives at the same fleet and passenger levels. Such reasoning, as demonstrated above completely ignores the induced demand issue and the cumulative effects issue that EPA noted.	Current guidance in 40 CFR 93, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*, specifies procedures to determine the conformity of projects, like the Airside Project, to the Massachusetts State Implementation Plan (SIP). Based on this guidance, the project-related emissions are *de minimis*, and the Airside Project therefore conforms to the SIP.
61.25	Air Quality	State Implementation Plan	The Massport and FAA "theory" that, the Project does not require a Conformity Determination is simply asserted in the DEIS/R without any citation or reference to provisions of the Clean Air Act, its implementing regulations or case law that allow such a conclusion. The fact is that the Project will cause emissions to go up. One such emission is NOx. NOx is one of the precursors of ozone. Massachusetts is a "serious non-attainment" state for ozone under the Clean Air Act, as noted by Administrator DeVillars in his comments on the ENF. The Project will allow or accommodate ever-increasing numbers of Stage 3 aircraft to fly into and out of Logan. Stage 3 aircraft, while quieter, produce more NOx than the noisier planes that they are replacing. Therefore, it is clear that the Project will have a decidedly negative effect on the Commonwealth's ability to meet Clean Air Act requirements. A Conformity Determination should certainly be required.	Emissions of ozone precursors, NO_x and VOCs, decrease under the Build Alternatives, when compared to the No Action Alternative. Current guidance in 40 CFR 93, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*, specifies procedures to determine the conformity of projects, like the Airside Project, to the Massachusetts State Implementation Plan (SIP). Based on this guidance, the project-related emissions are *de minimis*, and the Airside Project therefore conforms to the SIP.
61.26	Air Quality	State Implementation Plan	The DEIS/R goes on at great length to make the case that delays at Logan are extremely costly. However, it is silent on the economic impact of the failure of Massachusetts to achieve required results under the Clean Air Act. Failure to achieve the requirements of the Act can result in the loss of federal highway funds. Given the cost of the Central Artery, what would be the impact of such a loss on the Massachusetts economy?	The General Conformity provision of the CAA prohibits any federal agency, including the FAA, from approving, funding or permitting any project or action that does not conform to the State Implementation Plan (SIP) – the plan developed by DEP and approved by the EPA to achieve the goals and requirements of the CAA. In this case the planned improvements to Logan Airport have been shown to conform to the SIP because the emissions associated with the projects are well within the de minimis levels of the General Conformity rule. Based on this finding, the projects are not viewed as being an impediment to the Commonwealth's progress in meeting the requirements of the CAA

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61.27	Air Quality	Impacts	The dispersion model results do not seem to conform to the inventory model results. For example, at the 37.5 million low fleet scenario, 3 out the 8 pollutants in 2010 for the true no-build alternative are either less than or the same as the results for the Preferred Alternative, The same holds true for the 37.5 million high fleet scenario in 2010. For the 45 million high fleet scenario, a full half (4/8) of the pollutants measured are less for the true no-build alternative than they are for the Preferred Alternative. These results draw into question the argument in the DEIS/R that the "efficiency" of the Preferred Alternative provides clear air pollution benefits over no-build alternatives.	For ease in assimilating the data, the dispersion modeling results are presented in both the tables and the figures of the EIS/R as the "highest predicted level" at each of the 12 receptors, irrespective of the wind conditions. In other words, it is highly unlikely (if not impossible) for all of these highest predicted concentrations to occur simultaneously. Rather, when wind conditions cause the highest concentrations at receptors on one side of the airport, receptors on the other side of the airport would experience concentrations less than their maximum predicted levels. This reporting technique was conceived to present the data in a concise way and show the potential worst-case conditions. Another factor that leads to these results is the change in aircraft operations with the planned airfield improvements (e.g. changes in aircraft taxi-in, taxi-out, landing and take-off patterns). While this may lead to small increases in concentrations at some receptors, lower concentrations are predicted to occur at others. In all cases, these changes are very small and will be imperceptible. Most importantly, the predicted concentrations are all well within the NAAQS - standards established by the EPA to protect public health. The emission inventory results show an overall reduction in emissions with the Preferred Alternative when compared to the No-build condition. This finding is more reflective of the improved efficiency realized by the planned improvements.
61.28	Air Quality	Model	The discussion in the DEIS/R of the dispersion modeling results is completely disingenuous and casts further doubt about the air pollution conclusions in the DEIS/R. When the results show that the Preferred Alternative has a slight advantage over the no-action alternative, the DEIS/R proclaims that the "the lowest levels occur in association with" the Preferred Alternative. However, when, as noted above, the results show that the no-action alternative has virtually the same advantage over the Preferred Alternative, the DEIS/R comes to the very different conclusion that "there will be no detectable differences in air quality impacts among the four alternatives," or "there is no significant difference." This lack of consistency in analysis draws into question the conclusions of the DEIS/R.	Generally, the Preferred Alternative has lower emissions and dispersion modeling indicates that pollutant concentrations will be within the NAAQS under all alternatives. Only small differences are seen among the four alternatives, when comparing dispersion modeling results.
61.29	Environmental Review Process	FAA/NEPA, MEPA	Both MEPA and NEPA require the DEIR/S to discuss impacts on land use. The CEQ regulations implementing NEPA are quite specific on this requirement. They provide that a environmental impact statement "shall include discussions of: (c) possible conflicts between the proposed action and the objectives of.. local ... land use plans, policies and controls for the area concerned ...(g) Urban quality, historic and cultural resources, and the design of the built environment... There can be no doubt that Winthrop is part of the "area concerned." There can also be no doubt that Winthrop's "built environment," "urban quality," and "historic and cultural resources are heavily impacted by the airport and will be affected by the Project. ...The overflights from Logan have had a considerable impact on land use and land values in certain parts of Winthrop. Airport-related noise and air pollution impacts have helped to shape the "built environment" and "urban quality" of such neighbor-hoods....Yet, the DEIS/R includes the rather astonishing statement that the airside improvements will "not alter existing land use patterns."... Airport development and expansion have already had a major effect on land use in Winthrop. Further expansion associated with the Project will definitely impact land use patterns in Winthrop.... At a minimum the DEIS/R should look into the land use impacts on Winthrop brought about historically by Logan development and passenger growth. That historical experience should be utilized to develop a picture of what impacted portions of Winthrop will be like in 2010 at various passenger and fleet scenarios.	Refer to Section 6.3 of the Supplemental DEIS/FEIR for a discussion of land use impacts on the surrounding communities.

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61.30	Ecosystems	Wetlands	The DEIS/R claims that the project is not within any wetlands resource area. However. It also states that the Project will need an Order of Conditions from the Boston Conservation Commission. Obviously, then, there is at least a presumption of impact on a resource area. Such impacts need to be discussed.	Portions of the runway construction will involve work in the upland Buffer Zone adjacent to Boston Harbor, though no work in the harbor or adjacent wetlands is proposed. Work in the Buffer Zone will be limited to removal of unsuitable soil materials, minor regrading, placement of new clean fill and construction of the runway. This work requires an Order of Conditions from the Boston Conservation Commission. Details of runway construction impacts are described in Section 6.9 of the Supplemental DEIS/FEIR.
61.31	Ecosystems	Wetlands	There is no mention in the DEIS/R of the possibility that the Project-would require an Order of Conditions from the Winthrop Conservation Commission. Clearly the Project will have an impact on wetlands areas in Winthrop. Noise and exhaust pollution will impact on Belle Marsh. Runoff and outflow increases from new taxiways may wash up on Winthrop shores. These issues should be discussed in the DEIS/R.	The Preferred Alternative will not require an Order of Conditions from the Winthrop Conservation Commission.
61.32	Ecosystems	Rare Species	The DEIS/R discusses the issue of the Upland Sandpiper nesting areas, but not in the context of the wildlife habitat portion of the Wetlands Protection Act.	The Upland Sandpiper is an upland species whose habitat at the airport is comprised primarily of infield areas of the airfield not subject to the Wetlands Protection Act as habitat.
61.33	Ecosystems	Wetlands	The Project is planned to be constructed on filled tidelands or waterways. It represents a significant expansion of structure on existing fill. The DEIS/R does not discuss any possible need for a Chapter 91 license and/or compliance with the Rivers and Harbors Act or the Clean Water Act.	In accordance with Section 310 CMR 9.03(3) of the Chapter 91 Waterways regulations, airport activities conducted by Massport at Logan Airport on previously filled tidelands are exempt from Chapter 91 permitting requirements. No work is proposed in the harbor or areas subject to the River and Harbors Act. A multi-sector NPDES Discharge Permit will be required for Clean Water Act compliance during construction. Massport has an individual NPDES permit for operations of the airport.
61.34	Noise	Sound Insulation	While historic resources in Chelsea are discussed, as noted above, impacted historic and cultural resources in Winthrop are ignored. ...[T]he DEIS/R summarily dismisses the acknowledged impacts on historic buildings in Chelsea with the proposed soundproofing of the historic residences affected. Soundproofing is a "band aid" approach... It hardly represents all feasible mitigation measures.	The Supplemental DEIS/FEIR includes a discussion of historic and cultural resources in Winthrop. Five properties in Winthrop that are included in the Inventory of Historic and Archaeological Assets of the Commonwealth fall within the 65 dB DNL contour (45 Enfield Road, 240 Pleasant Street, 75/77 Somerset Avenue, 88 Somerset Avenue, 94 Somerset Avenue). The implementation of a sound insulation program for affected historic residences is an accepted FAA mitigation, as outlined in FAR Part 150. FAA proposes to mitigate noise impacts by sound insulation all affected residences, historic and non-historic, that fall within the 65 dB DNL contour for the Preferred Alternative.
61.35	Noise	Impacts, Open Space/ Parkland	The Project will clearly have a major impact on the Harbor Islands parkland. It will create major noise problems for those making use of the islands and change the entire experience of anyone exploring the Harbor Islands. Such impacts need to be discussed and analyzed.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
61.36	Open Space/ Parkland	Article 97	The possible applicability of Article 97 of the Massachusetts Constitution should be explored in the DEIS/R.	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands. No Article 97 impacts result from any of the alternatives.

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61.37	Noise	PRAS	The DEIS/R should take into account the fact that the PRAS goals are almost 20 years old. The DEIS/R should discuss whether or not the PRAS goals need revision in order to actually maximize environmental benefits.	The PRAS goals were established by the PRAS Advisory Committee during the development of the original computerized system between 1980 and 1983. The advisory committee was composed of representatives from Massport, the FAA, airlines, and 12 neighboring communities. It concluded that the PRAS goals should provide an equitable distribution of aircraft noise over the long-term, as well as short-term relief from excessive operations over certain neighborhoods. The FEIR demonstrates that there have been no significant demographic changes to warrant an update of the PRAS goals. A complete discussion of PRAS, the goals, and historic performance is included in Section 4.3 of the Supplemental DEIS/FEIR.
61.38	Noise	PRAS	It is also unclear from the DEIS/R just how much compliance with PRAS goals the Project might actually produce... For some runways the no-action alternative actually results in better PRAS compliance when compared to the Preferred Alternative. These discrepancies should be laid out and discussed fully in the DEIS/R.	There are no cases where the No Action Alternative provides better achievement of PRAS goals than the Preferred Alternative. Achievement must be compared on an overall basis such as the sum of the absolute or squared deviations from the goals. While the use of one runway may be closer to the goal when comparing the No Action Alternative with the Preferred Alternative, the goal deviation from all runways must be considered. Section 4.3 of the Supplemental DEIS/FEIR contains a complete description of the PRAS system and achievement of historic goals and explains this issue further. Appendix H of the Supplemental DEIS/FEIR presents achievement statistics for each fleet and alternative. Each improvements package provides increased goal achievement when compared with the No Action Alternative, and Alternatives 1 and 1A, which include the Runway 14/32, provide the greatest increase in annual PRAS goal performance.

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61.39	Public Health	Effects	Public health issues relating to airport activity remain a major concern in Winthrop and in other "close-in" communities...The DEIS/R fails to advance the inquiry into airport-related public health issues. The Project will clearly enhance capacity at Logan and thus increase noise and emissions. ...The DEIS/R should note... [the Natural Resources Defense Council and EPA] studies, update them and present a comprehensive review of what is known about the health effects of airport noise and emissions. Massport and the FAA should work closely with Massachusetts and federal health agencies to address the legitimate health concerns of Winthrop residents who are exposed to potentially harmful emissions. Since the Project will increase those emissions, the DEIS/R must deal with this subject.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context. Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway would substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays would represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in current and future passenger and aircraft activity at Logan Airport.

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61.40	Regional Transportation	Regional Airports	The DEIS/R ignores several reasonable alternatives. Rather than discussing and comparing such alternatives, the entire alternatives discussion in the DEIS/R centers on various combinations of airside "improvements" and the no-build alternative. It neglects true alternatives to the Project. Two such alternatives involve other airports. There is no discussion in the DEIS/R about a second major airport. Given the ground access and other constraints confronting Logan, a second airport is clearly an option that is worth consideration.	Comment noted.
61.41	Regional Transportation	Regional Airports	Another airport alternative ignored by the DEIS/R is Hanscom Field. This facility is owned by Massport, has adequate runways, is convenient to Boston and is underutilized. The DEIS/R does not explore the possibility of opening up Hanscom to commercial passenger and/or freight traffic. It does not discuss the fact that Federal Express once operated out of Hanscom or that the Hanscom Master Plan, agreed to by the surrounding towns, allows for an increase in operations over the current level. It also fails to acknowledge that many of the so-called "operations" at Hanscom are "touch and go" training exercises where each "touch" and each "go" is considered a separate operation, thus greatly inflating the operational level at Hanscom.	Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
61.42	Alternatives	Taxiway Improvements	Another alternative is that of stopping the proposed centerfield taxiway at Runway 15/33. This alternative would greatly reduce taxiway noise and pollution for Winthrop residents. It is not even mentioned in the DEIS/R.	Most of the delay reduction and environmental benefits are a result of the availability of the north end of the Centerfield Taxiway.

Code	Topic 1	Topic 2	Comment	Response
61.43	Regional Transportation	Passenger Rail	The DEIS/R should explore real participation by Massport in promoting projects like high speed rail and the NSRL (North-South Rail Link), including the expenditure of funds.	Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.
61.44	Noise	Model	California and many European countries utilize the Community Noise Equivalent Level ("CNEL") instead of the DNL. The DSEIS/R should present CNEL data.	There is no regulatory or scope requirement to provide CNEL contours in Massachusetts. Furthermore, CNEL values for an airport usually differ from DNL values by only a few tenths of a decibel. The metric would not lead to any different conclusions than those drawn here using DNL.
61.45	Noise	Nighttime Noise	Massport and FAA refuse to even consider applying for curfews under the Airport Noise and Capacity Act of 1990. While such an application may be fraught with difficulty, it is still legally available and thus still a reasonable alternative.	The FAA has stated that it does not intend to grant curfew regulations of Stage 3 aircraft. Therefore, such a regulation has not been proposed as a mitigation action in this study.

Code	Topic 1	Topic 2	Comment	Response
61.46	Environmental Review Process	MEPA	The MEPA regulations require the DEIS/R to contain Section 61 findings. The document 56-46 does not meet this requirement. Mitigation commitments are sorely lacking.	Refer to the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR. Chapter 8 of the Supplemental DEIS/FEIR summarizes Massport's proposed project-specific mitigation program associated with the Preferred Alternative including: Runway 14/32 would be designed, constructed, and operated to handle over-water operations only (unidirectional). Massport would seek to construct Runway 14/32 to reflect unidirectional use. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR R.* For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. Relocation assistance will be provided to eligible tenants of Cargo Building 60. The potential loss of Upland Sandpiper habitat will be mitigated by altering airfield mowing procedures, implementing an on-airfield reconnaissance program and restoring off-site habitat. During the construction period an extensive array of traffic, air quality and noise mitigation measures will be employed to mitigate temporary construction impacts. Since the publication of the Airside Project Draft EIS/EIR, Massport is proposing the following additional mitigation measure: A PRAS monitoring system to gather data and report on the actual achievement of PRAS. The objective of this system is to improve the achievement of the PRAS goals and to provide a broader platform for disseminating of the monitoring results. While not related to the Airside Project, Massport is proposing the following initiative: Should the passenger activity level require it, Massport will identify a conceptual small community exemption program for PPP that will reduce the expected degree of service disruption without undermining the PPP Program's delay reduction benefits, and that could be incorporated as part of any PPP regulations come into effect in the future. Massport is actively involved in many air quality initiatives and explored other options to reduce emissions from activities at Logan Airport in the *Logan Airport 1999 ESPR* (previously GEIR).
61.47	Noise	Sound Insulation	...soundproofing is not adequate mitigation. It is a "band aid" approach which is completely ineffective for much of the year and totally ineffective outside of a soundproofed building. Yet, the DEIS/R notes repeatedly that soundproofing is the mitigation answer to all noise problems.	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update.* Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
61.48	Ecosystems	Endangered Species	Massport has had years to deal with the Upland Sandpiper habitat problem. Instead of coming up with a plan for mitigation that can be reviewed in the DEIS/R, the document just notes that Massport is working with another state agency to develop options. That is not good enough.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
61.49	Alternatives	Runway 14/32	The DEIS/R assumes that Runway 14/32 will be "unidirectional" only. However, it does not provide any detailed discussion as to how that restriction will be put in place and maintained over time. Indeed, the DEIS/R simply recites that FAA "policy" will keep 14/32 unidirectional.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.

LETTER 62

TOWN OF WINTHROP
NOISE, AIR POLLUTION AND AIRPORT HAZARDS COMMITTEE

MEMBERS:
Jerome E. Falbo, Chairman
Robert L. Driscoll, Sr., Vice-Chairman
Richard N. Bangs
Richard D. Dimeo
Robert E. Pulsifer
Matthew Lanza, Selectperson
Gerald B. Ogus, Selectperson
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PRESENTED TO THE MASSACHUSETTS ENVIRONMENTAL PROTECTION AGENCY (MEPA) ON APRIL 7, 1999 AND APRIL 8, 1999

This has become the year that Massport is finally being held to account by the communities. The objections to Massports inadequate proposal are growing and spreading almost uncontrollably. Congressman, Michael Capuano, Mayor Thomas Menino, Representative Robert Deleo, Senator Robert Travaglini and many of their fellow representatives and senators, Chelsea City Council, Board of Selectmen, Town of Winthrop, just to name a few are forcefully against the construction of runway 14/32, and other projects. These projects may temporarily provide a small decrease in the delays in air traffic at Logan Airport, but they will increase the number of flights per hour per day, and the environmental degradation that goes with those flights. If you had attended meetings on airport issues in Winthrop, Chelsea, Revere, Jamaica Plain, Hyde Park, South Boston, Roxbury, Melrose, East Boston and Charlestown, you would have been impressed by the expressed outrage and indignation at these Massport Proposals. 62.1

You may ask yourself why is Massport causing an uproar and strenuous objections by many of the leaders and communities who were silent in 1997? It is somewhat surprising that the communities of Winthrop, East Boston and South Boston are opposing these plans, when Massport has projected thirty to forty (30% - 40%) percent decrease in noise in these areas. Many of you have been promised less air pollution from the contaminants generated by the operations of Loan International Airport.

The answer is simple. The citizens of all of these communities finally understand that Massport can not be believed; that any relief promised by Massport would simply be short term if at all. Eventually, these communities that have been promised relief will be subjected to even a higher level of noise by the year 2010, than these communities are experiencing today. 62.2

I am going to refer you to Massports draft Environmental Impact Statement/Report, Table 4.5-1, P 4-29: you will note that if Massport is allowed it's preferred alternative 1A (which encompasses the construction of runway 14/32 construction of center field taxi way and reducing the approaching minimums of runway 62.3

15R, 22L, 27 and 33L,) the flight delays will increase from 168,000 to 236,000 per year by 2010. In in 1999, Massport projects flight delays of only 126,500. So things are not going to get better at Logan even with the new runway.

The increase of passengers at Logan in the year 2010 will increase by approximately 42%. I suggest gentlemen that you try to visualize the increase in the amount of cars and trucks on the Massachusetts Turnpike, Southeast Expressway and the tunnels, during rush hour. Massport plans indicate one major and obvious error.... It has failed to plan for growth! 62.4

If you review the history of Massport, and the web of political intrigue, that has been spun by Massport and certain political leaders, the issue of expansion has taken on the appearance of a social and economic spin-off. In 1990-1991, James King, now a presidential fellow at Trinity College, was then Chairman of the Mass Aeronautics Commission, who studied sites for a second major airport. He recommended that serious consideration be given to the Fort Devens Site. However, Governor Weld removed that consideration completely from the table. I am referring to a Globe article, March 17, 1999. Secretary of Transportation of he Commonwealth, Fred Salvucci has admitted that he and then Governor Dukaisis promised the residences of East Boston that they would be no further expansion at Logan International Airport. (Also Globe, 3/17/99)

There has been no consideration or studies directed at expanding Hanscom Airfield in Bedford, which has two existing lengthy runways. A commitment from Massport to focus its energies and funding to improving the cargo and terminal facilities at Hanscom would help their cause far greater than the short term of runway 14/32 at Logan. Massport will admit, if confronted, that the expansion at Hanscom would be a political nightmare. A recent article in the Globe regarding a meeting that Governor Celluci granted to a selectman from the Town of Lexington, as you know, Lexington is adjacent to Hanscom. The governor was quoted as stating to the selectman that he certainly would not support an airport or expansion in an area where the residents "did not want it" Governor Celluci has not responded to the January 25, 1999 request by the residents of the Town of Winthrop for a meeting on the airport issues, and he probably will not respond. We do not want it. Governor Cellucci, are we a lesser class of citizens than those from lexington well-heeled suburbs? FAA, are you complying with your environmental justice requirements? 62.5 62.6

Massport has failed to take into consideration the updating and modernizing of either Worcester Municpal Airport, or New Bedford. For years, we have urged Massport to work on the Worcester Airport development, but we were told that Massport has no authority, Yet Peter Blute, the CEO at Massport was quoted in the Herald issue of 62.7

March 16, 1999 that "Massport is in the process of taking over the operation of Worcester Airport." What does this mean? Why was it not done years ago?

Rather than Massport facing reality, in developing these regional airports and also laying the foundation for a second major airport after the year 2010, it commits itself to spending $200,000 in an ad campaign in order to "sell" runway 14/32. A substantial portion of those funds are ours, the taxpayer monies!

Massport has done very little, in actively promoting construction of the North/South Station link (except to attend meetings). In November of 1999, Amtrak will begin a regular schedule of high speed trains traveling at 150 miles per hour reaching Penn Station, in New York in approximately 3 hours. A North/South Station link would open up high speed rail travel to all commuter lines running into North Station, the Woburn Regional Transportation Center and Northern New England and would divert a substantial number of air travelers to rail travelers. 62.8

Finally, I would like to address the issue of the economic effect of concentrating on regional airports. In the Boston Business Journal of March 19, 1999, Paul Guzzi, the CEO of the Boston Chamber of Commerce stated that the New Runway is "good for the economy and it is good for jobs". Is he implying that utilization of regional airports will cause a decline in the greater Boston economy? I believe that to be an improper statement. First of all, the airlines, internally are one of the major causes of delays. If instead of utilizing smaller aircraft on a more frequent basis they used larger planes on an infrequent basis, there would be substantial decrease in the noise. More importantly, people will still come to Boston with or without the construction of runway 14/32. Massport has admitted that in its statement. Hanscom's airfield is approximately 15 mil from Boston. With proper link into the Massachusetts Turnpike, Worcester would be within a reasonable distance from Boston. These regional airports would maintain and improve the Boston economy, as well as, provide the same number of jobs if not more as would the current Massport expansion plan. 62.9

In closing, I would like to quote sections from former Governor William Weld's executive order number 385, in the fifth paragraph he states "whereas in the absence of the effective growth management, the burden of balancing economic development with resource protection is not spread equitably, but falls disproportionately on proponents on the most recent development, as well as, on **communities lacking sufficient means to protect their resources and guide the development." (emphasis added).** He then went on to issue several orders under "declaration of policy". In section 3, he ordered all State Agencies, Departments, Boards, Commissions, Authorities and instrumentality's of the Commonwealth (hereafter "agencies") shall evaluate the effect of their current regulations, 62.10

policies, plans, and practices on their and others' ability to facilitate sustainable economic development and to **preserve environmental quality and resources**, and shall adopt changes to the extent necessary to effectively contribute to the attainment of these objectives; provided that no such change shall infringe on the jurisdiction or authority of municipal, county, regional or Federal Government.

Massport has failed to preserve environmental quality, and resources. I urge you to find the Massport Environmental Impact Statement/Report **Inadequate**.

Respectfully Submitted,

Jerome E Falbo

JEROME E. FALBO, CHAIRMAN

Letter 62
Town of Winthrop, Noise, Air Pollution and Airport Hazards Committee
Jerome E. Falbo

Code	Topic 1	Topic 2	Comment	Response
62.1	Alternatives	Runway 14/32	...[T]he construction of Runway 14/32, and other projects. ...may temporarily provide a small decrease in the delays in air traffic at Logan Airport but they will increase the number of flights per hour per day, and the environmental degradation that goes with those flights.	Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts. Projected changes in flight patterns and associated noise shifts are consistent with the PRAS goals, which were studied and approved by the community when established. Activity increases over certain communities are offset by activity reductions over other severely impacted communities and by activity increases over water.
62.2	Alternatives	Runway 14/32	...[T]he communities that have been promised relief will be subjected to even a higher level of noise by the year 2010, than these communities are experiencing today.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Similarly, overflights affecting Winthrop (Runway 27 arrivals and Runway 9 departures) will decline from 88,224 in 1998 to 55,805. As a result of the relief for these communities, flights over the water and flights over less impacted communities will increase.

Code	Topic 1	Topic 2	Comment	Response
62.3	Alternatives	Preferred Alternative	[With] Alternative I A (which encompasses the construction of Runway 14/32[,] construction of center field taxi way and reducing the approaching minimums of runway 15R, 22L, 27 and 33L,) flight delays will increase from 168,000 to 236,000 per year by 2010. In 1999, Massport projects flight delays of only 126,500. So things are not going to get better at Logan even with the new runway.	Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.
62.4	Ground Transportation	Access to Logan	The increase of passengers at Logan in the year 2010 will increase by approximately 42%. ...Visualize the increase in the amount of cars and trucks on the Massachusetts Turnpike, Southeast Expressway and the tunnels, during rush hour. Massport ...has failed to plan for growth!	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates). Massport is constantly striving to make Logan Airport a more efficient transportation center with less impact on surrounding communities by improving mass transit access to Logan Airport. The Airside Project makes Logan Airport more efficient and will not affect vehicle traffic, transit systems or major roadway intersections. The Supplemental DEIS/FEIR discusses all the environmental impacts from the Airside Project. The ESPR/GEIR and its Annual Updates discuss Massport's efforts to lessen Logan Airport's total environmental footprint, especially impacts from ground access. Finally, with regard to caps on airport operations, federal constitutional provisions (preemption, commerce clause, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. However, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
62.5	Regional Transportation	Regional Airports	There has been no consideration or studies directed at expanding Hanscom Airfield in Bedford, which has two existing lengthy runways. A commitment from Massport to focus its energies and funding to improving the cargo and terminal facilities at Hanscom would help their cause far greater than the short term of Runway 14/32 at Logan.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
62.6	Regional Transportation	Regional Airports	[Is the] FAA...complying with... [its] environmental justice requirements ...[by failing to seriously consider Hanscom]?	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively. Refer to response to comment 62.5.

Code	Topic 1	Topic 2	Comment	Response
62.7	Regional Transportation	Regional Airports	Massport has failed to take into consideration the updating and modernizing of either Worcester Municipal Airport, or New Bedford.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport. PRAS was established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. During very high demand periods, the controllers have little or no flexibility for runway selection. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals by redirecting many flights to overwater routes. The addition of Runway 14/32 is the single most important mechanism to achieve equitable geographic distribution of aircraft operations and noise. Runway 14/32 and all other airside improvements would reduce current and future delays and enhance safety. The sooner that these improvements are implemented, the more long-term delay benefits will be realized.
62.8	Regional Transportation	Passenger Rail	Massport has done very little, in actively promoting construction of the North/South Station link (except to attend meetings)... A North/South Station link would open up high speed rail travel to all commuter lines running into North Station, the Woburn Regional Transportation Center and Northern New England and would divert a substantial number of air travelers to rail travelers.	The official estimate of passenger diversion from Logan Airport to the North/South Rail Link is 46,700 passengers in 2010, approximately 0.1 percent of Logan Airport's expected passenger traffic in 2010. Refer to Technical Report No. 4 Ridership Methodology and Forecasting Study of the North/South Rail Link Project (February 1998).

Code	Topic 1	Topic 2	Comment	Response
62.9	Regional Transportation	Regional Airports	Hanscom's airfield is approximately 15 mil[es] from Boston. With proper link into the Massachusetts Turnpike, Worcester would be within a reasonable distance from Boston. These regional airports would maintain and improve the Boston economy, as well as, provide the same number of jobs if not more as would the current Massport expansion plan.	Refer to response to comment 62.5. Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
62.10	Environmental Review Process	MEPA	[Massport has failed to comply with] Governor William Weld's executive order number 385....	Massport disagrees with this assertion, as extensively described in Chapter 1 of the Supplemental DEIS/FEIR.

TOWN OF WINTHROP
NOISE, AIR POLLUTION AND AIRPORT HAZARDS COMMITTEE

MEMBERS:
Jerome E. Falbo, Chairman
Robert L. Driscoll, Sr., Vice-Chairman
Richard N. Bangs
Richard D. Dimeo
Robert E. Pulsifer
Matthew Lanza, Selectperson
Gerald B. Ogus, Selectperson
Robert L. Driscoll, Jr., Selectperson
Representative Robert A. DeLeo

Nancy A. Loubier, Secretary

LETTER 63

April 12, 1999

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Attention: Arthur Pugsley, MEPA

Dear Mr. Puglsey:

Enclosed is the Town of Winthrop Noise, Air Pollution, Airport Hazards Committees written comments to Massachusetts Port Authorities Environmental Impact Statement/Report.

Very truly yours,

JEROME E. FALBO

JEF:jp
Enclosure

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Message-ID: <86fa466c.24511503@aol.com>
Date: Thu, 22 Apr 1999 20:12:51 EDT
Subject: Fwd: Response to Draft EIS/R EOEA #10458
To: Ardwest7@aol.com

TOWN OF WINTHROP
NOISE, AIR POLLUTION AND AIRPORT HAZARDS COMMITTEE
ENVIRONMENTAL HEALTH FACTS SUBCOMMITTEE

Robert Durand
Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston MA 02202

April 21, 1999

Logan Airside Improvements Planning Project EOEA #10458

Dear Mr. Durand,

The following comments are being submitted in response to the above Draft Environmental Impact Statement/Report (EIS/R). It is the opinion of the members of this committee that the Draft EIS/R does not adequately address very critical issues regarding the generation of airborne pollutants from the combustion of petrochemical fuels, and the effects of these environmental pollutants on the health of Winthrop residents. A considerable proportion of the residents of Winthrop are concerned about what they perceive to be a high incidence of respiratory disease and cancer, which they attribute to exposure to pollutants currently and historically generated by airport activities. In the current Draft EIS/R, Massport estimates (Vol IV, Tables E14-1 Through E14-4) indicate that, in 1999, airport related activity releases 50,000 pounds of toxic pollutants into the air daily.

63.1

The relationship between these pollutants and serious respiratory disease is well established in the literature. Considerable evidence exists for elevated levels of Asthma, and Respiratory Tract Cancer in both East Boston and South Boston. Winthrop, primarily a residential community located seaward of the airport, in the past has shown lesser health effects than these communities. However more recent reports (Massachusetts Disease Registry) show that we have now reached the incidence levels of Asthma of our neighbor communities. Lung Cancer levels in Winthrop (Massachusetts Cancer Registry), not in themselves excessive, consistently demonstrate a markedly increased rate for females, who in past years have constituted the at home exposed population. As these results become clearer, the wisdom of locating airports, generators of concentrated petrochemical combustion waste, in urban centers becomes very suspect.

While we are aware that the changes proposed in the Draft EIS/R indicate increased efficiency of operation of the airport, and project only slight change in the level of pollutants emitted, we strongly feel that the current levels are themselves creating a significant negative impact on the health and well being of Winthrop residents. We strongly oppose any development which will increase the operational capacity of Logan Airport until these adverse impacts and their relation to airport pollution generation have been thoroughly addressed. 63.1 (cont.)

We note that these issues concerning immediate and local impact were raised in public comments, and in the Secretary of Environmental Affairs Certification statement with regard to the Logan Airport GEIR annual update in 1996, EOEA # 3247. Massport was directed at that time to initiate such studies, but we have no knowledge that such activities were ever undertaken. Massport has instead relied on its participation in the State Implementation Program, and the projection of pollutant concentrations by EPA dispersion modeling techniques which indicate levels within the National Ambient Air Quality Standards. We would like to make the following points:

1. Accurate analysis of the public health impact of this localized pollution source requires that the data be gathered and analyzed for differential effects on local neighborhoods within the affected area, and this data be compared to meteorological dispersion of pollutants generated by airport activity. 63.2

2. Dispersion models which predict essentially no variation in concentration of pollutants throughout the Town of Winthrop, which has neighborhoods both a few hundred yards, and several miles from the generation source must be considered very suspect. The technology exists for the direct measurement and monitoring of these pollutants, and should be established without delay. 63.3

We feel that addressing these issues must be carried out before any actions are taken to further the development or operational capacity of this airport.

J.B. Dumser, PhD, CIH, Chairman of the Subcommittee
Committee Members:
Barbara Bishop
Jack Dowd
Madeline Burke
Arthur Flavin, Sr.
Bob Massa
John Marcy
Greg Curci
Jean McNeish
Barbara Flavin
Harvey Maibor
Judy Silck
Conal Foley

Letter 63
Town of Winthrop, Noise Air Pollution & Airport Hazard Committee Jerome E. Falbo

Code	Topic 1	Topic 2	Comment	Response
63.1	Public Health	Effects	...the Draft EIS/R does not adequately address very critical issues regarding the generation of airborne pollutants from the combustion of petrochemical fuels, and the effects of these environmental pollutants on the health of Winthrop residents. A considerable proportion of the residents of Winthrop are concerned about what they perceive to be a high incidence of respiratory disease and cancer, which they attribute to exposure to pollutants currently and historically generated by airport activities... While we are aware that the changes proposed in the Draft EIS/R indicate increased efficiency of operation of the airport and project only slight change in the level of pollutants emitted, we strongly feel that the current levels are themselves creating a significant negative impact on the health and well being of Winthrop residents. We strongly oppose any development which will increase the operational capacity of Logan Airport until these adverse impacts and their relation to airport pollution generation have been thoroughly addressed.	Public health issues are discussed in Section 6.8 of the Supplemental DEIS/FEIR.
63.2	Air Quality	Model	Accurate analysis of the public health impact of this localized pollution source requires that the data be gathered and analyzed for differential effects on local neighborhoods within the affected area, and this data be compared to meteorological dispersion of pollutants generated by airport activity.	Public health issues are discussed in Section 6.8 of the Supplemental DEIS/FEIR.
63.3	Air Quality	Model	Dispersion models which predict essentially no variation in concentration of pollutants throughout the Town of Winthrop, which has neighborhoods both a few hundred yards, and several miles from the generation source must be considered very suspect. The technology exists for the direct measurement and monitoring of these pollutants, and should be established without delay.	The air quality dispersion model used for the Supplemental DEIS/FEIR complies with EPA and FAA standards.

AIRCRAFT OWNERS AND PILOTS ASSOCIATION
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www.aopa.org

March 30, 1999

LETTER 64

Mr. Arthur Pugsley – EOEA No. 10458
Secretary of Environmental Affairs
Attention MEPA Office
100 Cambridge Street
20th Floor
Boston, MA 022025

Dear Mr. Pugsley:

The Aircraft Owners and Pilots Association (AOPA) represents the general aviation interests of more than 340,000 individual pilots and aircraft owners in the United States, more than 30,000 of whom reside in New England. AOPA and its members are very interested in any action that will enhance the access to and capacity of airports in New England and the efficiency of the air traffic control system.

For more than ten years, AOPA has been participating in the airside development issues at Boston-Logan International Airport. Recently we were provided the opportunity to review the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) entitled "Logan Airside Improvement Planning Project."

It is our assessment that reducing delays through new infrastructure, including runways, is the appropriate way to ensure that the Boston Metropolitan area will be able to meet the growing demand for air transportation in the 21st century without suffering significant environmental and economic consequences. Alternative 1A in the Draft EIS/EIR would enhance capacity by building runway 14/32 and a new centerline taxiway. This alternative also calls for improvements to additional taxiways and would address the approach minimums for runways at Logan.

Additionally, Alternative 1A provides solutions for the recognized needs of the users of Boston-Logan International Airport while minimizing and mitigating environmental impacts, including noise, on the surrounding communities. Alternative 1A not only protects but also enhances the socioeconomic benefits that Boston-Logan International Airport brings to the Boston Metropolitan area and New England as a whole. Alternative 1A would also reduce fuel-wasting delays and in many cases reduce noise, especially late at night, for the communities most severely impacted at the present time. 64.1

On behalf of our New England members, **AOPA fully supports Alternative 1A** and urges its timely implementation.

Should you require any additional information on this or any other related issue, please feel free to contact me at (301) 695-2221.

Sincerely,

Dennis Roberts
Vice President, Executive Director
Government and Technical Affairs

Letter 64
Aircraft Owners & Pilots Association
Dennis Roberts, Vice President, Executive Director of Government and Tech. Affairs

Code	Topic 1	Topic 2	Comment	Response
64.1	Alternatives	Preferred Alternative	It is our assessment that reducing delays through new infrastructure, including runways, is the appropriate way to ensure that the Boston Metropolitan area will be able to meet the growing demand for air transportation in the 21st century without suffering significant environmental and economic consequences...On behalf of our New England members, A0PA fully supports Alternative 1A and urges its timely implementation.	Comment noted.

McGOWAN, ENGEL, TUCKER & SCHULTZ

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OF COUNSEL
PETER L. KOFF
MICHAEL ROITMAN
SUSAN GRANDIS BRANDER, P.C.

LETTER 65

April 16, 1999

Mr. John Silva
Manager, Environmental Programs
New England Region
Federal Aviation Administration,
12 New England Executive Park
Burlington, MA 01803

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Mr. Silva:

I am submitting the following comments on behalf of Airport Impact Relief, Inc. ("AIR, Inc.") in regard to the Draft Environmental Impact Statement/Report ("EIS/R") for the above project.

The Draft EIS/R does not adequately describe the environmental and socio-economic impacts of the project and evaluate other reasonable alternatives to the proposal chosen by Massport as its preferred alternative. Furthermore, to the extent this document has been circulated to comply with the requirements of Federal law, the Draft EIS/R shows that the Federal Aviation Administration has not properly carried out its own obligations under relevant provisions of Title 49 of the United States Code, the National Environmental Policy Act ("NEPA") and its implementing regulations, and the requirements of Executive Order 12898 and the DOT Order regarding environmental justice.

1. Federal statutory context. Massport's proposal to construct a new Runway 14/32 and other airfield improvements at Logan Airport will trigger a number of FAA and Secretary of Transportation approvals and/or actions with respect to a future grant application, changes to the Logan airport layout plan, airspace determinations, and related actions. Accordingly, this Draft EIS/R should reflect the strong Federal presence in the project, discuss the Federal policies and future Federal approvals which will be necessary, and provide a documented record of how the FAA has carried or will carry out its obligations under Federal law with regard to this project. The Draft EIS/R falls far short in providing this information to the public. 65.1

For example, the brief reference in Table 8.8-1 on pages 8-27 and 8-28 of the need for FAA "Federal funding approval" and a "Section 4(F) Determination" from the U.S. Department of Transportation, and the actual Section 4(f) discussion on pages 8-18 to 8-21, totally fail to provide the reader with a fair understanding of the important requirements of Federal law with respect to the approval of airport development projects. In fact, the only provision of Title 49 of the United States Code which is reproduced in the document is Section 40103, a provision which concerns FAA authority to regulate use of airspace, a fact which is not in dispute. On the other hand, other than one cryptic reference to the pubic hearing requirement of "49 USC 47106(c)" on page P-3 of the Draft EIS/R, this document does not summarize the relevant provisions of Federal law and policies contained in 49 U.S.C. § 47101 et seq. which have been enacted to ensure that airport development projects are consistent with the needs of the surrounding communities and protect the environment.

It is not generally understood by the many citizens who are impacted by the present, and proposed future, operations of Logan Airport that it is the policy of the United States that airport development projects should minimize, rather than increase, projected noise impacts on nearby communities (49 U.S.C. § 47101(a)(2)) and provide for the protection and enhancement of the quality of the environment (49 U.S.C. § 47101(a)(6)); that mitigation of existing noise impacts must be given a high priority in airport development projects which expand capacity (49 U.S.C. § 47101(c)); and that airport development projects should be planned in a cooperation effort with state and local officials (49 U.S.C. § 47101(g)(1)). None of these policies are alluded to in the Draft EIS/R. 65.2

These general policies are then reinforced by the more specific provisions of 49 U.S. C. § 47106 which ensure that airport development projects do not have significant adverse impacts on the surrounding region. For example, a project grant application may be approved by the Secretary of Transportation *only if* he is satisfied that "the interests of the community in or near which the project may be located have been given fair consideration ...." Second, 49 U.S.C. § 47106(c)(1)(A)(ii) gives the City of Boston, where the Massport airfield improvement project will be located, the right to petition the Secretary of Transportation about this project since the Massport Board does not have any voting representation from Boston, a right which is not discussed in the Draft EIS/R. Third, under 49 U.S.C. § 47106(c)(1)(A) the Secretary of Transportation may not approve the runway unless a public hearing is held to consider whether the runway is consistent with the community's planning objectives, as well as the economic, social and environmental effects of the runway. The public hearings held last week did not make this fact clear to the public. Finally, 49 U.S.C. § 47106(c)(C) prohibits approval of the project if it has significant adverse effects on natural resources (including recreation assets) unless there is no possible and prudent alternative and every reasonable step has been taken to minimize the adverse effects of the project. 65.3

The Draft EIS/R does not show that any cooperative planning efforts were made by Massport with the City of Boston and other local communities regarding which of the alternatives should be

selected by Massport as its preferred alternative. In fact, Massport repeatedly refused over an 18-month period to consult with the Community Advisory Committee about its choice of a preferred alternative. As you know, in October of 1997 AIR, Inc. specifically requested, in the enclosed letter to Massport Executive Director Peter Blute, an opportunity "to start the process of discussion" concerning airside improvements at Logan. This letter was never responded to by Mr. Blute or by anyone else at Massport or the FAA, to whom a copy was sent. Neither Massport nor the FAA consulted with the affected communities as to whether the selection of Alternative 1A would be consistent with the requirements of Federal law, particularly regarding minimization of noise and avoidance of disproportionate impacts to minority and low income communities. 65.4

Accordingly, we believe that it would be impossible for the Secretary of Transportation to be satisfied that "fair consideration" has been given to the interests of the surrounding communities when other alternatives, such as an aggressive peak period pricing program or further development of other existing commercial airfields, and Massport's own Hanscom Field, were not even evaluated. Furthermore, as documented in the comments of the Community Advisory Committee (CAC) dated March 29, 1999, which comments are endorsed and adopted by AIR, Inc., the project – particularly the proposed Runway 14/32 – will have excessive noise and other impacts on surrounding communities, in conflict with the national policy established in 49 U.S.C. § 47101(a) and (c). 65.5 65.6 65.7

One other area of particular concern to AIR, Inc. is the document's failure to make a meaningful evaluation, as required by Federal law (including 49 U.S.C. § 47106(c)((1)(C)), of the impacts of the project on Section 4(f) resources. The document's apparent status as a "Draft Section 4(f) Statement" as well as a Draft EIS/R is not really made clear except on the page following REV-32 entitled "List of Preparers" at the end of volume I. The Preface (page P-1) and the discussion of the MEPA/NEPA Process and the Massport - FAA Roles on pages P-2 to P-5 do not indicate that the document is being circulated for comment as a Draft Section 4(f) Statement. The references at the top of each page and the Table of Contents to "Draft 4(f)" are confusing and not explained in the text. 65.8

The actual discussion of potential Section 4(f) impacts on pages 8-18 to 8-21 of the Draft EIS/R does not present sufficient data which shows the actual effects of the proposed project on the two historic sites identified in Chelsea. The bare determination by the FAA "that there are no feasible or prudent alternatives to the Preferred Alternative which would achieve the delay reduction, safety, transportation, noise distribution and other objectives of the Preferred Alternative" (page 8-21) is so conclusory as to be meaningless. 65.9

2. Environmental justice compliance. The draft EIS/EIR reflects significant, and fatal, short-comings in the FAA's ascertainment and evaluation of the impacts of this project on minority and low-income populations living adjacent to the project. The document shows that the FAA did not actively obtain the population and impact information required by the Executive Order and the DOT Order; the only specific data presented is noise data, which compares the projected noise

impacts (which we believe are significantly understated) in particular communities to the study area as a whole, rather than showing the discrepancies among and between various communities which are impacted by the project; and other impacts, such as the impacts from air pollutants and odor, are not addressed. At best, the environmental justice information is presented in a way which suggests the FAA was simply "checking off" this requirement rather than attempting, in good faith, to provide a meaningful evaluation of the project on minority and low-income communities. 65.10

3. **Preferential runway advisory system (PRAS).** In Chapter 8 of the Draft EIS/R, Massport and the FAA maintain that the preferred alternative selected by Massport will help to obtain a better achievement of the goals of PRAS. In our opinion, however, that justification is misplaced. PRAS has not been a useful and reliable mechanism for equitable distribution of noise impacts for many years, due to increased volumes of air traffic and other historic and operational reasons. Achievement of the PRAS goals is not a relevant criterion for this project. If anything, the PRAS goals need to be revisited and understood by the public before any decisions should be made based upon PRAS. 65.11

4. Conclusion. AIR, Inc. respectfully requests that the Draft EIS/R be found inadequate by the Secretary of Environmental Affairs for all of the reasons stated above and in the comments of the CAC; that the FAA should reconsider its support for the project in light of the many deficiencies noted in the Draft EIS/R; and that the document should be withdrawn from further pubic consideration or processing at this time pending the development of a meaningful participatory process for evaluation of alternatives to the Runway 14/32 proposal. 65.12

Sincerely yours,

Peter L. Koff

cc: Arthur Pugsley, MEPA
AIR, Inc. members
Anastasia Lyman, Co-Chair, CAC

McGOWAN, ENGEL, TUCKER, GARRETT & SCHULTZ

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PAUL A. McGOWAN, III
MARK D. ENGEL
THOMAS H. TUCKER
ROBERT W. GARRETT
STEPHEN SCHULTZ

October 16, 1997

Mr. Peter Blute
CEO & Executive Director
Massport
10 Park Plaza
Boston, MA 02116

Re: Peak period pricing and airside improvements

Dear Peter:

Airport Impact Relief, Inc. has asked that I write to you regarding the issues of peak period pricing and airside improvements, issues which have been made even more important by yesterday's *Wall Street Journal* story and your message in this week's *East Boston Sun Transcript*.

We are concerned by the lack of information which is being provided to us regarding the nature and timing of Massport's plans with respect to peak pricing. I gather from the *Journal* piece and other information I have heard that Massport has decided to move forward, together and at the same time, with peak period pricing and airside improvements (including Runway 14/32 and a centerfield taxiway), and that a Draft EIR will be published next month. I do not know if this information is accurate, but it would certainly be helpful to the community if some specific timetable was communicated as to when and what Massport proposes to do. Of course, I am surprised if the Massport plan would have a runway element going forward at the same time as the initiation of peak pricing. It had been our understanding that you were in agreement about "giving 'peak' a chance."

In another ironic twist to this issue, I was today called by someone in the Hanscom area asking whether Massport would be subject to local zoning requirements relative to a possible golf course and non-aviation development plans for Hanscom. The possibility that Massport would be giving up airport uses at Hanscom -- while it simultaneously moves to expand Logan's "operational flexibility" and ability to accommodate increased numbers of small and commuter aircraft using Logan -- is most troubling to us. The people of East Boston and Winthrop have always been sensitive to not shifting the problems of Logan Airport to the Hanscom area communities of Lexington, Concord, Bedford, and Lincoln. But at the same time, as long as Logan Airport growth is being discussed and Massport is considering options which we believe would increase the use of and impacts generated

by Logan Airport, it is only fair and necessary for other alternatives to be explored and equally considered by your agency. Therefore, I would expect to see in any EIR for airside development at Logan a rigorous analysis of options for use of Hanscom, as well as the possibilities of a slot system and other demand management techniques for Logan, even if some of these would require FAA implementation. I am curious whether this kind of information will be available in your EIR and what studies have taken place regarding these various alternatives.

Your message in the *Sun Transcript* stated that you were committed to proceeding in good faith and in a spirit of cooperation to work with the Airport's neighbors to resolve difficult issues to the satisfaction of all concerned. I suggest that the difficult issues of peak period pricing, airside improvements, and alternatives to physical construction at Logan Airport should now be at the top of your list for discussion with the community. As one group which has a key role to play in these issues, we would like to start the process of discussion. If you would call me directly or ask Scott Kafker or another member of your staff to do so, we could hopefully agree upon the right way for this discussion to proceed.

I look forward to hearing from you.

Sincerely yours,

Peter L. Koff

cc: Scott Kafker, Esq., Chief Legal Counsel
Richard Lettieri, Esq., Ropes & Gray
Betty Desrosiers, Director of Aviation Planning and Development
Jane Garvey, Administrator, Federal Aviation Administration
Robert Bartanowicz, Regional Director, FAA
AIR, Inc. officers and active members

Letter 65
Airport Impact Relief, Inc. (McGowan, Engel, Tucker & Schultz)

Code	Topic 1	Topic 2	Comment	Response
65.1	Environmental Review Process	FAA/NEPA	...[T]his Draft EIS/R should ... discuss the Federal policies and future Federal approvals which will be necessary... with regard to this project.	Chapter 1 of this SDEIS/FEIR describes the Federal process undertaken for this project. Chapter 8 of the Supplemental DEIS/FEIR describes the federal permits and approvals required for the Preferred Alternative.
65.2	Environmental Review Process	FAA/NEPA	General policies enacted in 49 U.S.C. § 47101 are not alluded to in the Draft EIS/R.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR comply with applicable requirements of federal law.
65.3	Environmental Review Process	FAA/NEPA	The Public Hearing did not make clear to the public the requirements of 49 U.S.C. § 47106.	FAA statements at the commencement of the public hearing addressed pertinent requirements of 49 U.S.C. § 47106.

Code	Topic 1	Topic 2	Comment	Response
65.4	Environmental Review Process	Public Process	The Draft EIS/R does not show that any cooperative planning efforts were made by Massport with the City of Boston and other local communities regarding which of the alternatives should be selected by Massport as its preferred alternative...Neither Massport nor the FAA consulted with the affected communities as to whether the selection of Alternative 1A would be consistent with the requirements of Federal law, particularly regarding minimization of noise and avoidance of disproportionate impacts to minority and low-income communities.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order r, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.
65.5	Alternatives	Peak Period Pricing	Other alternatives ... such as an aggressive peak period were not evaluated.	The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Analysis of PPP is set out in in Section 4.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
65.6	Regional Transportation	Regional Airports	... further development of other existing commercial airfields, and Massport's own Hanscom Field, were not even evaluated.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The role of other commercial airports in New England is discussed in Chapter 2 of the Supplemental DEIS/FEIR.
65.7	Alternatives	Runway 14/32	... the proposed Runway 14/32 will have excessive noise and other impacts on surrounding communities, in conflict with the national policy ...	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
65.8	Open Space/ Parkland	Section 4(f)	The document fails to make a meaningful evaluation ... of the impacts of the project on Section 4(f) resources. The document's apparent status as a "Draft Section 4(f) Statement" as well as a Draft EIS/R is not really made clear ...	Section 4(f) requires the identification of resources that would be used by any alternative under consideration. Therefore, the identification of all park and historic resources currently affected by Logan Airport is not required for a Section 4(f) Evaluation. There are no parklands, historic properties or sites, or other Section 4(f) resources on the airfield in the area of the proposed runway and taxiway improvements. There are also no parklands identified in those areas where the 65 dB DNL contour for the Preferred Alternative extends beyond the 65 dB DNL contour for the No Action Alternative (Alternative 4). Therefore, the Preferred Alternative will have no direct or indirect impact on parklands. Refer to Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR for a discussion of parklands relative to the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
65.9	Open Space/ Parkland	Section 4(f)	... discussion of potential Section 4(f) impacts ... does not present sufficient data which shows the actual effects of the proposed project on the two historic sites identified in Chelsea. The bare determination by the FAA "that there are no feasible or prudent alternatives to the Preferred Alternative which would achieve the delay reduction, safety, transportation, noise distribution and other objectives of the Preferred Alternative" is so conclusory as to be meaningless.	Refer to response to Comment 65.8.
65.10	Environmental Justice	Impacts	... the environmental justice information is presented in a way which suggests the FAA was simply "checking off" this requirement rather than attempting, in good faith, to provide a meaningful evaluation of the project on minority and low-income communities.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation.
65.11	Noise	PRAS	Achievement of the PRAS goals is not a relevant criterion for this project.	Since the PRAS goals were developed in conjunction with Massport, the FAA, and neighboring communities, it has been Massport's policy to encourage the FAA to operate Logan Airport in a manner that would attempt to fulfill the PRAS goals. The use of the PRAS goals in this study is consistent with this policy.

Code	Topic 1	Topic 2	Comment	Response
65.12	Environmental Review Process	Public Process	... the document should be withdrawn from further public consideration ... pending the development of a meaningful participatory process for evaluation of alternatives to the Runway 14/32 proposal.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

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LETTER 66

April 24, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attn: Arthur Pugsley

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Mr. Durand:

I am submitting the following supplemental comments on behalf of Airport Impact Relief, Inc. ("AIR, Inc.") in regard to the Draft Environmental Impact Statement/Report ("EIS/R") for the above project. I am hopeful that you will be able to accept these late comments which were delayed by my being out-of-town all of this past week.

First, I want to include one general observation about the lack of adequate maps and figures to identify the particular residential communities surrounding the Airport which would be impacted (positively or negatively) by the projects which Massport is proposing. The document repeatedly shows the Logan Airport facilities only to the extent of the Airport's property boundaries but without reference to the surrounding land areas and residential communities which lie next to or just beyond the surrounding waters. See, for example, the following figures: Figure 1.5-1 (existing runway layout) on page 1-15; Figures 1.5-2 through 1.5-6 (runway usage in various wind configurations) on pages 1-16 through 1-20; and the noise contours in Volume IV. These graphics minimize the impacts of the proposed projects on the persons who reside close to the Airport and make it more difficult for individuals to understand the potential effects of the projects on their particular neighborhoods. Figure 5.1-1 on page 5-4 does show the Airport in relation to the surrounding communities, but the areas are identified only generally ("East Boston," "Winthrop," and so forth) without more specific identifications of the particular neighborhoods. In contrast, Figure 5.3-2 on page 5-56, which shows the locations of air quality modeling receptors, does properly identify specific neighborhoods within Winthrop and East Boston, and South Boston. More extended use of these particular identifications would be helpful throughout the document.

66.1

Second, our original comment letter dated April 16, 1999 neglected to comment upon two of the specific projects, in addition to the proposed Runway 14/32, which are of concern to AIR, Inc. and its members. The evaluation in the Draft EIS/R of the proposed Centerfield Taxiway does not adequately discuss the environmental impacts (both noise and odors) of this project, its relationship to increased Airport capacity (augmenting gate shortages) and expanded use of the airfield, and alternatives to the full Centerfield Taxiway, including constructing a shorter taxiway in the southern half of the airfield which would avoid adding more taxiing and queuing of aircraft in close proximity to the Bayswater/Constitution Beach area of East Boston and the Court Road neighborhood in Winthrop. 66.2 66.3

Finally, the discussion in the Draft EIS/R regarding lowering of the landing minimums on Runways 15R, 33L, 22L, and 27 is very limited and far from adequate. The Draft EIS/R does not fully disclose and properly evaluate the present conditions which limit lowering of the landing minimums on, we believe, three of the four runway ends. AIR, Inc. previously obtained from Massport, by means of a public documents request, a copy of the July 31, 1980 Agreement between Massport, the FAA, and the City of Boston regarding the installation of various lighting and instrumentation at the end of Runway 15R. In this Agreement the FAA states that it does not intend to lower landing minimums on Runway 15R, and will not do so in the future without a full environmental impact statement and public meetings. The Agreement references similar restrictions regarding lowering of the landing minimums on Runways 22L and 27. 66.4

The Draft EIS/R has no specific text discussion about this Agreement or the reasons particularly applicable to Runway 15R in the Draft EIS/R main volume (Volume I, pages 3-36 to 3-38) or Appendix D (Volume III). Based on the actual text of the Agreement for Runway 15R, and assuming the agreements for Runway 22L and 27 use similar language, the Draft EIS/R completely misstates the purpose of the agreements regarding these three runways when the Draft EIS/R states that when the instrument landing system equipment was installed on these runways "several years ago" the FAA "agreed to temporarily retain the existing approach minimums ...." See Volume I, page 3-38; Volume III, Appendix D, page 1. The EIS/R should provide, but does not, a full discussion of the reasons for the agreements, the concerns of residents who live close to the approach ends of these runways, the perceived and actual potential impacts of the proposed changes, alternatives, and appropriate mitigation.

AIR, Inc. respectfully requests that the Draft EIS/R be found inadequate by the Secretary of Environmental Affairs for the reasons stated above and in our previous comments.

Sincerely yours,

Peter L. Koff

cc: John Silva, FAA
AIR Inc. members

Letter 66
Airport Impact Relief, Inc. (McGowan, Engel, Tucker & Schultz)

Code	Topic 1	Topic 2	Comment	Response
66.1	Noise	Studies	Requests more extensive use of maps in identifying specific neighborhoods and to show relationship of surrounding communities to Logan on maps and figures.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
66.2	Alternatives	Taxiway Improvements	The evaluation in the Draft EIS/R of the proposed Centerfield Taxiway does not adequately discuss the environmental impacts (both noise and odors) of this project, ...	Section 6.2 of the Supplemental DEIS/FEIR shows that there are small noise benefits from the construction of the Centerfield Taxiway. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the taxiways reducing ground noise and emissions for close in residents of East Boston and Winthrop. It also should eliminate aircraft landing on Runway 4R from waiting to cross Runway 4L and aiming their intake noise toward Constitution Beach. Section 6.4 of the Supplemental DEIS/FEIR discusses the air quality benefits of the Centerfield Taxiway.
66.3	Alternatives	Taxiway Improvements	Wants discussion of having shorter Centerfield taxiway only in southern half of airfield.	One of the major benefits of the Centerfield Taxiway is to provide an impeded path from the north sector of the airfield to the south. This will prevent Runway 4R arrivals from queuing in the northern sector, and will reduce queues for Runway 22L departures. Refer to Section 3.3.1 of the Supplemental DEIS/FEIR for more discussion of the Centerfield Taxiway's operational benefits.
66.4	Alternatives	Reduced Approach Minima	Requests expansion of discussion on lowering minimums and specifics on the July 31, 1980 agreement between Massport, the FAA and the City of Boston.	The 1980 agreement between Massport and the FAA required an EIS analysis before any change in the minimums would be affected. The proposed reductions in minimums are analyzed in the EIS documents for the Airside Project. Reduced landing minimums provide for a safer approach by providing precision guidance at lower altitudes, and thus a safer approach. The reduced landing minimums do not change the approach path nor reduce the clearance between aircraft and the surface. Rather, they shift the location at which a missed approach decision is initiated closer to the airport. For Runways 27 and 22L, the reduced minimums will make the approach procedures flown by pilots more consistent with FAA standards in effect at most other airports. Reduced landing minimums will increase airfield safety by allowing operations more directly into the prevailing wind and will help improve PRAS goal achievement.

Statement of Scott Godfrey
Director, Eastern Region
Air Transport Association of America
on the
Logan Airside Improvements Planning Project
08 APR 99

LETTER 67

My name is Scott Godfrey and I am the Director of the Eastern Region Office of the Air Transport Association of America which is headquartered in Washington, DC. The ATA represents the 23 major passenger and cargo airlines in the U.S..

Today, I am speaking for all these airlines, their respective employees and the passengers and shippers using Logan International Airport. ATA and the airlines serving Boston Logan Airport support the Logan Airside Improvements Planning Project in its entirety. As a partner with Massport, local officials, and community representatives throughout the comprehensive process leading to the submission of the Draft Environmental Impact Statement/Environmental Impact Report; we believe that the benefits to be garnered by all partners weigh heavily in support of the project.

The present operational posture within which the airport operates results in significant delays during certain wind conditions. The efficiency of the airport's operation is severely compromised during these times due to the lack of a runway configuration compatible to the operational requirements otherwise addressed by the available runways in all other wind situations. The obvious solution to this problem is the implementation of Massport's plan which includes the construction of runway 14/32. 67.1

The ATA can not stress enough the importance of the reduction of the current delays which plague Boston Logan Airport and the corresponding level of service which we can provide to the passengers and shippers utilizing the airport. It is also our position that the implementation of the entire project will lower the overall noise impact on the surrounding communities. This is due to the uni-directional orientation of the new runway and the efficiency gains which will cause a reduction of delayed late night operations which currently impact citizens at the most intrusive time of day. 67.2

Additionally, air traffic system and pilot operational safety benefits will be realized; a lessening of fuel emissions from delayed aircraft on the ground will result; and associated economic benefits for the greater Boston area will be gained. 67.3

In the interest of time, the ATA will submit a more detailed presentation of these and all the pertinent items via a written submission to the appropriate state {MEPA Office} and federal {FAA} agencies.

Letter 67
Air Transport Association of America
Scott Godfrey, Director Eastern Region

Code	Topic 1	Topic 2	Comment	Response
67.1	Alternatives	Runway 14/32	The obvious solution to this problem [delays] is the implementation of Massport's plan which includes the construction of Runway 14/32.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
67.2	Alternatives	Preferred Alternative	... the implementation of the entire project will lower the overall noise impact on the surrounding communities.	Comment noted.
67.3	Air Quality	Impacts	... a lessening of fuel emissions from delayed aircraft on the ground will result; ...	Comment noted.

Air Transport Association

LETTER 68

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge ST
20th floor
Boston, MA 02202

Subject: **Logan Airside Improvements Planning Project**
Boston-Logan International Airport

Reference: **Draft EIS/EIR**

Dear Sir:

Pursuant to my testimony on April 8, 1999, at the second public hearing on this subject, the following comments are submitted by the Air Transport Association (ATA).

As Director of the Eastern Region office of the ATA, which represents the 23 major passenger and cargo airlines of the U.S., we support the improvements in the Logan Airside Improvements Planning Project in their totality as delineated in the preferred Alternative 1A.

ATA throughout the years has been an active participant with Massport and the FAA, working to enhance the efficiency of Logan air traffic operations which have suffered increasingly high levels of delay. The ATA Eastern Region, through its participation in the Airside Review Committee, has worked to insure that proposed improvements, specifically, this project, were coordinated with all concerned public and private constituencies. It is, therefore, our position that Massport has adequately fulfilled all necessary and reasonable requirements through the comprehensive processes leading to the submission of the subject document. 68.1

Due to the physical limitations of Logan Airport which have not been altered since 1977, and the increasing level of delays, Massport is justified in proposing this project to address

the root problem of airport efficiency and delay reduction. The airline industry acknowledges the overwhelming cost to our passengers and shippers which results from the current unacceptable level of delay. The ATA cannot stress enough the importance of the reduction of these delays and the corresponding change in the level of service we can provide. Additionally, if not adequately addressed now, we believe the delay situation will only worsen.

Supporting data for the preceding statements is adequately covered in the subject document.

Specifically addressing Alternate 1A, we submit the following:

a. All items addressing the taxiway improvements offer an increase to the level of safety regarding surface movement of aircraft as well as an increase in the efficiency of these operations. Because of a more efficient ground operation, a corresponding decrease in engine noise and fuel emissions will be experienced. This represents a significant benefit to the entire airport community and airport neighbors. 68.2 68.3

b. The proposed reduction in ILS landing minimums offers two main benefits: it will permit aircraft to land during weather conditions which currently prohibit such operations resulting in delays; and will allow the use of additional runway configurations. This will give controllers greater flexibility in runway assignment and present a greater opportunity to attain the legally designated PRAS goals. 68.4

   The level of safety is increased by reducing controller and pilot workload associated with executing unplanned actions including holding and diverting.

c. The construction of uni-directional Runway 14/32 is the keystone of the project. Due to the overwhelming amount and excessive length of delays caused by northwest wind conditions, the proposed runway offers the single most significant initiative to reduce these delays. The operational posture within which the airport operates now results in significant delays during weather and wind conditions as described in the subject document. The efficiency of the airport's operation is compromised during these times due to the lack of a runway configuration compatible with the operational requirements otherwise addressed by the available runways in all other wind conditions. 68.5

Letter 68
Air Transport Association of America
Scott Godfrey, Director Eastern Region

Code	Topic 1	Topic 2	Comment	Response
68.1	Environmental Review Process	MEPA	It is, therefore, our position that Massport has adequately fulfilled all necessary and reasonable requirements through the comprehensive processes leading to the submission of the subject document.	Comment noted.
68.2	Alternatives	Taxiway Improvements	Specifically addressing Alternate 1A, ... Because of more efficient ground operations, a corresponding decrease in engine noise and fuel emissions will be experienced. This represents a significant benefit to the entire airport community and airport neighbors.	Comment noted.
68.3	Alternatives	Reduced Approach Minima	Specifically addressing Alternate 1A, ... The proposed reduction in ILS land minimums offers two main benefits: it will permit aircraft to land during weather conditions which currently prohibit such operations resulting in delays;	Comment noted.
68.4	Alternatives	Preferred Alternative	Specifically addressing Alternate 1A, ... This will give controllers greater flexibility in runway assignment and present a greater opportunity to attain the legally designated PRAS goals.	Comment noted.
68.5	Alternatives	Runway 14/32	Specifically addressing Alternate 1A, ... Due to the overwhelming amount and excessive length of delays caused by northwest wind conditions, the proposed runway offers the single most significant initiative to reduce these delays.	Comment noted.

Alliance of Boston Neighborhoods

CURRENT MEMBER NEIGHBORHOODS

Aberdeen & Reservoir Civic Association • Allston Civic Association
Bay Village Neighborhood Association, Inc. • Beacon Hill Civic Association
Chester Square Neighborhood Association • Claremont Neighborhood Association, Inc.
Community Alliance of Mission Hill • Cosmopolitan Neighborhood Association
Dorchester Neighborhood Association • Ellis Neighborhood Association, Inc.
Fenway Civic Association • Jeffries Point Harborside Neighborhood Association
Leather District Neighborhood Association • Neighborhood Association of the Back Bay, Inc.
North End/Waterfront Residents Association • Pilot Block Neighborhood Association, Inc.
Prudential Center Residents Association • Roxbury Neighborhood Council
Seaport Alliance for a Neighborhood Design • St. Botolph Citizens' Committee, Inc.
Worcester Square Area Neighborhood Association

ALL CITY NEIGHBORHOODS ARE INVITED TO JOIN THE ALLIANCE.

Harriet Tubman House · 566 Columbus Avenue · Boston, MA 02118 · voice: 617-267-6356 · facsimile: 617-357-5916

LETTER 69

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge St. 20th Floor
Boston, MA 02202

April 23, 1999

The Alliance of Boston Neighborhoods strongly opposes the construction of Runway 14/32.

We are dismayed that Massport is violating its legal protected commitments to the affected neighborhoods. Public agencies are obligated to protect the public interest as they carry out their specific missions; this proposal fails to honor the public trust, at the continuing expense of the residents of nearby communities. 69.1

This runway will increase noise and pollution in Boston neighborhoods, including East Boston, Charlestown, South Boston, South End, Beacon Hill, Back Bay, Roxbury, Jamaica Plain, and possibly Hyde Park, Roslindale and West Roxbury. We urge a more equitable distribution of the burdens of economic growth. This is particularly true when the affected neighborhoods have benefited least from such growth. 69.2

The city and regional transportation infrastructure is not capable of supporting the expansion expected with this runway, and indeed, expected regardless of this runway. Neither visitors nor local travelers will benefit if they cannot get to and from the airport. 69.3

Massport's cost-benefit analysis of the proposed project values every minute of passenger time spent in delays, however brief, without adequate concern for city life. The cumulative costs to residents, in productivity lost due to interrupted communication and disruption of sleep, loss of outdoor recreational opportunity, respiratory and other health problems, decreased property values, and many other flight impacts are not calculated. 69.4

The proposed runway is a short term, local solution for a basic regional problem. The damage to afflicted neighborhoods will be permanent; however, the capacity controversy will face us again in a few years. 69.5

A regional plan for all transportation modes must be developed, considering new high-speed rail, and other airports and potential transit improvements. Peak-hour pricing, small-aircraft and freight redistribution, and other methods for rationalizing airport utilization must be examined. Massport must join with other public agencies as appropriate to develop a comprehensive, long-range regional transportation plan. 69.6 69.7

Sincerely,

Shirley Kressel
President

Frank Jordan
Vice President

Ned Flaherty
Secretary

Max Trager
Treasurer

Letter 69
Alliance of Boston Neighborhoods

Code	Topic 1	Topic 2	Comment	Response
69.1	Environmental Review Process	MEPA	... this proposal fails to honor the public trust, at the continuing expense of the residents of nearby communities.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* (previously the GEIR) and its updates. Massport and FAA have complied with all applicable state and federal requirements.
69.2	Noise	Impacts	This runway will increase noise and pollution in Boston neighborhoods, ...	Refer to response to Comment 69.1.
69.3	Ground Transportation	Access to Logan Airport	The city and regional transportation infrastructure is not capable of supporting the expansion expected with this runway, and indeed, expected regardless of this runway. Neither visitors nor local travelers will benefit if they cannot get to and from the airport.	Massport has in place an extensive Ground Access Management Plan, the primary goals of which are to: increase the overall efficiency of the metropolitan transportation system through interagency coordination; increase annual air passenger HOV mode share to 35.2 percent by the time annual air passengers reach 37.5 million; reduce employee reliance on commuting alone by private automobile; provide adequate long-term parking within the limits of the Logan Airport Parking Freeze; and improve management of ground access and infrastructure through technology. Key achievements in reaching those goals include: Establishment of the Logan Airport Transportation Management Association (TMA). Massport provided subsidies for TMA members on Logan Express and MBTA. TMA members ride the Rowe's Wharf Water Shuttle for free; hired professional TMA firm to operate the Logan Airport TMA. Record ridership on the Logan Express bus service (exceeded over one million passengers in 1998 and 1999) and planning for a fourth Logan Express location. Construction of the Woburn Regional Transportation Center which will include 900 new parking spaces for Logan Express (construction completed in 2000) Planning for the Airport Intermodal Transit Connector which will provide a direct link between Logan Airport and South Station/Red Line. Initiation of the Logan DART bus service between Logan Airport and South Station. Participation with the MBTA in planning for the redesigned new Airport Station to include wide escalators, flight information monitors, and other air passenger amenities. Continued the operation of free shuttle buses between Airport Station, Water Shuttle dock, and terminals. To "Provided a dedicated DART bus dock at South Station with direct service to the airport. Implemented Logan Direct service from the South Shore. Continued marketing and advertising of HOV services through use of 1-800-23LOGAN telephone service and other media. Continued implementation of commercial vehicle lane, Neptune Road exit ramp peak period forced turnaround, local street closures, and traffic volume restrictions at Maverick Street. Continued traffic monitoring, curbside monitoring, and traffic control improvements. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan.

Code	Topic 1	Topic 2	Comment	Response
69.4	Alternatives	Runway 14/32	... cost-benefit analysis ... The cumulative costs to residents, in productivity lost due to interrupted communication and disruption of sleep, loss of outdoor recreational opportunity, respiratory and other health problems, decreased property values, and many other flight impacts are not calculated.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
69.5	Alternatives	Runway 14/32	The proposed runway is a short-term, local solution for a basic regional problem.	The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR provide an evaluation of the regional airports at T. F. Green/Providence, Manchester, and Worcester Regional and their potential impacts on Logan Airport. Hanscom Field is the region's premier general aviation facility and accommodated over 180,000 aircraft operations in 1998. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport. Nevertheless, the proposed Logan Airport Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
69.6	Regional Transportation	Passenger Rail	A regional plan for all transportation modes must be developed, considering new high-speed rail, and other airports and potential transit improvements.	Massport's analysis of options to Logan Airport is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market. Chapter 2 of the SDEIS/FEIR provides a description of regional transportation mode alternatives.
69.7	Alternatives	Non-Construction Alternatives	Peak-hour pricing, small-aircraft and freight redistribution, and other methods for rationalizing airport utilization must be examined.	The airside analysis indicates that PPP would produce minimal delay reduction benefit in the current operating environment at Logan Airport while imposing significant costs on regional carriers and the communities that they serve. In contrast, the proposed unidirectional Runway 14/32 would produce immediate delay reduction benefits that will increase in the future as forecast activity levels grow. While the regional airports at Manchester and T.F. Green/Providence have experienced exceptional traffic growth over the past several years, traffic at Logan Airport has continued to grow. In the future, continued development at the regional airports should relieve some of the traffic growth pressures at Logan Airport, resulting in a reduced rate of traffic growth. Nevertheless, options to Logan Airport do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.

LETTER 70

MEPA PUBLIC HEARING
APRIL 8, 1999

GOOD EVENING. I'M ED FRENI, GENERAL MANAGER FOR AMERICAN AIRLINES HERE AT LOGAN AIRPORT. I'M HERE TONIGHT TO UNDERSCORE AMERICAN'S SUPPORT FOR THE MASSPORT AIRSIDE IMPROVEMENT PROJECT. WE BELIEVE THAT A NEW UNI-DIRECTIONAL RUNWAY FOR REGIONAL AIRCRAFT WILL BENEFIT ALL CARRIERS AT LOGAN.

A NEW RUNWAY WILL HELP REDUCE DELAYS AT LOGAN AND ALLOW THE AIRPORT TO OPERATE MORE EFFICIENTLY WHEN THE WINDS ARE NORTH-WESTERLY. THIS ENABLES THE AIRPORT TO OPERATE THE THREE-RUNWAY CONFIGURATION THAT IS REQUIRED TO HANDLE THE DEMAND. 70.1

A PLANE THAT IS LATE IN LEAVING LOGAN LIKELY WILL BE LATE IN ARRIVING AT ITS DESTINATION. AND, WHETHER WE TALK ABOUT A COMPLEX, INTENSIVE HUB AND SPOKE OPERATION, OR A TIGHTLY-SCHEDULED POINT-TO-POINT NETWORK, IT DOESN'T TAKE MUCH TO THROW AN ENTIRE DAY'S SCHEDULE OUT OF WHACK.

AS DELAYS INCREASE, THE COSTS OF PROVIDING RELIABLE SCHEDULES TEND TO RISE EVEN FASTER, WHICH CAN RESULT IN HIGHER FARES. AND AS ANYONE WHO HAS EXPERIENCED A CROWDED CHAOTIC TERMINAL DURING A SEVERE WEATHER EVENT KNOWS, ANYTIME AN AIRLINE'S CAPACITY IS RESTRICTED, THE QUALITY OF SERVICE WE CAN OFFER OUR CUSTOMERS DECLINES DRAMATICALLY.

IMPROVING THE EFFICIENCY OF AN AIRLINES' OPERATION AT LOGAN WILL ALSO ENABLE THE CARRIER TO CREATE A MUCH LESS ENVIRONMENTALLY OFFENSIVE PRODUCT. WITH LESS WAITING TIME ON THE GROUND WE'LL DEFINITELY REDUCE FUEL BURN AND EMISSIONS. 70.2

AMERICAN HAS A LONG AND RICH HISTORY IN BOSTON. WE BEGAN SERVICE HERE BACK IN 1927 WITH A NONSTOP FLIGHT TO NEW YORK. THE AIRCRAFT - A SINGLE-ENGINE FOKKER -- CARRIED SIX PASSENGERS, A PILOT AND A CO-PILOT. IT TOOK TWO AND A HALF HOURS TO REACH NEW YORK.

TODAY, AMERICAN OPERATES MORE THAN 70 DAILY FLIGHTS AND CARRIES THOUSANDS OF PEOPLE TO DESTINATIONS THROUGHOUT THE UNITED STATES, AND TO PUERTO RICO, LONDON, ENGLAND AND PARIS, FRANCE.

ON JUNE 1. WE'LL CELEBRATE TWO MAJOR EVENTS AT LOGAN. WE'LL LAUNCH NONSTOP SERVICE TO SEATTLE USING OUR NEW "NEXT GENERATION" BOEING 737-800 AND WE'LL MARK THE 40TH ANNIVERSARY OF THE VERY FIRST JET FLIGHT AT LOGAN.

TODAY, AMERICAN IS A TOP CARRIER AT LOGAN, WITH 4.5 MILLION PASSENGERS COMING THROUGH OUR GATES EACH YEAR. AND NEARLY 2,500 AMERICAN AIRLINE'S EMPLOYEES CALL BOSTON HOME.

"WE MEAN BUSINESS IN BOSTON" IS NOT ONLY OUR SLOGAN, BUT IT'S A COMMITMENT TO PROVIDING QUALITY SERVICE TO OUR PASSENGERS AND CUSTOMERS.

BUILDING A NEW RUNWAY WILL HELP US LIVE UP TO OUR COMMITMENT. IT IS GOOD FOR LOGAN AIRPORT AND IT WILL BE GOOD FOR THE AIRLINES THAT SERVE LOGAN.

THANK YOU.

Letter 70
American Airlines
Ed Freni, General Manager

Code	Topic 1	Topic 2	Comment	Response
70.1	Purpose and Need	Delays	A new runway will help reduce delays at Logan and allow the airport to operate more efficiently when the winds are north-westerly.	Comment noted.
70.2	Air Quality	Emissions Reduction	With less waiting time on the ground we'll definitely reduce fuel burn and emissions.	Comment noted.

Back Bay Photo Imaging
800 Boylston St.
Boston, MA 02199

April 23, 1999

LETTER 71

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge St. 20th. Floor
Boston, MA 02205

Dear Mr. Pugsley:

As a member of the Greater Boston Chamber of Commerce I recently received a letter from the organization's President and CEO requesting that members write to you in support of expanding Logan Airport (see copy enclosed). I am writing to inform you that I do not support Logan runway (14/32) expansion.

Much has been written in local newspapers both supporting and opposing Logan Airport expansion. I will not bore you by reiterating what you already known, but to take this opportunity to emphasis the need for responsible leadership. The air traffic problems currently facing Logan Airport did not spring up overnight. Increased air traffic has been the topic of discussions for several years. Where has the Massachusetts Port Authority been? Certainly they have had time to put together a long-term plan to address air traffic issues. Instead they recommend adding another runway, which by all acknowledgment is a short-term solution lasting up to five years! What then? I request that you deny environmental permitting and encourage the Massachusetts Port Authority to fulfill their responsibility by making an effort to develop a truly long-term solution. 71.1

The enclosed letter includes several generalized statements that sound as though the vitality of Massachusetts' economic future hinges upon the single event regarding Logan Airport expansion. I truly hope this is not the case, otherwise it is time for all of us to look outside the Commonwealth for a better living environment.

For other citizens of the Commonwealth and myself I thank you in advance for your time and efforts regarding this matter.

Sincerely,

Ray Molinaro
President

cc: Paul Guzzi, President and CEO
Greater Boston Chamber

Letter 71
Back Bay Photo Imaging
Ray Molinaro, President,
Greater Boston Chamber Member

Code	Topic 1	Topic 2	Comment	Response
71.1	Environmental Review Process	MEPA	I request that you deny environmental permitting and encourage the Massachusetts Port Authority to fulfill their responsibility by making an effort to develop a truly long-term solution.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

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April 22, 1999

LETTER 72

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention MEPA Office
Arthur Pugsley, IV, EOEA No. 10458
Commonwealth of Massachusetts
100 Cambridge Street, 20th floor
Boston, MA 02202

Re: Logan Airside Improvement Planning Project: DEIR/DEIR

Dear Secretary Durand:

Based upon our review of documentation and our participation in the CAC and ARC, the Beacon Hill Civic Association (BHCA) reiterates opposition to Massport's proposal to construct a new runway at Logan Airport. While the arguments for and against Massport's plan are many and complex, the following is a brief summary of our opposition:

1. We need a long-term, encompassing plan now; we need much more than a short-term, 20% fix. Massport's plan affords partial, temporary relief which does not effectively address the long-term, growing problem. Massport's plan is based on obsolete weather data, its delay model is different from and unreconciled with the FAA's calculations, and its plan forecasts only 11 years, probably only 5-7 years after completion. Massport tries to justify the runway in order to increase throughput and decrease delays in bad weather conditions. The new runway will increase actual operations annually, thereby expanding current capacity. Operations are projected to continue to grow without limits; and delays are also projected to continue to increase from the temporary, slightly decreased, level right after the new runway, eventually exceeding currently levels within a very few years. In the future operations will continue to increase without limits. Postponing a more encompassing solution will make it more difficult, painful, and expensive to achieve, if ever, at a later date. Why are we allowing a more massive pile up to develop and ignoring the responsible solution? 72.1 72.2

Bob Durand

April 22, 1999

The Association seeks your assistance in requiring Massport to develop an environmentally responsible, long-term plan which facilitates air traffic while respecting the health and well-being of all those affected.

Very truly yours,

Sandra C Steele
SCS

Sandra C. Steele, President

SCS/kp

c.c. Mayor Thomas Menino, City of Boston
U.S. Senator Edward Kennedy
U.S. Senator John Kerry
U.S. Representative J. Joseph Moakley
U.S. Representative Barney Frank
U.S. Representative Michael E. Capuano
Senator Stephen Lynch
Senator Robert E. Travaglini
Representative Paul Demakis
Representative Salvatore DiMasi
Governor Paul Cellucci
City Councilor Thomas M. Keane, Jr.
Boston City Council
Community Advisory Committee to Massport
Vincent A. Scarano, Mgr. Of Airports Division, FAA New England
Secretary, Office of Environmental Affairs
Environmental Protection Agency
Airside Review Committee
The Beacon Hill Times
The Beacon Hill Chronicle
The Boston Tab
The Boston Herald
The Boston Globe
The Boston Business Journal
The Wall Street Journal

Letter 72
Beacon Hill Civic Association
Sandra C. Steele, President

Code	Topic 1	Topic 2	Comment	Response
72.1	Analysis Assumptions/ Methodologies	Planning Period	We need a long-term, encompassing plan now; we need much more than a short-term, 20% fix.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
72.2	Delay	Model	... its delay model is different from and unreconciled with the FAA's calculations, and its plan forecasts only 11 years, probably only 5-7 years after completion.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The planning scenarios for 29, 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 1999 to 2020 time frame.

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BEACHMONT NEIGHBORHOOD ASSOCIATION, INC.

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LETTER 73

April 22, 1999

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02201

Re: Logan Airside Improvements Planning Project (Draft EIS/EIR)

Dear Mr. Pugsley,

Please accept the attached document as formal comment from the Officers & Directors of the Beachmont Neighborhood Association with regard to Massport's Logan Airside Improvements Planning Project. We submit this document to your attention, before 5p.m. on April 23, 1999, as directed by Massport in a coverletter on the Draft EIS/EIR.

Thank you for your consideration of our position.

Sincerely,

Ben Leone

Ben Leone
President

enclosure

cc: Mayor Robert J. Haas, Jr.
Honorable City Council of Revere
Honorable State Delegation
John Silva, Manager of Environmental Programs, Airports Division,

OFFICERS
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JAMES PAGE, **Vice President**
LAURA K. LEONE, **Secretary**
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Website: www.BNA8.com

Pursuing A Better Quality of Life Under The Crowded Skies

The Beachmont Neighborhood Association (hereafter referred to as "BNA") on April 14, 1999, sponsored an open meeting on the issue of Massport's Logan Airside Improvement Planning Project (hereafter referred to as the "Proposal"). We remain grateful for Massport's accommodation to our request for their participation at our neighborhood meeting.

Held at the Beachmont V.F.W., the meeting attracted 65 attendees representing mostly Revere residents but mixed with a few from other affected communities. The purpose of the meeting was three-fold: 1) to inform interested residents about the Proposal, which is a very significant and rather complicated issue; 2) to afford interested residents the opportunity to discuss the Proposal's ramifications; and, 3) to provide a forum for questions to both opponents and proponents. A team of Massport spokespersons delivered a detailed explanation of the Proposal with the audience responding in general disagreement. Overall, the program was informative and interesting but, at the same time, quite disturbing to most of the audience.

First, the BNA believes the Proposal as presented is flawed in that it includes at least two projects that we consider to pose direct threat to the Beachmont neighborhood. The concerning projects are: 1) the introduction of Runway 14/32; and, 2) the reduction in aircraft approach minimums.

As for Runway 14/32, we are concerned by the potential posed for increased air traffic and the noise and air pollution its establishment would bring. The promise of a brief reprieve from current noise levels for Revere and a few other communities is far from a justification for the BNA to support it. **As for the reduction in aircraft approach minimums**, we are concerned with what we perceive to be the serious safety factor in lowering the ceiling for planes landing in conditions of low visibility. We also predict that, as pilots would advance to a lower altitude before learning of a need to abort landing plans, the exhaust fumes and noise associated with resuming full-throttle to lift away would present a worsening of our already beleaguered situation.

73.1

73.2

The BNA favors economic vitality for Greater Boston's business communities. We favor energized focus on moving Boston toward a "world class" city. We are also keenly aware of the vital role air traffic plays in such development.

..... more

The BNA favors a more equitable distribution of noise levels among affected areas. 73.3

The BNA, in fact, favors an efficiently-operated first class airport at Logan International Airport, but stands opposed to such development when the burden of shouldering it is constantly placed on the few unfortunate communities that surround the airport. We believe this to be unfair and unjust.

Simply put, we are opposed to expansion at Logan International Airport because we already have more than enough traffic, air and noise pollution. The BNA is convinced the Proposal is destined to bring more pollution. We are convinced, too, that the next proposal (which the current Proposal, if accepted, will necessitate) will bring even more. We simply do not want any more.

In order to avoid ending negatively, the BNA offers the following recommendations. We hope that Massport can continue to work with affected communities in order to:

1) Devise a regional plan for aircraft operations in eastern Massachusetts, both for immediate and long-term future needs; 73.4
2) Embark upon a fair, impartial and complete evaluation of Hanscom Air Field and Worcester Airport as to what roles they each are capable of assuming in the short term to alleviate Logan's congestion, and in the long-term as alternative airports; 73.5
3) Study what further can be done to create and then mandate quieter aircraft; and, 73.6
4) Agree with sincerity to select locations as sites for three (3) additional airports to be developed within eastern Massachusetts. 73.7

*The BNA is an organization founded to serve as a focal point for community action dedicated to improving the quality of life in Beachmont and to joining in common effort with other groups for such purpose.

.....end

Letter 73
Beachmont Neighborhood Association

Code	Topic 1	Topic 2	Comment	Response
73.1	Alternatives	Runway 14/32	As for Runway 14/32, we are concerned by the potential posed for increased air traffic and the noise and air pollution its establishment would bring.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
73.2	Alternatives	Reduced Approach Minima	As for the reduction in aircraft approach minimums, we are concerned with what we perceive to be the serious safety factor in lowering the ceiling for planes landing in conditions of low visibility.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.
73.3	Noise	Impacts	... favors a more equitable distribution of noise levels among affected areas.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
73.4	Regional Alternatives	Regional Airports	Devise a regional plan for aircraft operations in eastern Massachusetts, both for immediate and long-term future needs;	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
73.5	Regional Alternatives	Regional Airports	Embark upon a fair, impartial and complete evaluation of Hanscom Airfield and Worcester Airport as to what roles they each are capable of assuming in the short term to alleviate Logan's congestion, and in the long-term as alternative airports;	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Airside Project Draft EIS/EIR for these improvements, which is expected to be filed in October 2001.
73.6	Noise	Impacts	Study what further can be done to create and then mandate quieter aircraft;	NASA is conducting a major research project, funded in part by the FAA, to determine what can be done to develop quieter aircraft. This project should provide the technical feasibility for developing quieter aircraft in the future.
73.7	Regional Alternatives	Regional Airports	Agree with sincerity to select locations as sites for three (3) additional airports to be developed within eastern Massachusetts.	Comment noted.

BEAR STEARNS

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April 23, 1999

LETTER 74

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

As a financial securities industry executive who uses Logan Airport quite frequently, I am writing to strongly support the Massachusetts Port Authority's proposal regarding the construction of runway 14/32. In addition, as the Vice Chairman of the Greater Boston Chamber of Commerce's Economic Development and Transportation Committee, I am extremely concerned that the regional economy will suffer greatly if the proposal is not approved. 74.1

Because I personally use commercial airlines flying out of or into Logan as many as six times a week, I am acutely aware of the problems caused by the increasing delays. As the eleventh-ranked U. S. airport in terms of operations, Logan currently ranks sixth in the nation in flight delays. I understand that last year alone, such delays amounted to 120,000 hours and cost approximately $319 million. As just one recent example, I was delayed over three hours last week in returning from New York City on the Delta Shuttle when one flight was cancelled and another delayed on the ground, as well as enroute, because windy conditions required Logan to operate with only one runway. As a result, I missed a business appointment in Boston, --a circumstance which could jeopardize my firm's ability to compete for a significant assignment. This was hardly an isolated incident and it is the type of problem that many of my Bear Stearns colleagues who visit Boston and our 200 employees who are based in the Boston office experience all the time. My own flights in and out of Logan have been delayed literally dozens of times because of similar conditions during the past year. Many, if not all of these delays would likely have been eliminated if runway 14/32 existed.

As the major airport in New England, Logan is a key driving force in the regional economy, with an impact of $5 billion annually. It employs more than 15,000 people and supports over 100 airport-related businesses. Continuing our regional economic growth and insuring the future fiscal health of the Commonwealth and surrounding states are

highly dependent on the success of the runway 14/32 project. As New England faces greater competition both nationally and abroad, having an airport that operates efficiently will become increasingly critical to our future.

Unfortunately, regional transportation measures will not provide sufficient relief for the problem of Logan delays. While Amtrak high-speed rail and growth at other regional airports are also necessary, they cannot begin to deal with the projected demand for air travel to Boston during the next decade. The runway 14/32 initiative, together with the entire Logan modernization project, thus strongly deserves your approval.

Sincerely,

John W. Gillespie

John W. Gillespie
Managing Director

Letter 74
Bear, Stearns & Co., Inc.
John W. Gillespie, Managing Director

Code	Topic 1	Topic 2	Comment	Response
74.1	Purpose and Need	Delay	...I am extremely concerned that the regional economy will suffer greatly if the proposal is not approved.	Section 1.3 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to the regional economy.

BOSTON
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LETTER 75

April 12, 1999

Mr. Arthur Pugsley
Secretary of Environmental Affairs - MEPA
100 Cambridge Street – 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

Re: EOEA 10458

I am writing on behalf of the 1,200 businesses and companies that are members of the Greater Boston Convention & Visitors Bureau, Inc.

We wish to be recorded in favor of the proposed unidirectional runway project 14-32 at Boston Logan International Airport.

This proposed runway will significantly reduce delays at Logan Airport and allow it to operate much more efficiently.

In the short term, the proposed runway project is the most realistic way in which to address Logan's delay problem. Even with the dramatic growth of regional airports in Providence and Manchester and the potential of Worcester and Portland Airports, as well as high-speed rail between Boston and New York, Logan will continue to be the airport of choice for business travelers and convention delegates. 75.1

If Logan's well-documented delay problems are not addressed, the ability of the region's visitor industry to compete for business will be compromised; and the economic benefits it generates will be threatened. 75.2

With major new transportation infrastructure already underway and a new convention center and new hotels planned for the Seaport District, Boston and Cambridge will be well positioned to compete for major national and international meetings and conventions. Those bids, however, may not be successful if the region's major airport, Logan International Airport, has a performance record of not operating in an efficient way. Meeting planners in evaluating bids look at the ability of the convention center to house their convention, the number and availability of hotel rooms in close proximity to the convention center and the ability of the airport to operate efficiently both on the

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groundside and airside. Without the proposed runway, our convention and meetings business will be threatened; and we could lose out on much of the business that the new convention center in the Seaport District is expected to generate.

If there is any additional information you need, please let us know.

Sincerely,

Patrick B. Moscaritolo
President and CEO

mg

Letter 75
Greater Boston Convention & Visitors Bureau
Patrick B. Moscaritolo, President & CEO

Code	Topic 1	Topic 2	Comment	Response
75.1	Regional Transportation	Regional Airports, Passenger Rail	...the proposed runway project is the most realistic way in which to address Logan's delay problem. Even with the dramatic growth of regional airports in Providence and Manchester and the potential of Worcester and Portland Airports, as well as high-speed rail between Boston and New York, Logan will continue to be the airport of choice for business travelers and convention delegates.	Comment noted.
75.2	Purpose and Need	Delay	If Logan's well-documented delay problems are not addressed, the ability of the region's visitor industry to compete for business will be compromised; and the economic benefits it generates will be threatened.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Section 1.32 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to tourism and the regional economy.

THE BOSTON HARBOR ISLANDS ADVISORY COUNCIL
BOSTON HARBOR ISLANDS NATIONAL RECREATION AREA
408 Atlantic Avenue
Suite 228
Boston, MA 02110-3350

LETTER 76

April 22, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

John C. Silva
Manager, Environmental Programs
Airport Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Project Name:	**Logan Airside Improvements Planning Project**
Project Location:	**Boston-Logan International Airport-Boston / Winthrop**
Project Proponents:	**Massachusetts Port Authority, Federal Aviation Administration**
Project Number:	**EOEA No. 10458**

Dear Mr. Pugsley and Mr. Silva:

On behalf of the Boston Harbor Island Advisory Council I wish to communicate two motions that were passed at the April 8, 1999 meeting of the Council. The Boston Harbor Island Advisory Council is a twenty-eight-member council appointed by the Director of National Park Service. The Advisory Council was formed to advise and make recommendations to the Boston Harbor Islands Partnership with respect to the development and implementation of an integrated management plan and the operation of the newly created Boston Harbor Islands National Recreation Area.

Motion 1: The Advisory Council cannot support the Draft Environmental Impact Report (EIR)/ Draft Environmental Impact Statement (EIS) filed by Massport and the Federal Aviation Administration if the addition of a new runway and associated taxiway leads to more overflights of the Boston Harbor Islands. 76.1

Motion 2: The Advisory Council requests that Massport and the Federal Aviation Administration withdraw the Draft Environmental Impact Report (EIR)/ Draft Environmental Impact Statement (EIS) until a more comprehensive analysis of the benefits and impacts the proposed runway and associated taxiway can be presented. Additionally, there should be greater involvement by a spectrum of interested parties to seek a long-term solution to the regions transportation needs. 76.2 76.3

If you have any questions please do not hesitate to call. Thank you.

On behalf of the Boston Harbor Island Advisory Council

Philip E. Lemnios
Member

CC: All Members of the Boston Harbor Advisory Council

Letter 76
The Boston Harbor Islands Advisory Council
Philip E. Lemnios, Member

Code	Topic 1	Topic 2	Comment	Response
76.1	Alternatives	Preferred Alternative	...cannot support the Draft Environmental Impact Report (EIR)/...if the addition of a new runway and associated taxiway leads to more overflights of the Boston Harbor Islands.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
76.2	Environmental Review Process	MEPA	...requests that Massport and the Federal Aviation Administration withdraw the Draft Environmental Impact Report (EIR)/Draft Environmental Impact Statement (EIS) until a more comprehensive analysis of the benefits and impacts the proposed runway and associated taxiway can be presented.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
76.3	Environmental Review Process	Public Process	...there should be greater involvement by a spectrum of interested parties to seek a long-term solution to the regions transportation needs.	Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

BRITISH AIRWAYS

April 8, 1999

LETTER 77

Secretary of Environmental Affairs
ATTN: MEPA
Mr. Arthur Pugsley
EOEA #10458
100 Cambridge St. - 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

British Airways wishes to express its support for the series of airside improvements currently proposed by Massport. In an effort to reduce delay and improve efficiency on Logan's airfield, we support the following projects:

⇒ Construction of an uni-directional reliever runway 14/32 for local over the water operations.

⇒ Construction of a centerfield taxiway to reduce taxiway congestion. 77.1

⇒ Realignment and extension of existing taxiways to enhance airfield safety.

⇒ Reduction of approach minimums on runways to upgrade Logan Airport to industry standards.

On behalf of our Customers, 553,943 passengers who traveled through Logan on British Airways in 1998 and who annually ship over 22 million tons of cargo and mail in and out of Logan Airport, we strongly reiterate our support for the Logan Airside Improvement Planning Project (EOEA #10458).

Sincerely,

Gail Visentin
Director Passenger & Cargo Operations

Letter 77
British Airways
Gail Visentin, Director Passenger & Cargo Operations

Code	Topic 1	Topic 2	Comment	Response
77.1	Alternatives	Preferred Alternative	[British Airways]...support(s).... Construction of an uni-directional reliever runway 14/32.... Construction of a centerfield taxiway.... Realignment and extension of existing taxiways.... Reduction of approach minimums....	Comment noted.

Building and Construction Trades Council of the Metropolitan District

AFFILIATED TO THE

BUILDING AND CONSTRUCTION TRADES DEPARTMENT

A.F.L.-C.I.O.

LETTER 78

TERRITORIAL JURISDICTION

Arlington, Belmont, Boston, Burlington, Cambridge, Canton, Chelsea, Dedham, Everett, Malden, Medford, Melrose, Milton, Norwood, Reading, Revere, Somerville, Stoneham, Wakefield, Walpole, Westwood, Winthrop, Winchester, Woburn, and the Islands of Boston Harbor.

Joseph W. Nigro Jr.
Secretary-Treasurer
General Agent

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston,MA 02205

Dear Mr. Pugsley:

April 22,1999

The Metropolitan Boston Building Trades Council, AFL-CIO representing 35,000 men and women is writing today in full support of the Massachusetts Port Authority's Airside Improvement plan for Logan International Airport. The Building Trade Unions firmly believe this project is necessary to reduce delays, improve the quality of life of our members and provide much needed employment opportunities.

Delays at Logan are consistently among the worsts in the U.S. These delays are not only inconvenient, they are costly. In 1998 delays at Logan cost airline and their passengers nearly $310 million. These losses ultimately affect the livelihood of many working men and women as it impedes the ability of Boston and the region to compete in a global economy. 78.1

A major component of the Airside Improvement project, Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area. The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities. The proposed centerfield taxiway and other improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxing aircraft to adjacent neighborhoods. 78.2 78.3 78.4

With an annual economic impact of $5 billion, Logan International Airport is directly responsible for creating more than 15,000 jobs in this area, many of which are the hard working men and women of the Trade Unions.

It is therefore, without reservation, the Boston Building Trades Council, AFL-CIO wholeheartedly support's Airside Improvements at Logan Airport and looks forward to the projects approval.

Thank you for your attention to this matter.

Sincerely,

Joseph W. Nigro,Jr
Secretary Treasurer/General Agent

Letter 78
Building and Construction Trades Council of the Metropolitan District
Joseph W. Nigro, Jr.
Secretary Treasurer/General Agent

Code	Topic 1	Topic 2	Comment	Response
78.1	Purpose and Need	Delay	Delays at Logan are consistently among the worst in the U.S...In 1998 delays at Logan cost airline and their passengers nearly $310 million.	Comment noted.
78.2	Alternatives	Runway 14/32	A major component of the Airside Improvement project, Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas....	Comment noted.
78.3	Alternatives	Runway Use	...The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities.	Comment noted.
78.4	Air Quality	Taxiway Improvements	The proposed centerfield taxiway and other improvements would further enhance air quality....	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.

Cape Air
NANTUCKET AIRLINES

Barnstable Municipal Airport
North Ramp
Hyannis, Massachusetts 02601
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508-778-1870 FAX
Reservations (800) 352-0714
(800) 635-8787

LETTER 79

Testimony for the Federal Aviation Administration with comments submitted pursuant to MEPA by Daniel A. Wolf, President of Cape Air/Nantucket Airlines
April 7, 1999

John Silva, Federal Aviation Administration

Arthur Pugsley, Massachusetts Environmental Policy Act

Mr. Moderator, my name is Daniel Wolf. I am the founder and President of Cape Air/Nantucket Airlines. We provide year round service between Boston, Cape Cod and the Islands of Martha's Vineyard and Nantucket. In addition, we are the only year round air service provider to many of the remote communities we serve. Our passengers rely on access to Logan International Airport. We fly approximately 150,000 passengers between Boston and the Cape and Islands each year. In the summer months a large proportion of these passengers are summer visitors connecting from other flights. It is important to emphasize that an equally large percentage of our passengers are residents and business people who need to reach Logan for travel, business and medical necessity.

I am a pilot and my strength is aviation. In fact, I dedicated the last 20 years of my life to the airline industry. A decade ago I founded Cape Air. Although they are not present, sitting with me are the other 400 employee owners of Cape Air who have worked tirelessly to make Cape Air the largest independent regional airline in the country. Today I speak for them and the passengers who depend on us.

We state very simply that construction of proposed runway 14/32 makes perfect aviation sense. Currently Logan Airport has the dubious distinction of being one of the top airports in the country in terms of aircraft delays

79.1

The primary reason for this is very simple. Under certain wind conditions the capacity at Logan Airport drops from 120 operations per hour to as few as 60. The result,

major delays, lost business time, missed connections and higher travel costs for both the industry and the passengers.

Although the proposed runway would increase efficiency and safety it would not increase the number of overall operations. I understand that is a major concern from a number of the communities in the area. 79.2

Another issue of course is noise. Once again aviation sense must come into play here. The proposed runway would re-direct the noise impact over the water thus away from some communities that are currently experiencing a disproportionate noise impact. 79.3

Alternatives to Logan Airport as a departure point have also been discussed. As someone whose business relies heavily on connecting passengers from Logan I need to point out that passengers arriving to Massachusetts from other parts of the world need Logan to make their connections to Cape Cod and the Islands. Air transportation markets are not automatically transferable. The use of alternative regional air transportation facilities should be encouraged but developing new air transportation markets with adequate ground transportation and other support infrastructure takes time. 79.4

We do encourage and support a regional approach to alternative regional air transportation issues. In fact, in an ongoing effort to pull some of our traffic out of Logan Airport, Cape Air provides service to New Bedford and Providence and invests considerable time and money in supporting the operation of the New Bedford Airport. 79.5

Such efforts should not be at the expense of the ongoing safety and effectiveness of the operations at Logan.

We believe that Massport has done a thorough job of evaluating the range of delay reduction tools outlined in Alternative 1A of the Draft Environmental Impact Statement filed with the MEPA Unit of the Executive Office of Environmental Affairs. Implementing the outlined improvements will allow the airport to operate at maximum efficiency regardless of wind direction. 79.6

Letter 79
Cape Air/Nantucket Airlines
Daniel A. Wolf, President, Cape Air, Testimony

Code	Topic 1	Topic 2	Comment	Response
79.1	Purpose and Need	Delays	...That construction of proposed runway 14/32 makes perfect aviation sense. Currently Logan Airport has the dubious distinction of being one of the top airports in the country in terms of aircraft delays. The primary reason for this is very simple. Under certain wind conditions the capacity at Logan Airport drops from 120 operations per hour to as few as 60.	Comment noted.
79.2	Alternatives	Runway 14/32	Although the proposed runway would increase efficiency and safety it would not increase the number of overall operations.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.
79.3	Noise	Runway Use	The proposed runway would re-direct the noise impact over the water, thus away from some communities that are currently experiencing a disproportionate noise impact.	Comment noted.
79.4	Regional Transportation	Regional Airports	Alternatives to Logan Airport as a departure point have also been discussed...passengers arriving to Massachusetts from other parts of the world need Logan to make their connections to Cape Cod and the Islands. Air transportation markets are not automatically transferable.	Comment noted.
79.5	Regional Transportation	Regional Airports	We do encourage and support a regional approach to alternative regional air transportation issues.	Comment noted.
79.6	Alternatives	Preferred Alternative	We believe that Massport has done a thorough job of evaluating the range of delay reduction tools outlined in Alternative 1A of the Draft Environmental Impact Statement... Implementing the outlined improvements will allow the airport to operate at maximum efficiency regardless of wind direction.	Comment noted.

Cape Air
NANTUCKET AIRLINES

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Barnstable Municipal Airport
North Ramp
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LETTER 80

Secretary of Environmental Affairs
Attention: MEPA Unit
Mr. Arthur Pugsley-EOEA #10458
100 Cambridge St. 20th floor
Boston, MA 02202

RE: Draft Environmental Impact Report for the Logan Airside Improvements Planning Project

Dear Mr. Secretary:

For ten years Cape Air has been the critical air link between Logan International Airport and several Massachusetts communities. Currently we provide year round scheduled air service from Logan, New Bedford Airport, and T.F. Green Airport in Rhode Island to Cape Cod and the Islands of Nantucket and Martha's Vineyard. Access to Logan is critical to the communities we serve. This year Cape Air will transport more then 150,000 passengers between Logan Airport and Cape Cod and the Islands.

Cape Air actively supports Massport's efforts to improve the safety and efficiency of Logan operations. For the past three years I have participated in the environmental review of this project. I attended nearly all of the Airside Review Committee meetings and provided economic and operational data on our company for use in technical analysis of delay conditions, the assessment of alternatives and the development of case studies. Prior to my participation in this project I was a member of the Second Airport Commission charged with assessing the Commonwealth's needs and opportunities for creating a second major airport. As an airline president as well as a pilot, I have hands on, practical knowledge of the delay conditions at Logan and am familiar with Massport's efforts to address the Commonwealth's long-term air transportation needs. Based on these experiences I believe that Massport has undertaken a thorough and credible assessment of alternatives to reduce delays at Logan and at the same time is working to develop increased use of regional transportation facilities to help relieve pressure at Logan.

Logan's location on the waterfront and within city limits poses landside and airside challenges, but also offers the potential environmental benefits of moving air traffic over water. Logan experiences wind conditions that severely reduce Logan's capacity from 120 operations an hour to 90 or as low as 60 per hour. I agree with Massport's analysis which indicates the proposed airside improvements would both

80.1

80.2

80.3

equitably redistribute noise and at the same time shift existing noise over water and away from affected communities.

In Alternative 1A, Massport proposes 14/32 as a unidirectional runway for this purpose. This plan also includes taxiway improvements and reduced approach minimums. Massport's analysis demonstrates that these actions will have meaningful delay reduction results without causing negative environmental impacts on the surrounding communities. 80.4

We are pleased that Alternative 1A does not include peak period pricing. Massport's analysis demonstrates that peak hour pricing would not be effective in reducing current or projected delays at Logan. The DEIR/S demonstrates peak period pricing would not address delays caused by wind conditions that are most effectively helped by Runway 14/32. Massport demonstrates that peak period pricing will not address delay conditions at Logan. This is particularly true since delays are due to adverse wind conditions and not a result of airline over-scheduling. 80.5

The DEIR/S documents the negative impact peak period pricing would have on Cape Air and the remote destinations we serve. Peak period pricing would increase our landing fees by more then 1000%. We could not absorb a cost increase of this magnitude. Our response would have to be a drastic reduction or elimination of service to Logan Airport. This would have a direct impact on the 400 Massachusetts residents we employ and the hundreds of thousands of passengers, businesses and institutions we serve. Loss of air service to the region would mean staggering economic losses for the region's tourism industry, the Cape's emerging high technology sector and the countless other businesses that rely on air service.

In addition, Cape Air strongly supports the communities we serve in a variety of ways including low cost medical flight service to Boston from our remote destinations. With peak hour pricing not only would the communities lose that benefit but since we are the only airline providing air service to the town of Provincetown that community would be severely impacted. 80.6

Compounding the economic and public welfare issues are the resulting environmental impacts from adding 450,000 passengers we carry to already congested roadways including the Southeast Expressway, Route 3, and Route 6.

The often cited claim that carriers such as Cape Air are the major cause of delays at Logan is not substantiated by the extensive delay modeling and analysis completed for the DEIR/S. This analysis concludes that cape Air's operational characteristics limit the impact on Logan delays. Since Cape Air's contribution to the delay problem at Logan is relatively minor, the elimination of Cape Air's operations by the use of peak hour pricing brings with it many negative consequences without any significant commensurate benefit to delay reduction.

Logan is an important resource to all New England communities. Political considerations have dominated the public discussion of the DEIR since it's release in February. While important, these political considerations should not obscure the operational and environmental benefits embodied in Massport's preferred alternatives.

If viewed objectively, the analysis contained in the DEIR can lead to actions that will improve the safety and efficiency of operations at Logan and thereby serve the best interests of the Commonwealth. It would be unfortunate if we squandered this 80.7

opportunity which would not only improve the efficiency and safety of Logan Airport, but also produce beneficial environmental results.

Thank-you for the opportunity to comment.

Daniel A. Wolf
President, Cape Air

Letter 80
Cape Air/Nantucket Airlines
Daniel A. Wolf, President

Code	Topic 1	Topic 2	Comment	Response
80.1	Purpose and Need	Delay	Cape Air actively supports Massport's efforts to improve the safety and efficiency of Logan operations.	Comment noted.
80.2	Purpose and Need	Delay	...I believe that Massport has undertaken a thorough and credible assessment of alternatives to reduce delays at Logan....	Comment noted.
80.3	Noise	Impacts	...I agree with Massport's analysis which indicates the proposed airside improvements would both equitably redistribute noise and at the same time shift existing noise over water and away from affected communities.	Comment noted.
80.4	Noise	Impacts	Massport's analysis demonstrates that these actions will have meaningful delay reduction results without causing negative environmental impacts on the surrounding communities.	Comment noted.
80.5	Alternatives	Peak Period Pricing	Massport's analysis demonstrates that peak hour pricing would not be effective in reducing current or projected delays at Logan...This is particularly true since delays are due to adverse wind conditions and not a result of airline over-scheduling.	Comment noted.
80.6	Alternatives	Peak Period Pricing	The DEIR/S documents the negative impact peak period pricing would have on Cape Air and the remote destinations we serve...the elimination of Cape Air's operations by the use of peak hour pricing brings with it many negative consequences without any significant commensurate benefit to delay reduction.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP exemption program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
80.7	Alternatives	Preferred Alternative	...the analysis contained in the DEIR can lead to actions that will improve the safety and efficiency of operations at Logan and thereby serve the best interests of the Commonwealth.	Comment noted.

CHAMBER OF COMMERCE

LETTER 81

John D. O'Brien
Chief Executive Officer

April 15, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
Cambridge Street
20th Street
Boston, MA 02202

Dear Secretary Durand:

I have represented Cape Cod business interests on the Airside Review Committee (A.R.C.) for the past three years.

The business community on Cape Cod strongly supports the Logan improvement program as outlined in MassPort's plan submitted to you for MEPA review.

As you know, we here on the Cape and Islands have developed an economic development strategic plan that has as its fundamental purpose a balance between environmental concerns and the development of more stable year round jobs.

As part of our effort we have endeavored to stretch out our tourism season by using more sophisticated marketing techniques aimed at a target market. We also are augmenting this effort with a recruitment initiative designed to attract more technology companies to locate here on Cape Cod.

In order to be successful we need reliable on time air service.

Economic Development Division
307 Main Street ~ Suite 2
Hyannis, MA 02601~4043
Tel: 508~790~4980
Fax: 508~790~1889
URL: www.capecodchamber.org
Email: ecdev@capecodchamber.org

Convention & Visitors Bureau
307 Main Street ~ P.O. Box 790
Hyannis, MA 02601~0790
Tel: 508~862~0700
Fax: 508~862~0727
URL: www.capecodchamber.org
Email: info@capecodchamber.org

Our international visitor market is growing and this market alone requires efficient reliable connections to our Cape and Islands Airports.

As a member of the A.R.C. Committee I participated in the numerous working sessions and came away with the belief that the MassPort plan including runway 14/32 is essential to our economic well being. 81.1

Additionally, as I suggested and pressed for early on, the use of peak period pricing is not a workable solution at Logan and it would absolutely devastate our small carriers based on Cape Cod. 81.2

The MassPort staff and the community activists basically agree that Cape Air would essentially be put out of business by the use of peak period pricing.

The business community on Cape Cod urges approval of MassPort's overall plan to reduce delay at Logan with the taxiway improvements and the construction of runway 14/32. 81.3

Sincerely,

John O'Brien
Chief Executive Officer

cc Mr. John Silva
Manager, Environmental Program
Airports Division F.A.A.
New England Division
12 New England Executive Park
Burlington, MA 01803

JDO:sb

Letter 81
Cape Cod Chamber of Commerce
John O'Brien, Chief Executive Officer

Code	Topic 1	Topic 2	Comment	Response
81.1	Alternatives	Runway 14/32	...I participated in the numerous working sessions and came away with the belief that the Massport plan including runway 14/32 is essential to our economic well being.	Comment noted.
81.2	Alternatives	Peak Period Pricing	...the use of peak period pricing is not a workable solution at Logan and it would absolutely devastate our small carriers based on Cape Cod. The Massport staff and the community activists basically agree that Cape Air would essentially be put out of business by the use of peak period pricing.	The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR.
81.3	Purpose and Need	Delay	The business community on Cape Cod urges approval of Massport's overall plan to reduce delay at Logan with the taxiway improvements and the construction of runway 14/32.	Comment noted.

CAPE COD ECONOMIC DEVELOPMENT COUNCIL

3225 MAIN STREET
P.O. BOX 226
BARNSTABLE, MA 02630
(508) 362-3828
FAX: (508) 362-3136

LETTER 82

April 15, 1999

Secretary Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attention: Arthur Pugsley, MEPA Unit

John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

EOEA #10458

Dear Sirs:

On behalf of the Cape Cod Economic Development Council (CCEDC) I would like to comment on the Draft Environmental Impact Report/Statement (DEIR/S) for the Logan Airside Improvements Planning Project. The CCEDC is the economic development arm of Barnstable County and, as such, is responsible for promoting policies in support of a year-round economy for the Cape. The Council consists of eleven private sector representatives and three representatives of local government.

The economic and environmental well being of Cape Cod's residents and businesses depends on continued safe and efficient air transportation access to Logan. Logan airport is a vital link to the region for visitors that support the Cape's tourism industry. Reliable air transportation access to Logan is also a component in public and private efforts to diversify the regional economy and create quality year-round employment opportunities for residents.

The Council believes that Alternative 1A as presented in the DEIR/S provides the most direct and effective actions for controlling delays and increasing operating efficiency. The preferred alternative would address weather-related conditions that account for the vast majority of delays at Logan. It would also result in a greater number of overwater operations and increase Massport's ability to achieve community noise goals. 82.1

Regarding peak pricing, the Council recognizes that Massport has conducted a thorough assessment of delay reduction benefits of peak period pricing, as well as the impacts on air carriers to the region and the regional economy. Through this assessment Massport has concluded that peak period pricing would not be an effective response to current or projected delay conditions at Logan.

The Council strongly opposes the imposition of peak period pricing at Logan Airport at any time. Peak period pricing would unfairly penalize the carriers providing service to Cape Cod, even though it has been demonstrated that the smaller aircraft used by those carriers have a negligible impact on delays because of their use of alternative runways. The Council notes Massport's finding of the "real possibility" that peak period pricing could put carriers serving this region out of business. 82.2

For the communities of the Outer Cape, the loss of air carrier service would fundamentally threaten the health and safety of residents by removing a critical community transportation resource. Cape Air currently provides a medical care flight service that many residents rely on. For these residents, the closest ambulance drive is an hour away to Cape Cod Hospital and two-and-a-half hours away to Boston. 82.3

In addition to staggering economic and health and safety impacts, peak period pricing would also generate harmful environmental impacts. The resulting loss of air transportation would force more cars onto local roadways, which are already stressed beyond capacity during the summer season.

Thank you for the opportunity to comment on the Logan DEIR.

Sincerely,

Daniel Dray
Administrator
Cape Cod Economic Development Council

cc: Honorable A. Paul Cellucci, Governor
Mr. Peter Blute, Massachusetts Port Authority
Mr. Mark Robinson, Chairman, Massport Board of Directors
Massachusetts Congressional Delegation
Cape Cod Delegation to the Massachusetts General Court
Cape Cod Board of Selectman
Barnstable Town Council
Cape Ports
Cape Cod Commission
Mary Pat Flynn, Cape Cod Economic Development Council, Chairman
David Willard, Cape Cod Economic Development Council, Vice-Chairman

Letter 82
Cape Cod Economic Development Council
Daniel Dray, Administrator

Code	Topic 1	Topic 2	Comment	Response
82.1	Alternatives	Preferred Alternative	...believes that Alternative 1A as presented in the DEIR/S provides the most direct and effective actions for controlling delays and increasing operating efficiency.	Alternative 1A is the preferred alternative.
82.2	Alternatives	Peak Period Pricing	...strongly opposes the imposition of peak period pricing at Logan Airport at any time.	The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR.
82.3	Alternatives	Peak Period Pricing	The Council notes Massport's finding of the "real possibility" that peak period pricing could put carriers serving this region out of business. ...the loss of air service would fundamentally threaten the health and safety of residents.... Cape Air currently provides a medical care flight service that many residents rely on. ...peak period pricing would also generate harmful environmental impacts. The resulting loss of air transportation would force more cars onto local roadways, which are already stressed beyond capacity during the summer season.	Refer to response to comment 82.2.

CHARLESTOWN BUSINESS ASSOCIATION

LETTER 83

April 23, 1999

Secretary of Environmental Affairs Robert Durand
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor, Room 2000
Boston, MA 02202

Attention: MEPA Unit, Arthur Pugsley

RE: Logan Airside Improvements Planning Project - EOEA #10458 DEIS/R

By Facsimile: (617) 727-1598

Dear Secretary Durand:

On behalf of the Charlestown Business Association, I wish to express our concern over the application made by the Massachusetts Port Authority (Massport) and the Federal Aviation Administration (FAA) to develop a new runway, 14/32, at Boston-Logan International Airport (Logan) in Boston, Massachusetts and over the information contained in the DEIS/R which supports its development. We believe that the proposed runway expansion carries deep impacts on the quality of life in the surrounding communities and in Charlestown, in particular, because of noise and increases in air traffic. The proposed runway 14/32 has the potential to negatively impact and damage our businesses as well.

It is for these reasons that the Board of Directors of the Charlestown Business Association voted recently to oppose development of the new runway, 14/32, at Logan. The Charlestown Business Association (CBA), founded in 1986, is an organization of approximately 180 members, including office, industrial, retail, restaurant, and recreational businesses and non-profit institutions, most located within Charlestown itself. The CBA gives businesses a voice in the Charlestown community, and its mission is to better the community through commerce.

Our reading of the Draft Environmental Impact Statement/Report Volume 1 did not alleviate our concerns about impacts of the proposed runway on our community and on the impacted communities. The following are particular areas of concern.

1. **Need for a Regional Network**. A basic premise of the DEIS/R is that " The transportation services provided at Logan -- both passenger and air cargo- are essential to the economic success of the entire New England Region." (ES-6). By using the word "essential", the proponents ignore the fact that Logan is but one element in the regional transportation network. By using the word "essential", they focus only on increasing capacity at Logan rather than on seriously analyzing the regional capacity and growth potential of the network of airports at Worcester, Hanscom Field, T.F. Green Airport, RI, Manchester, NH, and Bradley International Airport, Hartford, CT. 83.1

2. **Need for Runway by Runway Numbers**: The DEIS/R did not appear to list the increases in numbers of arrivals and departures runway by runway, that is by direction, under the various alternatives. It is not possible to determine the increases or decreases in activity level with construction of R14/32. However, earlier reports presented to Massport's Airside Review Committee on April 2, 1997, for the Environmental Impact Study on Logan Airport Improvements show the changes in arrivals and departures runway by runway under the R14/32 build and no-build scenario. Why was this same information not readily available in Volume 1 of the DEIS/R? From a Charlestown point of view, the 1997 document certainly makes the case for our not supporting construction of R14/32. 83.2

3. **Delays:** The information on delays does not indicate the number of delays caused by weather-related problems at other airports For example, many of us have experienced winter delays when connecting flights are delayed by snow at other distant airports. What part of the total delay is caused by such weather problems elsewhere? 83.3

4. **Soundproofing Mitigation:** Massport's willingness to soundproof buildings should not be used to support arguments for expansion of Logan runways. For businesses that operate out of doors and for residents who use their outdoor spaces around their homes, how can you soundproof the out-of-doors? There is a loss in property value attributable to the increase in noise and air traffic that cannot be mitigated by soundproofing. Where is this loss in property value given attention in the DEIS/R? 83.4

5. **Is Runway 14/32 always going to be uni-directional.** While the uni-directional R14/32 as proposed has negative impacts on the Charlestown community and its business community, we wonder how many years it will be before Massport makes the argument for a two-directional runway 14/32. A two-directional runway would have a far more devastating environmental impact on Charlestown than the uni-directional runway, which we oppose as it is proposed. 83.5

We recognize the importance of the airport to the regional economy, but we side with the quality of life and economic viability issues which are "essential" to us. We believe that Massport and the FAA must take a regional approach to solving the airport growth and usage problems, among other issues cited above. Until that happens, we can find little, if anything, in the proposed R14/32 plan that we support. 83.6

Sincerely,

Carol Bratley

Carol Bratley, Chair
Charlestown Business Association

cc: Senator Thomas F. Birmingham, State House
Representative Eugene L. O'Flaherty, State House
City Councilor Paul Scapicchio, District One, Boston City Hall

Letter 83
Charlestown Business Association
Carol Bratley, Chair

Code	Topic 1	Topic 2	Comment	Response
83.1	Regional Transportation	Regional Airports	...[the proponents] focus only on increasing capacity at Logan rather than on seriously analyzing the regional capacity and growth potential of the network of airports at Worcester, Hanscom Field, T.F. Green Airport, RI, Manchester, NH, and Bradley International Airport, Hartford, CT.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR provide an evaluation of the regional airports at T. F. Green/Providence, Manchester, and Worcester Regional and their potential impacts on Logan Airport. Hanscom Field is the region's premier general aviation facility and accommodated over 180,000 aircraft operations in 1998. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport. Nevertheless, the proposed Logan Airport Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
83.2	Delay	Model	...earlier reports presented to Massport's Airside Review Committee on April 2, 1997, for the Environmental Impact Study on Logan Airport Improvements show the changes in arrivals and departures runway by runway under the R14/32 build and no-build scenario. Why was this same information not readily available in Volume 1 of the DEIS/R?	Arrivals and departures by runway end for all future fleets and project alternatives were included in Appendix H of the Draft EIS/EIR. The same information for the 2015 37.5M High RJ fleet is included in Appendix C of the Supplemental DEIS/FEIR.
83.3	Delay	Model	The information on delays does not indicate the number of delays caused by weather-related problems at other airports...What part of the total delay is caused by such weather problems elsewhere?	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.

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Code	Topic 1	Topic 2	Comment	Response
83.4	Noise	Sound Insulation	Massport's willingness to soundproof buildings should not be used to support arguments for expansion of Logan runways...how can you soundproof the out-of-doors?	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.
83.5	Alternatives	Runway 14/32	Is Runway 14/32 always going to be uni-directional.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
83.6	Regional Transportation	Regional Airports	We believe that Massport and the FAA must take a regional approach to solving the airport growth....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside improvements to be implemented under the Preferred Alternative at Logan Airport.

Chelsea Waterfront Association

Jeff Buck
President

Marie Iacono
Vice President

Richard Smigielski
Secretary / Treasurer

Telephone
884-3763

LETTER 84

To: Robert Durand
Secretary of Executive Office of Enviromental Affairs
April 22, 1999

Dear Robert,

The Chelsea Waterfront Association is a non-profit, non-partisan, neighborhood improvement association dedicated to giving its members a voice in the policies that affect the Chelsea waterfront area. The purpose of the association is to maintain and enhance the quality of life in our neighborhood and our City through information, education, advocacy, self-help, and activism as well as through cooperation with other civic organizations. The organization represents hundreds of residents in the Chelsea Historic Waterfront District who are vehemently opposed to the runway proposal.

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhood. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over our neighborhood. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over heads, a salt pile on another side, an oil tank farm 45 feet from our boundary, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood. 84.1

First and foremost, the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting the Waterfront area. The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely underestimate it as well. We also feel that soundproofing would do little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park and does not help us as we try to enjoy a sea breeze through open windows in the summertime. 84.2

We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants - always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact 84.3

of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate. 84.4

Naturally we were upset to learn that other alternatives such as a thorough regionalization plan including ALL other options was not included. Additionally, we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered because 115 operations per hour understates the true benefit of this alternative. Why wasn't a second airport examined? 84.5 84.6

While Massport refuses to admit the Airside Improvement Planning Project will expand capacity at Logan, Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations. Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea. 84.7 84.8

Chelsea is undergoing a modern day renaissance. We have had to fight harder than most to turn the City around. As this proposal is being examined we are watching the value of our homes rise. We have a new school system and a local government committed to undoing the past. We were recently honored as an "All America City," in recognition for our ability to address the problems confronting us. Our budget is balanced for the first time, and we are investing millions in our infrastructure in order to move forward into the next century. The proposed expansion of Logan Airport is the single largest threat we face. If this runway is built, years of hard work could be undone in an instant.

Sincerly,

Jeffrey Buck

President Chelsea Waterfront Association

Letter 84
Chelsea Waterfront Association
Jeffrey Buck, President

Code	Topic 1	Topic 2	Comment	Response
84.1	Noise	Runway Use	...new runway will allow for a tripling of flights over our neighborhood.	PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere. No one in Chelsea or Charlestown currently experiences noise that is this high.
84.2	Noise	Model	...the method used to measure the noise impact is inaccurate. ...the integrated noise model has consistently underestimated the actual noise levels affecting the Waterfront area.	We are not aware of any data that show an underestimation of the noise in the Chelsea waterfront area by the model used in this study.

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Code	Topic 1	Topic 2	Comment	Response
84.3	Noise	Sound Insulation	...also feel that soundproofing would do little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park and does not help us as we try to enjoy a sea breeze through open windows in the summertime. We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue.	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals. The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
84.4	Regional Transportation	Regional Airports	...we were upset to learn that other alternatives such as a thorough regionalization plan including ALL other options was not included.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
84.5	Alternatives	Peak Period Pricing	...we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered....	The Airside Project analysis of PPP examined an operations threshold of 110 operations per hour, which is already below Logan Airport's normal operating capacity of 120 operations per hour. There is no legitimate operational justification for imposing a peak period surcharge at an operation level significantly lower than Logan Airport's normal operating capacity which is achieved 80 percent of the year without any delays. Even at 75 operations per hour, Logan Airport would be subject to delays from northwest wind conditions. The Airside Project analysis in the Draft EIS/EIR and in the Supplemental DEIS/FEIR indicates that, with the Preferred Alternative, Logan Airport can accommodate existing and foreseeable future levels of demand without imposing a drastic administrative restriction to artificially revise Logan Airport's existing capacity.
84.6	Regional Transportation	Regional Airports	Why wasn't a second airport examined?	Comment noted.
84.7	Alternatives	Demand	...this project must be considered and evaluated as stimulating growth in aircraft operations.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
84.8	Ground Transportation	Access to Logan Airport	...the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea.	The Airside Project does not result in additional demand for ground access services. Cargo activity at Logan Airport changes from year to year. Despite strong economic growth over the last few years, cargo operations at Logan Airport increased by less than two percent in 1999 and actually declined by 1.2 percent in 1998. Since cargo operations account for only two percent of aircraft activity at Logan Airport and no additional truck traffic is expected to be generated.

COMMUNITY ADVISORY COMMITTEE
TO MASSPORT
18 Greenough Avenue
Boston, Massachusetts 02130

"We're Stronger Together."

LETTER 85

April 7, 1999

Beacon Hill
Braintree
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Cambridge
Charlestown
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Dorchester
East Boston
Everett
Hingham
Hull
Hyde Park
Jamaica Plain
Malden
Medford
Melrose
Milton
Quincy
Revere
Roslindale
Roxbury
Somerville
South End
South Boston
Swampscott
West Roxbury
Winthrop
Woburn

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Unit
Arthur Pugsley, EOEA No. 10458
1000 Cambridge Street - 20th floor
Boston, MA 02202

Dear Secretary Durand,

As Co-Chair of the Community Advisory Committee to Massport (CAC), I am submitting the following document representing the CAC consultant's opinions on the Massachusetts Port Authority's Draft Environmental Impact Statement on the Logan Airport Airside Improvement Planning Project (DEIS/DEIR).

The CAC concurs with the consultants' conclusion that the DEIS/DEIR should be found inadequate.

Sincerely,

Anastasia Lyman

Anastasia Lyman, Co-Chair CAC

****

Review Comments on Draft Environmental Impact Statement/ Draft Environmental Impact Report (DEIS/DEIR) for the Logan Airside Improvements Planning Project as presented by Massachusetts Port Authority dated February 1999

Prepared for:

Community Advisory Committee (CAC)

Prepared by:

Consultants to CAC

Consultants include:
Robert G. Burns
Monty Gettys, Montgomery Consulting Group, Inc.
David Standley, P.E.

Prepared on:
March 29, 1999

****

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Executive Summary

A. Introduction

- Logan was constructed into a residential setting. Massport for too long has been allowed to take a segmented approach to Logan's development, arguing that landside projects are designed to accommodate ground passenger handling; airside improvement projects are designed to accommodate aircraft handling; that neither generates traffic; and that Massport has no control over passenger and cargo growth. 85.1

- The Airside Improvement Planning Program is a short-range and limited response to a major concern about long-term trends, future growth, and increasing impact. The prospect is for more and more passengers, more and more aircraft operations, and a greater impact on the surrounding communities. 85.2

B. Addressing the Scope & Regulatory Requirements

B.1 Notice of Project Change

- **The Secretary and FAA should require Massport to change the base year to calendar year 1998, to revise all presentations in the DEIS/DEIR to reflect that change, and to extend the planning period to 2020 from 2010 with concomitant revisions in projected levels of activity and impact, and to republish the DEIS/DEIR.**

- The passage of over five years from the "base year," and the changes in activity levels at Logan since that date, should require that 1998 constitute the "base year" for this Planning Project. 85.3

- The minimal 15-year planning horizon for the project should be extended to a 20-year planning horizon, to 2020, in order to examine potential impacts and benefits of the project proposals over a reasonable period.

- The FAA data on delays shows that the delay situation at Logan has improved since 1993 and is essentially in equilibrium, as assessed by the FAA. 85.4

- The Airside delay model (DELAYSIM) used hourly weather observations from 1981-1990. Weather patterns have changed significantly within the last five years due to effects from El Nino and La Nina. A new 10-year average should be constructed and used. 85.5

B.2 Requirements of ENF Certificate

❖ The items listed below were not specifically addressed in the DEIS/DEIR:

1. Discussion of diversion of cargo to off-airport alternatives 85.6
2. Considering the off-airport alternatives as a separate scenario evaluated during the DEIS/DEIR 85.7
3. Failure to consider Hanscom Field in Bedford as a reliever airport for general aviation operations, origin/destination regional non-jet traffic, and short-haul origin/destination jet traffic. 85.8
4. Considering the development of a second major airport, in discussion of environmental justice 85.9
5. Detailing of the existing delay at Logan including delay derived directly from wind/weather and indirectly from delay at other airports 85.10
6. Documentation of history of PRAS and problems implementing it 85.11

C. Growth & Long-Range Planning Issues

❖ **The Secretary of Environmental Affairs should determine that significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required.** 85.12

❖ It seems inevitable that Logan Airport will experience growing congestion, and with that congestion will come increasing pressure for additional measures to reduce it. The proposed projects provide only limited and interim relief to whatever aircraft operating delays at Logan Airport are caused by or as a result of the airfield configuration. The delay problem as modeled and represented by Massport will get worse. 85.13

❖ There is no plan or program to deal with long-term growth at Logan, which will soon overwhelm any interim benefits of this project. There are measures that could be instituted to effectively address transportation in eastern New England, but there is no discussion in this document. There must be a plan and a program to shift some current, and most growth in, air traffic and passengers away from Logan. Major expansion of service at and capacity of other airports must be undertaken. 85.14

❖ Massport projects air traffic operations to increase substantially over the project planning period. A conservative projection is a 20% increase in total operations over the next decade. A more important assessment is the projected increase in "equivalent jet operations," which takes into account the substantial increase in noise impact of a nighttime operation compared to a daytime operation. The projected growth in "equivalent jet operations" approaches 50% over the next decade. 85.15

- Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan directly, because of delay reduction. 85.16

- This project and landside projects at Logan are interdependent, and both will increase capacity and stimulate demand. 85.17

- Massport's proposal to increase the percentage of passengers accessing Logan Airport who do so in high-occupancy vehicles falls far short of absorbing the full projected increase in passenger ground access requirements, even over the limited planning period. 85.18

D. Environmental Issues

D.1 Noise

- There can be no guarantee of "unidirectional use" of Runway 14/32. 85.19

- We believe airfield operations are unlikely to attain, and even less likely to sustain, the progress toward attainment of PRAS goals that Massport projects. The increasing impact of Logan on the communities in the coming decade stresses the need to reduce dependence on and preference for air travel and Logan in particular. 85.20

- PRAS goals were established many years ago, under considerably different circumstances, and may well no longer represent community consensus. The Community Advisory Committee (CAC), however, declined to move for a review and possible modification of the PRAS goals. 85.21

- Most of the projected increases in passenger demand will be met by increased operations of the "passenger jet" fleet. This of course is the fleet that creates the noise impacts at Logan and elsewhere. 85.22

- There will be significant increases in overflights of East Boston, Chelsea, Everett and other "15/33" communities, and of South Boston, South End, Roxbury and other Runway 27 communities. 85.23

- Massport overstates the benefit of further conversion to Stage 3 aircraft on future noise levels around Logan Airport. 85.24

D.2 Night-time Operations

- The number of nighttime jet operations can be expected to double within the foreseeable future under conservative forecasts. The noise impacts of this increase are huge, and are not mitigated by use of Stage 3 aircraft since night operations are now required to be only of that type. 85.25

- An alternative that should be considered is the creation of a cap on nighttime operations pursuant to FAR Part 161. 85.26

D.3 Flight Tracks

- A significant number of flights did not conform to the published departure tracks, and re-crossed the shoreline over Hull and were also below 6,000 feet. 85.27

- The FAA and the airlines have not adhered to the flight paths established for Runway 27 departures.

D.4 Soundproofing

- "Soundproofing" is not the answer. Acoustical treatment of selected residences cannot fully mitigate for the impacts of increased overflights and increased ambient noise. We disagree with the statement "After sound-proofing to mitigate impacts within the 65 YDNL Contour, the full-build alternatives provide net long-term benefits." 85.28

- Concerns about Massport's residential "soundproofing" program include the pace of the program, the failure to provide air conditioning in conjunction with the "soundproofing" program, and the small number of dwelling units that are eligible for the program. 85.29

- FAA Order 5100.38A makes ineligible for AIP funding any non-related code-required building improvements necessary to accommodate acoustic treatment improvements. This may impose significant burdens on some property owners. 85.30

D.5 Air Quality

- The proposed Airside Improvement Project provides minimal long-term air quality benefits. Changes in air quality associated with the proposed project are likely to be undetectable, with the exception of adverse odor impacts. 85.31

- There is potential for adverse odor impacts in certain areas proximate to the airport, as a result of this project. Changes in odor impacts are most likely to occur in the Jefferies Point neighborhood from takeoffs on Runway 14. 85.31 (cont.)

- The odor modeling and odor impact assessment procedure is inadequate. 85.32

D.6 Dispersion Modeling Results

- For all modeled contaminants other than VOCs, the difference (if any) among Airside Improvement Project alternatives is much less significant than the projected growth of emissions over time. 85.33

- Massport should have used the ten-year hourly average meteorological input for the air quality dispersion model, and should be required to rerun the dispersion model for all of the conditions modeled for the DEIS/DEIR. 85.34

D.7 Endangered Species - Upland Sandpiper

- A program is required to compensate for impacts to the nesting habitat on Logan Airport of the state-listed endangered upland sandpiper. The suggested program appears highly speculative as described. Massport should be required to set forth the resolution with NHESP in the DEIS/DEIR. 85.35

D.8 Construction Impacts

- Massport has failed to demonstrate how fugitive dust emissions from construction operations on the airfield will be controlled during winter months. 85.36

- Shortcomings of the Massport construction noise analysis include its failure to address the matter of pure tones and of impact noise (*i.e.*, paving breakers and hoe rams), and the failure to separate out and separately analyze nighttime construction noise levels against nighttime ambient levels. The noise criteria applied by Massachusetts Department of Environmental Protection are applicable to this project. 85.37

D.9 Cumulative Impacts

- We disagree with the statement "After sound-proofing to mitigate impacts within the 65 YDNL Contour, the full-build alternatives provide net long-term benefits."" 85.38

- Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan. 85.39

D.10 Relationship to the GEIR

- The planning period is inadequate, and should be extended to 2020. There is no plan or program to deal with long-term growth at Logan, which will soon overwhelm any interim benefits of this project. 85.40

- Delay does not appear to be a major problem at Logan, based on Massport's two-year history of inaction and on FAA analyses. 85.41

- **The Secretary of Environmental Affairs should determine that significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required.** 85.42

D.11 Relationship to Other Logan Projects

- This airside project and the landside projects at Logan are interdependent, and both will increase capacity and stimulate demand. 85.43

E. Delay

- There is no discussion in the DEIS/DEIR on the selection of the model for estimating delay. The models used including FLAPS and DELAYSIM appear to have been developed exclusively for analysis of Logan. Background information on the development of these models is not presented, as required by FAA. 85.44

- Massport did not use the FAA-approved SIMMOD model for the airport simulations, but chose to develop its own model for estimating delay. 85.45

- The delay hours projected by Massport are the artifacts of its own model, severely overstate the actual situation, and do not comport with the FAA's procedure for calculating delay at airports. Besides calculating every minute of potential delay associated with every scheduled flight, it fails to take into account normal flight cancellation activities by airlines. 85.46

- The DELAYSIM model should use as the leading criteria the highest capacity configuration and air traffic controller workload weighting approved by FAA ATC. This approach would be a more conservative approach and reflect historical operational selections by the FAA ATC personnel, instead of assuming attainment of PRAS goals can and will be an initial decision point. No data is presented to show recent improvement due to the availability of Enhanced PRAS (EPRAS). 85.47

- The report compares Massport's calculation of delay with FAA's calculation of delay. This comparison throughout the DEIS/DEIR is incorrect and misleading. 85.48

- The FAA data on delays cited elsewhere in this report shows that the delay situation at Logan has improved since 1993 and is essentially in equilibrium, as assessed by the FAA. From 1993-1997, delay at Logan as calculated by FAA, has decreased almost 36%. FAA reported delay for 1998 was 18% lower than 1993 levels. The DEIS/DEIR does not reflect this information. This reduction in delay has occurred without the implementation of any of the airside improvements proposed in this DEIS/DEIR. 85.49

- Modeled delay under the most optimistic Massport scenario will return to present levels within a very few years and increase after that. The stimulation of demand is not reflected in the annual hours of delay calculations. 85.50

- While peak hour capacity does not increase with construction of the runway, the additional runway will provide the controllers the option to use higher-capacity configuration more of the time. This ability is providing additional "throughput" of aircraft operations. 85.51

- The guise of constructing the new runway to reduce weather-related delays actually has the effect of increasing the all-weather capacity of the airport; thus allowing for additional throughput of aircraft operations.

F. Alternatives

- Massport has not met the requirements of the National Environmental Policy Act (40 CFR Part 1502 Environmental Impact Statements) that requires the DEIS/DEIR to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." No discussion of "alternatives not considered in this DEIS/DEIR" was included. A reasonable person could expect the DEIS/DEIR alternatives to include the following: 85.52

  a. Development of a new airport
  b. Consideration of Implementing a High-Density Rule (Slots) 85.53
  c. Consider Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan to provide noise relief to affected communities. A specific measure that could be considered is a cap on night-time operations. 85.54 85.55

F.1 Regional Airports

- The New England governors, the FAA, and the Federal Highway Administration must assist state government and the Boston Area communities in devising and implementing programs to ensure that Massport's numbers grow no larger, while not inhibiting normal beneficial economic growth of Eastern New England. The Airside Improvement Project must be viewed in this larger regional context. 85.56

- Massport argues that the growth in passenger traffic experienced at the Manchester, New Hampshire Airport and the T. F. Green Airport in Warwick, Rhode Island represents shifts of demand from Logan Airport. It is equally likely that the introduction to those two airports of low-cost carriers has stimulated overall regional air travel growth, the bulk of which has been absorbed at those two airports. 85.57

- If market forces are left to drive growth in traffic at those airports, growth at Logan will not be significantly constrained. Specific goals would have to be established, and a series of measures implemented to stimulate a substantial shift of traffic demand from Logan. 85.58

- The ENF Certificate dated November 22, 1995 cited that "the alternatives analysis must be broadened to include off-airport alternatives." Although Massport includes some off-airport options, the development of other obvious alternatives has not been reasonably discussed nor have the reasons for their elimination as options. 85.59

- The conclusion of the MAC Second Major Airport Study points out that long term considerations to meet increasing demand require that a second airport (either a greenfield airport and/or significant expansion of an existing airport) be an alternative to the improvements recommended. 85.60

F.2 Peak Hour Pricing

- Congestion pricing, peak-period pricing and techniques that base landing fees on functional categories relating to operations (landing or take-offs, weight (or size) of aircraft, and capacity to meet peak period demand could be particularly useful in reducing delays. Peak Period Pricing is but one form of economic incentive or control that should be considered in evaluating measures to reduce airspace and airfield congestion 85.61

- The basic assumption was made that peak period pricing needed to be revenue neutral, pertaining only to airfield revenue and airfield costs at Logan. This assumption resulted in impacts to airlines that operate small aircraft only. 85.62

- Consideration should be given to a quite different approach to addressing the efficiency of Logan Airport during peak operating periods and in carrying out its primary mission. 85.63

- Massport's model for peak hour pricing has chosen too narrow a definition of the regulatory criteria it must meet to establish a peak hour pricing structure. 85.64

- Massport chose a higher operational threshold (115 operations per hour) which underestimates the delay reduction capabilities of peak hour pricing. The range of options considered for Peak Period Pricing is insufficient. It is essential to introduce other economic factors into the decision process of the airlines, large and small. 85.65

- The option of utilizing "costing" (including peak period pricing) approaches for the purpose of delay reduction should be retained. It should be the first option selected for implementation, as a non-capital intensive, adjustable measure to move toward a goal. 85.66

F.3 Other Alternatives

- A shift away from air travel through reliance on other means of travel or communication is essential. Vigorous measures to foster and encourage this shift should be undertaken by State government in cooperation with Amtrak and telecommunications providers. 85.67

G. Benefit-Cost Analysis

- FAA legislation requires that airport sponsors conduct a benefit-cost analysis for capacity-related airport projects, particularly when the sponsor anticipates the need for $5 million or more in Airport Improvement Program grants. The DEIS/DEIR does not indicate the requirement of a benefit-cost analysis. 85.68

- There are no economic analyses of the noise impacts regarding the various alternatives. The noise-related costs and benefits should be addressed in economic analyses of activities that result in increases or decreases in aircraft noise. 85.69

- The development of the preferred alternative is anticipated to cost over $60 million. No indication of how the project is to be financed is provided in the DEIS/DEIR document. This information should be discussed as it may be relevant to the selection of alternatives. 85.70

H. Airfield Layout & Utilization

H.1 Runway 14/32

- Layout Option C for Runway 14/32 requires the FAA to issue a "Modification of Standards."

- Should the FAA decline the Modification of Standards, the possibility of constructing the runway, and/or the environmental impacts of constructing the runway, may change. If the runway cannot be so shifted, Option A or reducing the runway length would be the only viable options. Option A has a significant impact on Hyatt parking, as it would require a substantial reduction in that parking for which there appears to be no alternative. These eventualities are not thoroughly explored in the DEIS/DEIR. 85.71

- **The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible.** 85.72

- Massport indicates that only regional and commuter aircraft will use the proposed runway. The Airport Reference Code (C-III) for the proposed runway includes the following aircraft types: Airbus A-320s, BAC 111s, Boeing 727s, Boeing 737s, Fokker F-28s, and MDC DC-9s. Therefore, large jets can and will use the runway. 85.73

H.2 Centerfield Taxiway

- The summary of advantages cited for the Centerfield Taxiway supports the community concern that the presence of the Centerfield Taxiway will make the use of the 4/22 runway combinations more attractive and therefore will tend to strengthen the bias of the tower toward use of those runways. Not only would this operate contrary to the goal of shifting operations from those runways, it would increase the tendency to stack aircraft in the northern section of the airfield. 85.74

I. Preferred Alternative

- Massport is not including Alternate 1 as the preferred alternative which according to its model provides the highest reduction in delay. Peak hour pricing is said to be not included because of current conditions but is represented as an administrative option that can be implemented later. However, Massport makes no commitment to ever using this capacity management tool. The rejection of peak period pricing by Massport is inappropriate, and ignores several salient factors. The peak period pricing option or an alternative congestion approach should be implemented immediately to gain its delay-reduction benefits throughout and beyond any construction period. 85.75 85.76

- Layout Option C for Runway 14/32 requires the FAA to issue a "Modification of Standards."" Should the FAA decline to do that, the possibility of constructing the runway, and/or the environmental impacts of constructing the runway, may change. These eventualities are not thoroughly explored in the DEIS/DEIR.

- There are adverse air quality impacts associated with construction of Runway 14/32 and the Centerfield Taxiway that are not sufficiently explored in the DEIS/DEIR. These include odor impacts especially in the Jefferies Point area, and potential construction dust problems. 85.77

- A major element of the proposal to mitigate impacts on the state-listed upland sandpiper, that of creation of a replacement habitat on Cape Cod, appears to ignore geography and is of questionable benefit. 85.78

- The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible. That, and the signal this project sends that Massport continues to be committed to expansion of Logan Airport, are the two greatest concerns of the surrounding communities. 85.79 85.80

- Alternate No. 3 provides delay reduction without the build option. Alternate No. 2 provides significant delay reduction by allowing maximization of existing airfield capacity through the construction of a parallel taxiway. These two alternatives appear to be the most viable for the community. 85.81

Review Comments on Logan Airside Improvement Planning Project

A. Introduction

The need to accommodate the demand for air travel services to Boston and the region has continually conflicted with the residential concerns regarding noise, air quality, property value and quality of life issues. This conflict between Massport and the communities has been on-going for over four decades. While the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) identifies the economic necessity of operations at Logan, it minimizes the fact that neighboring communities were well established prior to the development of Logan International Airport. The timeline of Logan's development, if documented, would place a responsibility on Massport to more closely consider how development of its property affects its neighbors. If Massport is taking responsibility for providing adequate air service to meet the region's growing needs and economy; then the DEIS/DEIR document should indicate a) what the long term (20 year) needs are, and b) how the alternatives considered meet these needs. 85.82 85.83

Logan Airport was developed in 1923, significantly after most development of residential communities surrounding the Airport property. Unlike many airports that are initially developed without encroachment of residential uses, Logan was constructed into a residential setting. The history of the airfield at Logan is noted in Appendix B but does not point out the residential development existing during the phases of development. 85.84

Massport for too long has been allowed to take a segmented approach, arguing that landside projects are designed to accommodate ground passenger handling; airside improvement projects are designed to accommodate aircraft handling; that neither generates traffic; and that Massport has no control over passenger and cargo growth. 85.85

There needs to be a reallocation of roles and responsibilities, a primary objective of which should be to significantly temper the adverse impacts of air and ground vehicle operations to and from Logan Airport. 85.86

B. Addressing the Scope & Regulatory Requirements

B.1 Notice of Project Change (Massport letter dated February 16, 1999 to the Secretary of Environmental Affairs on transmission of DEIS/DEIR document

It is now unlikely that the notice of availability of the Final EIS/EIR for the project will be published prior to the summer of 1999, nearly four years after the publication of the ENF. This project, initiated in 1995 with the filing of an ENF, uses 1993 as its "base year" for planning purposes and for comparison of impacts and benefits from 85.87

the proposed project. The passage of over five years from the "base year," and the changes in activity levels at Logan since that date, warrants and should require that 1998 and data therefrom constitute the "base year" for this Planning Project. A full year of records of activity levels, including flight activity, passenger levels, fleet mix, and delays, is now available from that year and should be used instead of the 1993 data.

The planning process to date has used a 15-year planning horizon, to 2010 from the 1995 date of filing of the ENF. 2010 is now only 11 years away and the minimal 15-year planning horizon for the project should be extended to a 20-year planning horizon, to 2020, in order to examine potential impacts and benefits of the project proposals over a reasonable period. 85.88

For these reasons, the Secretary and FAA should find the lapse of time significant, should consult with the Community Advisory Committee and others, and should receive comments on the Notice, as provided for in 310 CMR 11.10(8). The Secretary and FAA are urged to require the proponent, Massport, to change the base year for planning for the project to calendar year 1998, to revise all presentations in the DEIS/DEIR including the appendices thereto to reflect that change, and to extend the planning period to 2020 from 2010 with concomitant revisions in projected levels of activity and impact, and to republish the DEIS/DEIR.

Massport claims that there has been no change in schedule (i.e., item c on page 3 in letter dated 02/26/99) for the project since no preferred alternative was identified or selected. Further, it claims that no change in completion or work schedule dates for the Project has occurred. This is untrue. Massport choose to delay the submittal of the DEIS/DEIR documents; thus, there have been changes to the schedules discussed at the ARC meetings.

According to 40 CFR Part 1502 Environmental Impact Statements[1] (PP1050.1) "An agency shall commence preparation of an environmental impact statement as close as possible to the time the agency is developing or is presented with a proposal (PP1508.23) so that preparation can be completed in time for the final statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made." PP 1508.23 describes a proposal as the following: " 'Proposal' exists at the stage in the development of an action when an agency subject to the Act has a goal, is actively preparing to make a decision on one or more alternative means of accomplishing that goal, and the effect can be meaningfully evaluated." The ENF Certificate was issued November 22, 1995. Massport and the FAA have not complied 85.89

[1] Council on Environmental Quality, 40 CFR Part 1502.5

with the required timing of the DEIS/DEIR document. Furthermore, the analysis uses baseline data of 1993 for a document submitted in 1999. 85.90

The FAA data on delays cited elsewhere in this report shows that the delay situation at Logan has improved since 1993 and is essentially in equilibrium, as assessed by the FAA. Massport has clearly demonstrated, by its action placing this project on hold for nearly two years, that the problem is not "a matter of priority." It now proposes to stretch out construction over a five-year period. Once planning, environmental review, and design were completed, one could build a new airport in five years! 85.91 85.92

B.2 Requirements of the ENF Certificate (issued November 22, 1995)

The ENF Certificate required consideration of several additional issues that were not specifically addressed in the DEIS/DEIR document, including:

1. Page 3 of ENF Certificate -	Discussion of diversion of cargo to off-airport alternatives	85.93
2. Page 3 of ENF Certificate -	Considering the off-airport alternatives as a separate scenario evaluated during the DEIS/DEIR	85.94
3. Page 4 of ENF Certificate -	Considering the development of a second major airport in discussion of environmental justice	85.95
4. Page 5 of ENF Certificate -	Detailing of the existing delay at Logan including delay derived directly from wind/weather and indirectly from delay at other airports	85.96
5. Page 6 of ENF Certificate -	Documentation of history of PRAS and problems implementing it	85.97

B.3 Cumulative Impacts

Massport argues that Federal policy limits the need to address cumulative impacts of the current proposals. This DEIR is submitted subject to Massachusetts laws, policies and regulations, in addition to federal regulations and guidance (page 7-3). As such, it is subject to the determination of the Secretary of Environmental Affairs as to whether cumulative impacts have been adequately addressed. 85.98

C. Growth & Long-Range Planning Issues

The Airside Improvement Planning Program is a short-range and limited response to a major concern about long-term trends, future growth, and increasing impact. Logan Airport is not going to go away. The prospect is for more and more passengers, more and more aircraft operations, and a greater impact on the surrounding communities. The DEIS/DEIR does not address the long term implication of growth. 85.99

C.1 Stimulation of Growth

Federal planning policy[2] establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan directly, because of delay reduction. The DEIS/DEIR makes a clearly contrary statement. In our opinion, the statement (page 7-3) that "The Airside Project has independent utility, and will not stimulate, preclude, or otherwise determine other development anticipated as part of Massport's landside planning effort" is incorrect.

Massport argues the Airside Improvement Project is independent of the landside projects in every way. We disagree. Both landside and airside projects clearly enhance the attractiveness of Logan Airport, the efficiency of managing ground and air traffic, and the capacity to handle such traffic and passengers. Of course, a more attractive Logan Airport will attract more discretionary travel, divert travel from other modes, and recapture travel from other airports. 85.100

The full implementation of the Airside Improvement Project, as proposed by Massport in its preferred alternative, would provide a runway configuration with an operational capacity equal or nearly equal to that provided by the current maximum capacity runway configuration at Logan Airport, the 4/22 runways in combination with Runway 9/27. This will significantly increase the average capacity of the airfield. It will significantly extend the time and meteorological conditions under which the highest operational capacities are available at Logan. This will temporarily reduce delay, as Massport has argued. Therefore, it should be expected that the near-term result would be to reduce the rate of "capture" of Logan passengers by other airports and by other transportation modes. This, in turn, will place greater burdens on all elements of all systems at or serving Logan. This is expansion of capacity. Such an increase must be translated into a projected increase in demand, as the FAA has stated in its regulations. 85.101

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[2] FAA-APO-98-4 "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", B "Capacity Increases which Reduce Congestion Related Delay"

C.2 Forecast Planning Period

This DEIS/DEIR, like the GEIR and Annual Updates, does not cover a sufficient planning period. Massport continues the fiction that 1999 is the near future and 2010 the far future (DEIS/DEIR page 7-5). For a $60 million project, and for Logan Airport, 2010 is the near future, beyond 2020 is the far future.

This section labels 1999 as "near term" and 2010 "long term." In terms of forecasting, Massport has provided an inadequate length of forecast years for evaluation of the long term impacts on the airside improvements proposed. Prudent planning would dictate that Massport look further than 10 years in the future in this document. Implementation of the proposed airside improvements is planned over a 5-year construction period beginning in 2000 (assuming permitting is completed). Thus, by the time all of the projects would be constructed (September 2004), the forecasts are only applicable for six years under the current timeperiods. The forecasts presented in the DEIS/DEIR are not appropriate for: a) determining the long term evaluation of the impacts planned, b) selection of base year data, c) timeframe for implementation of the project. 85.102

As a standard, FAA typically reviews and evaluates 20 year forecasts. Per FAA Advisory Circular 150/5070-6A entitled "Airport Master Plans," the following is noted: "The length of the short, intermediate and long-term activity forecasts should be decided, while 5-10-20 year times are typical, there may be justification for using different time frames." Massport has provided forecasts for current year (1999) and ten year (2010) periods. No justification for using these shorter time frames was given.

C.3 Base Year Assumptions

The base year for the development of these forecasts is 1993, five (5) years prior to the submittal of the DEIS/DEIR document. A more updated forecast for passengers at Logan in future 5, 10, and 20 years with high and low fleet scenarios should be provided for evaluation. 85.103

The Base Year and 29M High-Range Fleet data used for development was based on conditions through 1993, a full five years prior to the submittal of the DEIS/DEIR document. Massport cites significant changes since 1993 in the aircraft fleet mix; thus the validity of the base year and high-range fleet forecasts are not appropriate for consideration in this analysis because of: a) age of background material and b) changes in fleet mix occurring during short term period (1993-1998). In fact, Massport prepared alternate fleet forecast called the 29M Low-Range Fleet data. 85.104

C.4 Forecasts

Forecasting the total number of annual passengers is the first step in the methodology for the 29M High and Low Fleet Assumptions (Appendix E, Section 3, page 3) and the Logan 2010 Fleet Forecast (Appendix E, page 17). Since specific information was not presented for the development of the passenger forecasts that is the input for the fleet forecast, the fleet forecast output is invalid.

Additionally, although the methodologies for the 29M, 37.5M and 45M were explained in Appendix E, the forecasting methodologies are not consistent with each other. The Base Year and 29M High Forecast were developed under one method, the 29M Low Forecast made specific adjustments based on changes in the fleet activity at Logan and the 37.5M and 45M scenarios were developed using a different methodology (and were performed in 1995).

Since the airside improvements are to cost over $60 million to construct and since there is significant concern from the communities regarding the long term demand and development at Logan, Massport should provide recent and relevant passenger forecasts for a 20 year period with associated operational forecasts using high and low fleet scenario assumptions that are consistent for all forecast years. This information is the backbone of the environmental impact report and affects all of the analysis of the alternatives. 85.105

It is important to note that the DEIS/DEIR document footnotes that Massport's planning forecasts will be formally reviewed in the next GEIR. This footnote says that the forecasts, which the evaluation of these airside improvements was based on, is going to be changed in 1999. Massport delayed submittal of the DEIS/DEIR document for over two years; now, it is submitting forecast information that they indicate will be updated this year.

The DEIS/DEIR does not indicate the detailed methodology used to develop the levels of passenger forecasts presented. Per 40 CFR Part 1502 Environmental Impact Statements regarding methodology and scientific accuracy ". . . They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for the conclusions in the statement."[3]

Massport is now saying that the potential diversion to regional airports is "accounted for in the range of passenger levels analyzed."" These passenger levels, ranging from 37.5 to 45 million annual passengers and originally projected for the year 2010, were derived from standard demographic projections based on a number of factors not including the potential diversion to regional airports. (See, i.e.., the 1994/5 GEIR) 85.106

[3] Council on Environmental Quality, 40 CFR Part 1502.24

It should follow that as passenger levels rise and congestion increases, the attractiveness of regional airports, and therefore the extent of diversion of passenger traffic, should increase. Thus, the diversion amount on an annual basis should be higher at a 45 million annual passenger load than at 37.5 million.

Massport also suggests that the past parallel between passenger growth and increase in flight operations will change. In the past, the growth curve of flight operations has essentially mirrored the growth curve in passengers, on an annual basis. Massport now projects that in the future, average aircraft capacity will increase, and average load factors will also increase, thereby reducing the rate of growth of operations compared to the rate of growth of passengers. Recent experience, through 1998, does not bear out this projection. The 1998 data indicates the distribution of jet passenger operations by aircraft size category has changed little since 1993.

Massport must clearly identify the basis for the passenger demand projections, and must state the confidence level in those projections. Similarly, it must state the confidence level in the projections of diversion at each projected passenger level, and show the resultant range of passenger level projections.

Massport argues that the growth in passenger traffic experienced at the Manchester, New Hampshire Airport and the T. F. Green Airport in Warwick, Rhode Island represents shifts of demand from Logan Airport. It is equally likely that the introduction to those two airports of low-cost carriers has stimulated overall regional air travel growth, the bulk of which has been absorbed at those two airports.

The distinction between the "low operations fleet" and the "high operations fleet" is confused in the DEIS/DEIR. Table 4.2-6, 1999 Aircraft Operations Forecasts, is consistent with the text description under Section 4.2.2. In this table, under the "high fleet" forecast, the distribution of passengers shifts slightly to the regional carrier fleet. The passenger jet operations decrease slightly, the regional carrier operations and total operations increase significantly. However, in the 2010 Aircraft Operations Forecasts (Table 4.2-7) the passenger jet operations increased markedly over the 1999 forecasts, with the increase ranging from a low of 11% comparing the "low fleet" forecasts, to 23% to 35% for the "high fleet" forecasts. But the regional carrier operations remain within the general range projected for 1999, 200,000 to 250,000 operations per year. In the "2010" "high fleet" forecasts, the regional carrier operations are shown as 42% of the carrier fleet operations, rather than the 50% stated as an assumption in Section 3.1.2, page 1-11. 85.107

This and the percentage distribution of passengers between "passenger jets" and "regional carriers" presented in those tables indicate that most of the projected increases in passenger demand will be met by increased operations of the "passenger jet" fleet. This is the fleet that creates the noise impacts at Logan and elsewhere. 85.108

Table 1 as follows shows historic activity levels at Logan. Table 2 (based on Table 11 in Appendix E of the DEIS/DEIR) presents Massport's projected changes is the jet passenger fleet mixes for the forecast years.

It should also be noted that cargo fleet operations in 1999 (Table 4.2-6) were held constant in both the "low fleet" and the "high fleet" projections, at 13,000 operations. For 2010 (Table 4.2-7) the cargo fleet (jet) "low fleet" forecast operations are not increased from the 1999 forecasts, and are increased to 18,000 operations per year for the high fleet forecasts. If the projections were consistent, the 2010 low fleet forecast would use 18,000 cargo operations and a total of 325,000 jet operations per year. Furthermore, the increased economic growth projection that results in the 45 million passenger forecast in 2010 should also include a concomitant increase in the cargo jet operations forecast to 22,000 operations per year and a total jet operations of 382,000 per year. These corrections will affect the noise and noise impact forecasts of Chapter 5 and Appendix L. 85.109

In our opinion, Massport should be carrying its projections a minimum of 20 years from a base year of 1998, for a draft environmental impact statement and report published in 1999. We strongly recommend the year 2020 as the planning period for this project, consistent with Federal planning recommendations. 85.110

TABLE 1

Massport Logan Activity Levels, 1990-1998

YEAR	PASSENGERS	OPERATIONS						
		TOTAL	JET	% JET	NON-JET	%NON-JET	GA	%GA
1990	22.9 million	425,000	249,000	59%	$ 151,000	36%	$ 25,000	6%
1991	21.5 million	430,000	233,000	54%	$ 174,000	40%	$ 24,000	6%
1992	22.7 million	474,000	244,000	51%	$ 205,000	43%	$ 26,000	5%
1993	23.6 million	493,000	246,000	50%	$ 244,000	49%	$ 23,000	5%
1994	24.5 million	459,000	251,000	55%	$ 183,000	40%	$ 24,000	5%
1995	24.2 million	466,000	241,000	52%	$ 201,000	43%	$ 24,000	5%
1996	25.1 million	456,000	241,000	53%	$ 189,000	41%	$ 26,000	6%
1997	25.6 million	483,000	255,000	53%	$ 198,000	41%	$ 30,000	6%
1998 *(partial)*	22.5 million	*425,000*	*233,000*	*55%*	$ *166,000*	*39%*	$ *26,000*	*6%*

Note: This table demonstrates the constancy of the relationship between jet carrier aircraft operation and regional non-jet operations at Logan over the period 1991-1997. Absent significant changes in markets or types of travel demand, the basis for Massport's assumption of changes in this relationship is not apparent.

TABLE 2

PASSENGER JET OPERATIONS AT LOGAN AIRPORT

YEAR/Pax Level	1998		1998	1997	29 Million		29 Million		37.5 Million		37.5 Million		45 Million	
FLEET MIX	24 MM High		28 Mil	28 Mil	Low Fleet		High Fleet		Low Fleet		High Fleet		Low Fleet	
Aircraft capacity (pegrs)	#	%			#	%	#	%	#	%	#	%	#	%
<90	3,329	1%			15,370	6%	2,931	1%	24,215	8%	19,045	5%	27,514	8%
91-120	44,574	18%			42,368	15%	48,614	19%	35,157	12%	59,546	17%	19,828	6%
121-175	132,415	55%			136,218	50%	126,226	48%	119,253	39%	168,260	47%	123,006	36%
176-225	34,449	14%			58,703	21%	81,916	23%	89,661	23%	62,945	18%	89,829	27%
>225	27,049	11%			22,156	8%	24,461	9%	57,363	19%	48,943	14%	78,102	23%
TOTAL	241,816	100%	232,000	245,000	274,811	100%	287,148	100%	305,649	100%	358,739	100%	338,279	100%

YEAR/Pax Level	45 Million	
FLEET MIX	High Fleet	
Aircraft capacity (pegrs)	#	%
<90	24,865	7%
91-120	32,788	9%
121-175	148,184	41%
176-225	92,690	26%
>225	61,235	17%
TOTAL	359,762	100%

Comments: It is counterintuitive that the total passenger jet operations should be the same for the 37.5 million annual passenger and 45 million passenger High Fleets.
For the same two passenger levels, 37.5 and 45 million, the Low Fleet Mix for the respective years increases by about 32,000 operations (+10.7%).
Comparing the 1993 "high fleet" mix operations to the 29 million passenger High Fleet operations yields a similar 10.3% increase in operations

YEAR/Pax Level	29 Million		37.5 Million		45 Million		29 Million		37.5 Million		45 Million	
FLEET MIX	Low Fleet		Low Fleet		Low Fleet		High Fleet		High Fleet		High Fleet	
Aircraft capacity (pegrs)	#	%	#	%	#	%	#	%	#	%	#	%
<90	15,370	6%	24,215	8%	27,514	8%	<90	2,931	19,045	5%	24,865	7%
91-120	42,368	15%	35,157	12%	19,828	6%	91-120	48,614	59,546	17%	32,788	9%
121-175	136,218	50%	119,253	39%	123,006	36%	121-175	126,226	168,260	47%	148,184	41%
176-225	58,703	21%	89,661	23%	89,829	27%	176-225	81,916	62,945	18%	92,690	26%
>225	22,156	8%	57,363	19%	78,102	23%	>225	24,461	48,943	14%	61,235	17%
TOTAL	274,811	100%	305,649	100%	338,279	100%	TOTAL	287,148	358,739	100%	359,762	100%

Comment: The projected distribution of operations among jet aircraft size categories is compared separately for the "low fleet mix" and "high fleet mix" for each of the three projected annual passenger volumes. For the "low fleet" forecast, Massport assumed a significant shift, both in numbers of operations and in percentage of total operations, to larger aircraft as passenger volumes increase, except that both operations and percentage of the smallest jets are also forecast to increase. For the "high fleet" forecasts, Massport's projected trends are less clear. (There appears to be a significant error in the forecast number of operations of the smallest passenger jets in the 29 million passenger "high fleet" forecast.) Even accounting for that error, operations in that category are projected to increase as passenger volume increases. For the 37.5 million annual passenger "high fleet" forecast, operations of all aircraft size categories are projected to grow in number, although percentage of operations decreases in all but the smallest and largest size categories. (The growth in number of operations in the size category 176-225 passenger capacity is essentially nil.) However, the projection for the 45 million annual passenger "high fleet" scenario is quite different. Numerical growth in operations is forecast for the smallest and the two largest size categories, which also increase percentage share of operations significantly. The number of operations in the two remaining size categories, 91-120 and 121-175 passenger capacity aircraft, decreases dramatically both numerically and as a percentage of total operations.

C.5 Regional Context of Logan Airport and the Regional Transportation Policy

Logan Airport is recognized as a major facility, and its operations a major activity of the regional transportation complex. An issue that we believe is precipitated by the Airside Improvement Planning Process is the future role of Logan Airport in regional transportation. The affected communities universally believe that the impacts of air and ground traffic associated with Logan Airport have for many years created intolerable and unacceptable noise and traffic impacts, and make significant contributions to unacceptable air quality levels. Massport argues that airlines serving Logan and airline passengers currently encounter excessive and unacceptable levels of delay. So, what is to be done?

Massport projects air traffic operations to increase substantially over the project planning period. A conservative projection is a 20% increase in total operations over the next decade. A more important assessment is the projected increase in "equivalent jet operations," which takes into account the substantial increase in noise impact of a nighttime operation compared to a daytime operation. The projected growth in "equivalent jet operations" approaches 50% over the next decade. 85.111

Massport proposes to increase the percentage of passengers accessing Logan Airport who do so in high-occupancy vehicles, but its proposal falls far short of absorbing the full projected increase in passenger ground access requirements, even over the limited planning period. 85.112

C.6 New Large Aircraft

A new class of much larger aircraft is under active development by several manufacturers. These aircraft are referred to as "New Large Aircraft" (NLAs)[4], and are projected to have passenger capacities ranging upwards to nearly 1,000 (!), to weigh in excess of one million pounds (Maximum Take Off Weight), to utilize engines with total aircraft thrust ranging upward to around 350,000 pounds of thrust, to have wingspans of as much as 260 feet and to be as long as 300 feet, and to have main wheel assemblies as wide as 50 feet. Representatives of this class include the Airbus A3XX, and the Boeing 747-500 and –600.

The FAA will categorize them as a completely new "group" of aircraft, Group VI. (The B 747-400 is in Group V.) Another type of aircraft, the High-Speed Civil Transport (HCST) would also be included in this Group VI. These are supersonic aircraft, with a significantly longer development horizon. The range of these planes is expected to exceed 7500-8000 miles, and their projected utilization is for 85.113

[4] FAA Report DOT/FAA/AR-97/26, "Impact of New Large Aircraft on Airport Design," March 1998. This report is available on the Internet at www.tc.faa.gov/its/worldpac/techrpt/ar97-26.pdf.)

international heavily traveled routes. The manufacturers are currently projecting introduction of these planes into the international fleets in the period 2003-2006.

Current information indicates a host of serious issues associated with the introduction of this class of aircraft. Their size, weight, turning radii during taxiing, wingspans and wingtip clearance requirements will require substantial adjustments of many kinds to airfields. Their size and height, and the number of passengers, pose significant terminal problems. They are expected to require runways of about 11,000 feet in length. Many existing airfields will not find it feasible to accommodate these aircraft, or will require extensive waivers of FAA requirements and significant operating restrictions even for very limited numbers of NLA operations. Others will require very large investments, substantially over $100 million in the case of Kennedy Airport, to accommodate these planes.

With their enormous size and great thrust, wake turbulence will be a problem, and jet blast and intake problems would have to be dealt with. Basically, these planes will need a lot of space both in the air and on the ground. These considerations will in turn create delay problems.

We doubt that Logan can accomplish the modifications necessary to accommodate these planes. This therefore becomes another argument for the development of a major international airport serving New England that will have the capacity and capability to handle this generation of planes.

C.7 Community Impacts

These documents fail to address how Massport, the air transportation system, and the regional transportation and communication systems will cope with continued passenger and operations growth while simultaneously maintaining and improving environmental quality and quality of life, and an efficient transportation and communication system in the future. The proposed projects provide only limited and interim relief to whatever aircraft operating delays at Logan Airport are caused by or as a result of the airfield configuration. The delay problem as modeled and represented by Massport will get worse. 85.114

How much worse, and how soon, will be determined by decisions of passengers and airlines. What will Massport do then? Work with the FAA to find ways of cramming more operations into daytime hours? That would certainly increase community impacts. Propose some further reconfiguration or expansion of the airfield? That is not possible without enormous environmental and community impacts, and huge costs. Work with the air transportation industry and the operators of other airports to create viable, attractive, competitive, full-service alternatives to using Logan? Massport suggests this option has a limited capability to relieve congestion at Logan,

and further suggests that Logan will always be the more attractive option. This attitude, and those facts, if they are facts, must be changed. Or, does the resolution lie in the establishment of a new, major regional airport?

Massport argues that the project "will not result in the division or disruption of established communities." This must refer solely to physical division or disruption, since Massport's promotional and political strategy has clearly been to effect division among the communities around Logan Airport. Some of these communities will be further disrupted by the short-term shifts in runway usage which are the basis for Massport's claims of "net benefits", all will be disrupted by further growth in Logan air operations over the near and far futures. Furthermore, this is the last possible physical project to increase Logan airfield capacity that could be undertaken without "division or disruption of established communities," or of the waters of and lands under Boston Harbor. 85.115

Aircraft operations and the impact of those operations at Logan and to Logan neighbors will continue to increase as long as Massport and the FAA, or other state and federal agencies, do not exercise control over airline practices and policies. It will have taken over 20 years to fully convert the jet fleet to Stage 3 aircraft, and there is no program envisioned to create a future class of substantially quieter transport aircraft. The noise impact per operation is unlikely to diminish significantly in the next 30 to 40 years. 85.116

Both economic growth and the highly competitive nature of the air travel business increase passenger demand for both business and pleasure travel. As long as this demand is not channeled to other means of transportation and communication, and to other airports, passenger demand at Logan will grow. This growth will in turn spur growth in aircraft operations.

It seems inevitable that Logan Airport will experience growing congestion, and with that congestion, will come increasing pressure for additional measures to reduce it. 85.117

The Secretary of Environmental Affairs should determine that significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required. 85.118

D. Environmental Issues

The boundaries of the Airfield Study Area, Figure 5.1-2, should be extended to include the Hyatt Hotel and the waters to the east of Governors Island, in order to include the runway safety areas and other protective envelopes. 85.119

D.1. Noise

Noise in the surrounding communities is the most serious negative impact of Logan Airport. The FAA and Massport have chosen to represent noise impacts through use of the Integrated Noise Model (INM). This model produces "contours" (lines of equal intensity) of "yearly day-night average sound level" (YDNL) in 5 decibel (dB) increments. FAA sets 65 dB(A) as the YDNL below which all land uses (including residential and "sensitive receptors") are compatible. Note especially that this metric is a yearly average number.

The weakness of this methodology is demonstrated by the examples of the Milton/Quincy/Braintree area and the Town of Hull. Neither at present nor under any future scenarios does the 60 YDNL contour (much less the 65 YDNL) include any portion of these communities. Yet residents of those areas are distressed by aircraft noise, as demonstrated by the aggressive participation of their representatives on the Community Advisory Committee (CAC). This concern, this impact, results from peak noise intensities (as partially expressed by the "times above noise level" metric), the frequency at which they are experienced, and the times of day during which overflights occur. 85.120

The most salient observation is that "equivalent operations" will increase substantially over almost all areas over time. The causes are increases in total jet operations and in nighttime jet operations ("Equivalent operations" is the sum of (nighttime operations x 10) plus daytime operations.) We have compared the base year, 1993, to Massport's projections for the 37.5M Low Fleet scenario. Both alternatives 1A (all options except peak period pricing) and Alternative 2 and 3 (no runway) were compared.

The Tables 3, 4 and 5 as follows, derived from the DEIS/DEIR Tables 6.2-3 and 6.2-4, display these comparisons. (It would have been preferable to compare against 1998, but adequate data is not available in the DEIS/DEIR.) Attention should be paid to those operations that impact significant populations (based on assumed flight tracks and the INM); departures on Runways 4, 9, 27 and 33, arrivals on Runways 4, 15, 22, and 27; and to the multipliers comparing "future fleet" equivalent operations to the base year. 85.121

Table 3
Equivalent Operations
Departures

Runway		1993	37.5M Low Fleet			
		"Base Year"	Alt 1A	% change	Alt 2/3	% change
4	%	10%	7.1%		6.6%	
	#	27,000	28,000	nil	26,000	nil
15	%	13%	14%		9.9%	
	#	35,000	56,000	60 %	39,000	10%
22	%	28%	23%		31%	
	#	76,000	92,000	20%	123,000	60%
27	%	12%	17%		8.6%	
	#	33,000	68,000	106%	34,000	nil
33	%	12%	11%		9.5%	
	#	33,000	44,000	30%	38,000	20%
9	%	25%	29%		34%	
	#	68,000	115,000	70%	135,000	100%

The % change reflects increase from 1993 Base Year Operations based on Alternative Scenario. Percentages (%) rounded to two significant figures throughout table. Totals may vary slightly due to rounding.

Table 4
Equivalent Operations
Arrivals

Runway		1993	37.5M Low Fleet			
		"Base Year"	Alt 1A	% Change	Alt 2/3	% Change
4	%	36%	34%		41%	
	#	98,000	140,000	40%	160,000	60%
15	%	3.7%	6%		1.8%	
	#	10,000	24,000	140%	7,000	(-30%)
22	%	12%	14%		16%	
	#	33,000	56,000	70%	64,000	90%
27	%	17%	13%		16%	
	#	46,000	52,000	10%	64,000	40%
33	%	32%	33%		26%	
	#	87,000	130,000	50%	100,000	15%

The % change reflects increase from 1993 Base Year Operations based on Alternative Scenario. Percentages (%) rounded to two significant figures throughout table. Totals may vary slightly due to rounding.

Of the 16 comparisons presented in Tables 3 and 4 (4 runways, arrival and departure, 2 alternatives), three comparisons show essentially no change in number of operations, one comparison shows a significant decrease, and twelve comparisons show increases ranging from 110% to 240%.

Table 5
Increases in Equivalent Operations
Future Scenarios to Base Year
(Percent)

Departure Operations			Arrival Operations		
Runway	Alt 1A	Alt 2/3	Runway	Alt 1A	Alt 2/3
4	nil	nil	4	40%	60%
9	70%	100%	15	140%	(-30%)
27	119%	nil	22	70%	90%
33	30%	20%	27	10%	40%

The conclusion drawn from Table 5 is that while the different alternatives slightly shift overflight impacts among communities, most residential areas will experience significant increases in impacts over time.

The plan to add another runway on the southern boundary of the airport will definitely alter the noise patterns for those south and southwest of the proposed runway. Although the noise level for Alternatives 1 and 2 appear to be similar, there are appreciable differences. The South Boston and Jefferies Point areas will definitely have an increase in noise above 60 dB and possible above 65 dB. Although the planned runway is to have all departures to the southeast, certain atmospheric conditions will affect the intensity of the additional noise in these areas. There is forecast to be an increase of five or more dB in approximately a three square mile area on the south shore of the Inner Harbor. 85.122

Only four monitor locations were used on the south shore of the Inner Harbor for the airside analysis of sound level contours (Vol 1, Figure 5.2-1), while the remainder were northeast, north and east of and in close proximity to the airport.

Two sensor sites to the west-northwest of the airport are those at the Jefferies Point Yacht Club and at Summer near Lawsom in East Boston. These two sites would receive ground noise from the jet engines as they taxi to Runway 14 and as takeoff power was applied. This noise is quite directional when the aircraft reaches full power. According to the day-night contours in the analysis, the noise level would never reach 60 YDNL. The Times Above Noise Levels (TANL) tables contradict 85.123

these figures. The TANL analysis in the DEIS/DEIR Appendix L shows that there would be increases to the 65 YDNL threshold under all scenarios, including Alternatives 2,3, and 4. This is another illustration of the weakness of the YDNL contours in defining noise impact.

D.1.a Enhanced Preferential Runway Advisory System - PRAS Implementation

Noise abatement procedures, it is understood, are a significant concern of the Logan Airport Air Traffic Control Tower. However, the PRAS goals are advisory and may be declined by the Air Traffic Supervisor on duty after analysis of the recommended PRAS runways and weather conditions.

To change a runway configuration and move traffic to another combination of runways is similar to diverting a flow of water from one outlet to another with a similar receptacle without shutting off or spilling any of the water. Changing traffic flow to attain PRAS noise goals takes pre-planning by the supervisors and controllers. In many instances, a runway or traffic flow change can also require changes of traffic flow not only at the Boston Air Route Traffic Control Center but also at adjacent facilities. These concerns suggest that attainment of the PRAS goals will remain elusive. 85.124

Past experience with the PRAS system has demonstrated the difficulty of attainment of the PRAS goals. It is clear that capacity considerations and controller workload have taken precedence. We expect this situation to continue, and to be exacerbated by growth in operations over time.

We believe airfield operations are unlikely to attain, and even less likely to sustain, the progress toward attainment of PRAS goals that Massport projects. Therefore, the projected noise reduction "benefits" of the proposed project for the communities impacted by operations using the 4/22 Runways are not likely to be attained or if attained to be sustained. (Conversely, the projected noise increase "dis-benefits" of the proposed project for the communities impacted by operations using the 15/33 (and 14/32) Runway and by departures on Runway 27 are also less likely to occur.)

D.1.b Night-time Operations

The number of jet operations at night (Appendix H) is projected to increase significantly over time. The increase is from about 31,000 operations per year and 12% of all jet operations in 1993, to about 40,000 and about 14% of jet operations in the 29 million passengers scenario in 1999. A further increase to about 52,000 operations per year and about 16% of jet operations is projected in the 37.5 million/low fleet scenario, and to about 65,000 operations and 18% of

jet operations in the 37.5 million passenger/high fleet scenario. In the 45 million passenger/high fleet scenario the projected increase is to about 89,000 annual operations, representing 23% of all jet operations. **This shows projected major increases in nighttime jet operations from the 1993 level.**

The trend is clear. The number of nighttime jet operations can be expected to double within the foreseeable future under conservative forecasts. The noise impacts of this increase are huge. All nighttime operations of jets weighing over 75,000# are required to be of Stage 3 aircraft, at this time. Therefore, the growth in numbers and percentage of nighttime jet operations will not be mitigated by the conversion to Stage 3 aircraft. 85.125

Table 6
Growth in Jet Operations

SCENARIO	Total Jet Operations	Daytime Jet Operations		Nighttime Jet Operations		Equivalent Jet Operations	
		Number	Percent	Number	Percent	Number	Increase
1993	262,200	231,000	88%	31,200	12%	543,400	------
29M Low Fleet	297,900	257,500	86%	40,400	14%	661,200	22%
High Fleet	294,100	253,500	86%	40,600	14%	659,300	21%
37.5 M Low Fleet	331,400	279,800	84%	51,600	16%	796,200	47%
High Fleet	363,000	297,700	82%	65,300	18%	951,000	75%
45 M High Fleet	392,800	303,900	77%	88,904	22%	1,190,000	120%

This table is constructed from data and projections presented in the Logan DEIS/DEIR, Appendix H.

The last columns of the table above, also taken from Appendix H, apply the "nighttime noise equivalent" factor of 10 to the (forecast) nighttime jet operations to predict the "noise equivalent" number of jet operations during the year. **This of course is not a forecast of actual operations.** It is rather a statement that the predicted mix of operations in a particular scenario (year, passenger traffic, fleet, and resulting non-jet, jet, day, and night operations) would result in a noise impact equivalent to the impact of that number of operations if they all occurred in the daytime.

This is an important set of numbers, speaking eloquently to a critical element of the increasing impact of Logan on the communities in the coming decade. It should be a major factor in the debate about the long-term management of travel and communication for the Metropolitan area, and stresses the need to reduce dependence on and preference for air travel and Logan in particular. An alternative that should be considered is the creation of a cap on nighttime operations pursuant to FAR Part 161. 85.126

D.1.c Noise Monitoring by Massport - Late Night Preferential Runway Use

There has been a program at Logan for preferential use of over water approaches and departures, in effect from midnight to 6:00 a.m. The objective is to maximize the use of runway 15R for departures and runway 33L for landings during that period. The effectiveness of this program for the years 1995, 1996, and 1997 is reported on in the GEIRs. The program would appear to have some benefit, as reported, but is not discussed in the DEIS/DEIR. The data presented in the GEIRs suggest a higher potential benefit in the initial year of operation than in the last reported year, comparing the percentage of time that those two runways were designated as the active runways during that midnight to 6:00 a.m. period. The DEIS/DEIR should report on the current status of the program, and discuss/explain the apparent diminution in its application. **The construction of Runway 14/32 would not enhance the opportunity to utilize this program nor increase its benefit.** 85.127

D.1.d Flight Tracks

The 1997 GEIR Update contains an analysis of flight tracks on departures from various runways. The principal observations from this report are that a significant number of flights re-crossed the shoreline over Hull and were also below 6,000 feet. This is true for departures from 15R (although the numbers are relatively small) and from 22R/22L, where only 42% of the crossings through Hull No. 2 gate were above 6,000 feet. This may explain the level of concern of aircraft noise in Hull.

Comparison of the report of the flight track monitoring program in the 1994/1995 GEIR Update with that reported in the 1997 GEIR Annual Update shows the following. While the number of aircraft departing Runways 22 that subsequently cross the Hull peninsula on their westbound leg did not increase appreciably, the percentage of aircraft crossing that peninsula below 6,000 feet increased from about 8% to about 42%! (The noise abatement procedure for runway 22 departures is to pass north of the Hull peninsula on the eastbound departure and to pass across the shoreline south of the Hull peninsula at an altitude of over 6,000 feet on the westbound return leg.) It appears from the data that a significant percentage of operations failed to conform to the procedure in two ways--the Hull peninsula was crossed, and it was crossed at less than 6000 feet altitude. 85.128

The 1997 GEIR Study does not report on compliance with the flight tracks for Runway 27 departures as established by the FAA in 1996. The CAC representatives from the Runway 27 coalition are vociferous in their complaints about failure to comply with the agreed-on departure procedures, which were developed as part of the Runway 27 DEIS/DEIR. Massport reports that in 1997 85.129

the FAA initiated an action plan to improve compliance with the Runway 27 flight corridor.

D.1.e Benefits of Further Conversion to Stage 3 aircraft from Stage 2 aircraft

The Logan Low-Frequency Noise Study reported in 1996 by Harris, Miller, Miller & Hanson, Inc. indicates that Massport overstates the benefit of further conversion to Stage 3 aircraft on future noise levels around Logan Airport. First, there is only minimal conversion left to be accomplished, as Massport reports that the percentage of aircraft using Logan that meet the FAA criteria for Stage 3 is about 85% at present. Second, the HMMH Report indicates little or no "Stage 3" benefit (a) under the flight track of arriving aircraft, (b) during thrust reversal, and (c) to the sideline of arriving aircraft; and only limited benefit to the sideline of departing aircraft. The principal benefits, according to the HMMH Report, will be experienced under the flight track of departing aircraft and to the rear of departing aircraft at the start of roll. 85.130

The impact of flight operations on persons living under or near flight tracks has been assessed and evaluated using a number of approaches and metrics, as reported in the DEIS/DEIR. These include the YDNL contours, dwell, persistence, and "time above" a selected noise level. The interference and annoyance associated with flight operations is, of course, felt in a given area only when the particular flight path is in use. During those periods, the important factors are the loudness of the event (including a nighttime correction), the frequency at which the event occurs (or the interval between events), the duration of the period during which the event occurs, and whether the event occurs during a noise-sensitive period, *i.e.*, nighttime. Enhancement of the ability to evaluate and to report this form of impact might allow those concerned to better understand community perceptions of aircraft noise and the lack of broad community acceptance of the use of YDNL contours as an adequate means of expression of aircraft noise impacts. 85.131

D.1.f "Soundproofing"

Application of measures to reduce sound transmission through building envelopes to interior spaces, called "soundproofing" but more accurately termed "acoustic treatment" can certainly be beneficial in providing a degree of respite from aircraft noise. When accompanied by whole-house air-conditioning (to allow the window barriers to remain in place year-round) it can provide year-round benefits indoors. There are several drawbacks. First, it is impossible by this technique to improve ambient conditions outdoors. Second, it reduces communication and contact of those within the structures with the outside environment, in effect "cocooning" residents within their houses. Third, as a principal objective and effect of the

"soundproofing" program is to reduce or eliminate noise pathways through the structure, this also reduces air exchange between the structure and the ambient air, trapping within the structure air contaminants that are generated therein. Thus, a byproduct of "soundproofing" is an increase in the potential for interior air contamination in the absence of mechanical ventilation.

This is not an argument that "soundproofing" is a bad idea or should not be continued and intensified as a mitigation measure for otherwise unavoidable aircraft noise impacts. It is, however, a statement that acoustic treatment should not be regarded as a full substitute for reduction in ambient levels of aircraft noise. 85.132

Concerns about Massport's residential "soundproofing" program include the pace of the program, as Massport has had a target of completing the program in 15 years, or the year 2000. Massport depends on FAA grants for the funding of this program and is therefore limited by FAA eligibility rules as to the location with respect to noise contours of units for which "soundproofing" may be provided. FAA Order 5100.38A makes ineligible for AIP funding any non-related code-required building improvements necessary to accommodate acoustic treatment improvements. This may impose significant burdens on some property owners. 85.133

Another concern is the failure to provide air-conditioning in conjunction with the "soundproofing" program. Note that according to the DEIS/DEIR, the FAA grants provide for 80% of the cost of the program, with Massport providing 20%. 85.134

A further concern is the eligibility of dwelling units for the program. At present, eligibility is determined by the location of the unit within the 65 YDNL noise contour, as determined by the application of the Integrated Noise Model (INM). Massport should consider whether other factors should be included in the determination of eligibility that might not be adequately captured by the use of the 65 YDNL noise contours. Consideration should also be given to establishment of an interior noise level goal for the program regardless of location of the dwelling unit. Any restructuring of the program should be undertaken with full communication with the interested and affected communities. 85.135

The shortcomings of the INM should be recognized and accommodated in the further development of the acoustic treatment program and with respect to eligibility for the program. The disparity between YDNL levels projected using the INM and dB levels measured in the field is well demonstrated around Logan Airport. Credence should be given to the measured values in determining eligibility and design of corrective measures. 85.136

D.1.g School Sound Insulation Program

Massport reports that all schools eligible for the "soundproofing" program have been treated. That is certainly positive. However, the statement does not address the question of whether the treatments have been adequate or sufficient in every school to which they have been applied, or the question of whether all schools that would benefit from some form of acoustic treatment have received that benefit. 85.137

D.2 Air Quality/Odors

The issues with respect to air quality impacts of the Logan Airside Improvement Planning Project are (1) shifting of existing emissions to other locations on and around the airport, and (2), overall growth in aircraft and motor vehicle emissions operations and emissions.

Shifting or relocation of aircraft engine emissions and impacts will follow and relate to changes in runway and taxiway utilization that are projected to occur under any of the "build" alternatives. Generally, these changes in impact locations will mirror the shifts in noise impact. The change in air quality impact most likely to be detected is that of odors.

D.2.a Odor Assessment

(Please refer to the Appendix B - "Analysis of Odor Complaints at Logan Airport" memorandum of March 27, 1996 to the Community Advisory Committee).

Changes in odor impacts are most likely to occur in the Jefferies Point neighborhood from takeoffs on Runway 14 (taxiing aircraft approaching the runway and holding, and start-of-roll thrust and resulting emissions). The wind direction during use of Runway 14 for takeoff will, of course, disperse odorous contaminants in the general direction of Jefferies Point. This would constitute a new source of odors in the Jefferies Point area and would also affect the Hyatt Hotel. 85.138

Increased use of Runway 15 for takeoffs can be expected to have an influence on odor impacts downwind of Runway 15 in the Bremen Street/Eagle Hill area of East Boston, due to increased emissions from taxiing, holding and start of takeoff roll. In this case, as contrasted to Runway 14, this would not be a new source of odors, but rather, an increase in the frequency during which the source was active. An odor receptor location in East Boston representing the most proximate residential receptor located along or near the extended centerline of Runway 85.139

15R/33L should have been selected for odor modeling rather than Location 10 at the intersection of Condor and Glendon Streets.

The construction and use at the Centerfield Taxiway would change odor impacts in the Bayswater Street area of East Boston. Increased stacking of taxiing aircraft in the northern portion of the airport would increase odor source strength, a minor shift of taxiing operations from Taxiway November to the Centerfield Taxiway would slightly increase the dispersion and dilution of odors prior to reaching the Bayswater Street area (compared to emissions from aircraft on Taxiway November). The use of the Centerfield Taxiway would place taxiing aircraft closer to the Court Road section of Winthrop, where the odor impact would depend on the crosswind component during operations on Runways 4 and 22. 85.140

Responses to changes in odor strength are logarithmic in nature, as pointed out in the K. M. Chng Environmental Report of 1996 and in the attached memo of David Standley of March 27, 1996. Therefore, it is entirely possible that changes in odor emission intensity/source strength as they may affect Bayswater Street and Winthrop will not be sufficient to be noted by residents. However, the introduction of a new source, as in the case of Runway 14, is very likely to be detected, noted, and complained of. The same is probably true of an increase in frequency at which detectable odors are present, as could be the case for increased use of Runway 15 for takeoffs. 85.141

Improvements in efficiency of ground taxi operations, while potentially yielding or resulting in reduction in odorous emissions generally on the airfield, are not likely to be detected in the neighborhoods as reductions in odor intensity. 85.142

D.2.b Dispersion Modeling Results

These results show that growth of operations at Logan Airport will increase contaminant concentrations over time at most modeled locations, although the modeled concentration of selected air contaminants are within applicable ambient air quality standards or guidelines. The modeled increase in one-hour predicted levels of Volatile Organic Compounds ("VOCs") is of particular concern. This class of compounds is used as a surrogate for odorous compounds. The projected increase in concentrations from the 1999, 29 million-passenger scenario to the 2010, 37.5 and 45 million passenger scenarios is more than sufficient to elicit negative responses from exposed populations. It appears from the modeling results that the principal determinant of overall changes in VOC emissions would be the Taxiway Improvement Program. Runway 14-32 would have little impact on total emissions from aircraft sources, although as noted above its use would introduce a new odor source to Jefferies Point. 85.143

Over this same time frame, nitrogen oxide emissions from aircraft sources at Logan Airport are predicted to increase by about a third irrespective of the alternative selected. Particulate matter ("PM10") emissions also increase by as much as a third from the 29 million to the 45 million-passenger scenarios, irrespective of alternative selected. These increases in emissions appear to be due in large measure to increased operations, in part to changes in engine design.

Combining Tables E-13 and E-14 shows that for all modeled contaminants other than VOCs, the difference (if any) among Airside Improvement Project alternatives is much less significant than the projected growth of emissions over time. The direct or indirect comparison of various alternatives to the baseline year 1993 is misleading. Conditions have changed substantially since 1993 in many respects, and emission estimates for the various alternatives and for the various scenarios should be compared to 1998, the most current year for which operational data are available. 85.144

VOC emission estimates from aircraft sources are anomalous in that the data presented indicate essentially no increase in emissions over time despite growth in operations and regardless of alternative modeled. It is unclear why aircraft VOC emissions are not projected to increase with increasing numbers of aircraft operations. Massport models "odor indicator" emissions as VOCs from low-power aircraft operations in Tables ES-13 and ES-14. The K. M. Chng Environmental Study of 1996 reports that high-power operations (runup and takeoff roll) may be significant sources of emissions of odorous compounds despite lower concentrations during that mode of operation, because of the high volume of contaminants discharged, yet this mode was not incorporated in the "odor emission" estimates. 85.145

The dispersion modeling protocol used for the DEIS/DEIR utilized the 1993 year-of-record of meteorological data as input to the dispersion model. Massport used a ten-year hourly average of meteorological conditions at Logan as input to the DELAYSIM Model for calculating delay times associated with various alternatives and runway configurations. Massport should have used the same ten-year hourly average meteorological input for the air quality dispersion model, and should be required to rerun the dispersion model for all of the conditions modeled for the DEIS/DEIR (Section 3.1.2 Dispersion Modeling, page 6-67). Further, for odor modeling alone, it should be recognized that any problem of odor detection and nuisance is associated with conditions that will provide the maximum exposure concentration and maximum response characteristics, as set forth in the K. M. Chng Environmental Report. 85.146

The use of the EPA Industrial Source Complex Dispersion Model utilizes too long an averaging time to adequately model peak odor concentrations, which is the 85.147

stimulus of concern for odor response. Furthermore, averaging over a one-hour period essentially washes out the peak concentration profile. The modeling that was performed should be supplemented by the application of a "puff" model utilizing reasonable worst-case dispersion and dilution conditions and short-term peak emission rates, in addition to the factors set forth in the Chng Report. For all of the above reasons, the odor modeling and odor impact assessment procedure is inadequate. 85.148

No references are given for the assertion that newer engines associated with Stage 3 aircraft produce lower hydrocarbon emissions. The DEIS/DEIR demonstrates that complete conversion to Stage 3 aircraft in the fleet at Logan must (a) be accomplished by the year 2000, (b) will affect less than 15% of the current fleet, and (c) will occur independently of the Airside Improvements Project. Thus, the assertion that odorous emissions will decrease over time has not been substantiated. 85.149

D.3 Endangered Species - Upland Sandpiper

A program is required for off-site mitigation to compensate for impacts to the nesting habitat of the state-listed endangered upland sandpiper on Logan Airport. The suggested program appears highly speculative, and seems irrational with regard to protection and enhancement of so much of the species as tends to reside in and utilize habitat in the Boston Metropolitan Area. Camp Edwards on Cape Cod is over 50 airline miles from Logan Airport, in a completely different ecosystem. Massport should be required in the DEIS/DEIR to define a project fully acceptable to the Massachusetts Natural Heritage and Endangered Species Program that involves creation of a comparable habitat and its protection and preservation in the Metropolitan Area. Massport has been aware of this issue for several years, has had ample time to resolve the matter with NHESP, and should be required to set forth the resolution in the DEIS/DEIR. 85.150

D.4 Water Quality

The presentation for minimizing water quality impacts during construction is completely inadequate and is substantively limited to the one paragraph on page 6-94. There is no discussion of erosion and siltation control measures, best management practices during construction, of grain size distributions and loading that might be expected from runoff during construction or of proposed acceptable discharge rates to avoid siltation of adjacent wetlands. There is also one sentence each on pages 6-96 and 6-97, which refer to plans not yet developed or permits not yet issued. Reference is made to Massport standard programs for construction at Logan, but these are not attached to the DEIS/DEIR nor cited by title and location for reference. 85.151

D.5 Soils Management

Massport has performed no soil sampling and analysis in the principal areas of proposed excavation for the planned construction projects. Of particular interest would be the cargo and general aviation ramp areas in the vicinity of the proposed Runway 1432. The soil sample data presented in Section 6.6.4.1 cannot be considered potentially representative of any of the proposed construction areas. 85.152

Massport has indicated that the principal means of disposal of excavated material will be as landfill cover and contouring material. Experience with other projects demonstrates that the Central Artery Project has substantially saturated the demand for materials for those purposes within reasonable haul distances. While the shortage of capacity will principally be a cost factor, it could also affect proposed construction schedules. 85.153

Without information on the source of the hydraulic fill in the eastern portion of the airfield (Taxiway Delta Extension Section 6.6.4.3), no assumption should be made about the chemical characteristics of the underlying material. 85.154

The total volume of soil to be disposed of, from the DEIS/DEIR, appears to be a minimum of approximately 800,000 cubic yards, and depending on the results of field sampling prior to construction, could be considerably greater. Generation of the bulk of this material would occur in the first two years of the project. While this volume is less than 10% of the total volume of material that is being managed as part of the Central Artery Project, its management and disposal is a significant program. The DEIS/DEIR treats this matter far too casually. 85.155

D.6 Construction Impacts

D.6.a Construction Activities

The statement that construction work with limited exception would only occur during the months of January, February and March, weather permitting, is puzzling. It is not consistent with Table 6.7-3; it is not clear why Massport would select two of the months that are normally the most problematic because of weather, and years 2, 3, 4 and 5 in Table 6.7-3 specifically show no construction activity in the first quarter. This matter needs to be clarified. 85.156

It is apparent from the construction schedule that Massport intends to first implement its capacity enhancement projects, Runway 14/32 and the Centerfield Taxiway.

D.6.b Ground Transportation

Massport should explain how construction workers would access the site, based on experience with other recent Massport construction projects. Will contractors be required to provide off-airport worker parking with shuttle buses to the airfield construction site? How will the potential for parking, legal or otherwise, in East Boston be minimized? (Page 6-129) 85.157

D.6.c Air Quality - Fugitive Dust during Construction

The most likely sources of fugitive dust during construction are wind erosion of exposed soils and dust re-entrainment during vehicle passage. The areas most likely to be affected by fugitive dust are those within a few thousand feet of soil movement and transport activities, such as Court Park in Winthrop, Bayswater Street and Jefferies Point, and the South Boston Waterfront, including Fort Independence. Massport proposes street sweeping and wheel-well washing, and use of water sprays, to minimize dust generation. These are reasonably effective measures if implemented in a proper manner and at a proper place. However, it is assumed that Massport will not construct and operate wheelwash facilities on the airfield, but rather, will establish them at the southerly end of Harborside Drive and perhaps at the North Gate (although locations are not mentioned in the DEIS/DEIR). To minimize dust generation on the airfield, Massport must use spray trucks or "water wagons." However, such systems, and wheelwash operations, are not feasible during sub-freezing weather without the (costly) addition of chemical freezing point depressants to the water. Massport has failed to demonstrate how fugitive dust emissions from construction operations on the airfield during winter months will be controlled. 85.158

Wheelwash facilities generate considerable quantities of silt and sediment-laden water. Massport has not discussed how discharge of these contaminants will be controlled. Settling methods or "sedimentation boxes" are ineffective with respect to fine particles in the water stream. 85.159

D.6.d Construction Noise Impact

Massport proposes to use the Federal FHWA Criteria for construction noise impact. Massport fails to recognize the criteria applied by Massachusetts Department of Environmental Protection, which limit construction noise increases to 10 dB(A) above background and prohibit pure tones as defined by DEP (DEP Policy 90-001). These criteria are applicable to this project. 85.160

Other shortcomings of the Massport construction noise analysis are its failure to address the matter of pure tones and of impact noise (*i.e.*, paving breakers and 85.161

hoe rams), and the failure to separate out and separately analyze nighttime construction noise levels against nighttime ambient levels, in addition to the information on projected day DNL levels in Table 6.7-6.

Should this project be finally approved, the Record of Decision and the Section 61 Findings should clearly incorporate the construction impact mitigation measures set forth in Section 6.7 of Volume I of the DEIS/DEIR, as amended by any additional measures incorporated as a result of these or other comments.

How will construction vehicles accessing or exiting via the North Gate be precluded from use of local streets? 85.162

The Soils Use Policy and the Stormwater Pollution Prevention Plan (Section 6.7.5.4) should be available for and subject to public review and comment. 85.163

D.7 Cumulative Impacts

The statement is made, "After sound-proofing to mitigate impacts within the 65 YDNL Contour, the full-build alternatives provide net long-term benefits." We disagree with this statement. As discussed elsewhere in these comments, the soundproofing program has significant limitations in terms of the benefits provided. 85.164

There is potential for adverse odor impacts in certain areas proximate to the airport, as a result of this project. The proposed Airside Improvement Project provides minimal long-term air quality benefits. With the exception of odor impacts, changes in air quality associated with the proposed project are likely to be undetectable. 85.165

The statement expressing total peak construction trips as a percentage of the average annual daily traffic on the regional highway system is misleading, since most of the construction-related traffic consists of heavy vehicles. These vehicles have significantly greater traffic impacts than do passenger vehicles. 85.166

This Draft Environmental Impact Report is submitted subject to Massachusetts laws, policies and regulations, in addition to federal regulations and guidance (page 7-3). As such, it is subject to the determination of the Secretary of Environmental Affairs as to whether cumulative impacts have been adequately addressed.

Federal planning policy[5] establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan. The DEIS/DEIR makes a clearly contrary statement (page 7-3): "The Airside Project has independent utility, and will not stimulate, preclude, or otherwise . . . " In our opinion, this statement is incorrect. 85.167

D.7.a Relationship to the GEIR

The planning period is inadequate, and should be extended to 2020. There is no plan or program to deal with long-term growth at Logan, which will soon overwhelm any interim benefits of this project. There are measures that could be instituted to effectively address transportation in eastern New England, but there is no discussion in this document. 85.168 85.169

As stated above, the Secretary of Environmental Affairs should determine that these significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required. 85.170

Delay does not appear to be a major problem at Logan, based on FAA reports and Massport's 5-year history of inaction. 85.171

D.7.b Relationship to Other Logan Projects

This project and landside projects at Logan are interdependent, and both will increase capacity and stimulate demand. 85.172

D.7.c Long-Term Cumulative Effects

The Airside Improvements Project is already "divisive and disruptive of established communities," and prospects for the long term are significantly worse. 85.173

With respect to Section 7.3.1 - Noise - it is necessary to iterate that the "sound-proofing" does not fully mitigate for the impacts of increased overflights and increased ambient noise. With respect to odor impacts that may be associated with the proposed project, we believe the modeling approach used by Massport to be flawed and to require substantial enhancement. 85.174 85.175

[5] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", e-4 "Regulatory Changes in Capacity at Access Capped Airports"

E. Modeling

E.1 Approach to Delay Modeling

There are a number of different models available[6] for determination of capacity and delay analysis including: LMI Runway Capacity Model, FAA Airfield Capacity Model, AND (Approximate Network Delays), The Airport Machine, SIMMOD, TAAM (Total Airspace & Airport Modeler), HERMES (Heuristic Runway Movement Event Simulation), NASPAC, TMAC, FLOWSIM, and ASCENT. It is assumed that Massport used the commercial software model "The Airport Machine" developed by Airport Simulation International (ASI) for the evaluation of the taxiway demand, capacity and delay; however, no specifics were given on the development of the model. It is curious why Massport did not use the FAA-approved SIMMOD model for the airport simulations. "The Airport Machine, which costs about $20,000 for a site license, offers less flexibility and options than SIMMOD and is a largely deterministic model."[7]

85.176

There is no discussion on the selection of the model for estimating delay. Section 1.4.1 describes two measures of delay, ATOMS and ASQP data. In 1997, according to an FAA published report[8], the FAA had two delay reporting systems, Operations Network (OPSNET) and the APO Total Cost for Air Carrier Delay Report. In addition, DOT publishes the Air Travel Consumer Report (ATCR) and the Air Transport Association issues a report on member airlines.

FAA's Office of Aviation Policy and Plans (APO) has created the "Consolidated Operations and Delay Analysis System (CODAS) to provide estimates of aircraft delay by individual flight. "APO's main objective was to develop a clear and well-supported methodology to calculate aircraft delays that will be accepted by both government and industry as valid, accurate and reliable. Because the acceptance of the CODAS delay estimates are the key to its usefulness, APO coordinated the development of CODAS with other FAA organizations and major air carriers and continues to do so."[9]

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[6] Modeling Research Under NAS/ATT, "Existing and Required Modeling Capabilities for Evaluating ATM Systems and Concepts", International Center for Air Transportation, MIT, March, 1997

[7] Modeling Research Under NAS/ATT, "Existing and Required Modeling Capabilities for Evaluating ATM Systems and Concepts", International Center for Air Transportation, MIT, March, 1997, page 17.

[8] FAA, Office of Aviation Policy and Plans, "Documentation for the Consolidated Operations and Delay Analysis System", September 1997, page 1.

[9] FAA. Office of Aviation Policy and Plans, "Documentation for the Consolidated Operations and Delay Analysis System", September 1997, page 3

The CODAS information should be incorporated into the models developed (FLAPS and DELAYSIM) for the evaluation of the airside improvements at Logan. CODAS also calculates taxi in and out time and delay and should be considered in lieu of The Airport Machine. 85.177

It is unclear why Massport chose to develop its own model for estimating delay when FAA has developed a model to do the very same. Massport chose to use the FAA INM model for reviewing the effects of noise on the community. However, they choose to use non-standard models like the Airport Machine, DELAYSIM, and FLAPS instead of SIMMOD and CODAS. 85.178

The models used including FLAPS and DELAYSIM appear to have been developed exclusively for analysis of Logan. Background information on the development of these models is not presented. The models have not been verified or compared with historical information nor has it been shown that the development has been coordinated with FAA or the airlines. Based on 40 CFR Part 1502 requirements of preparing Environmental Impact Statements[10] " . . . Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference," this usage is inappropriate. 85.179

E.2 Airside Delay Modeling

The Airside delay model (DELAYSIM) used hourly weather observations from 1981-1990. Not only does this not correlate either to Massport's base year or to the recommended 1998 base year, it uses data that is over 17 years old. Weather patterns have changed significantly within the last five years due to effects from El Nino and La Nina. The selection of the weather data does not provide current information as background for the selection of the runway configurations. 85.180

One of the assumptions of the DELAYSIM model is that an air traffic controller first chooses 1) highest capacity configuration, then 2) the configuration that most closely meets the PRAS goals. We believe this assumption is not supported by historical data on the actual percentages of runway use configuration. No data is presented to show recent improvement due to the availability of Enhanced PRAS (EPRAS). 85.181 85.182

The DELAYSIM model should withdraw the PRAS goal decision-point as a runway configuration selection criteria and provide the model results using, as the leading criteria, the highest capacity configuration and air traffic controller workload weightings approved by FAA ATC. This approach would be a more conservative approach reflecting historical operational selections by the FAA ATC personnel. FAA's primary responsibility is to provide safe and efficient aircraft operations into 85.183

[10] Council on Environmental Quality, 40 CFR Part 1502.21

and out of Logan. To try to model the ability of FAA to adhere to a volunteer noise program (PRAS) is not appropriate in simulating the "worse-case" or "highest capacity" operations. Moreover, Logan has indicated that continued growth is expected; thus, FAA will focus on its primary responsibility of efficient aircraft operations.

It should be noted that PRAS goals have not been met by the FAA since establishment. For the model to assume the attainment of PRAS goals will improve significantly is unrealistic and underestimates the operations over specific communities. While it is important for the FAA to be encouraged to met the PRAS goals, it is impractical to consider the goals as a significant factor in FAA operational decisions. 85.184

The methodology of the DELAYSIM model as applied by Massport provides output that reflects a "best-case" though unrealistic scenario, and warps the follow-on analysis of the environmental issues. 85.185

The assumptions made by the DELAYSIM model do not account for stimulative effect that would occur if these improvements are implemented. FAA's Economic Analysis of Investment and Regulatory Decisions - Revised Guide provides specific guidance regarding the evaluation of delay and the stimulative effect that reducing delay will have by increasing demand. The following is for review from this document: 85.186

"Capacity Increases which Reduce Congestion Related Delay - Two definitions of capacity are relevant in defining the relationship (between delay, capacity and system demand). One is the "through put" measure. It defines the absolute number of system users that can be served in a given period of time, provided that a user is always present waiting to use the system. The second measure is that of "practical' capacity. It provides a measure of the ability of a given system to accommodate users subject to some maximum acceptable level of delay. ....Average delay is low at low levels of demand and increases as demand approaches capacity, as defined under either definition. As demand exceeds "practical" capacity, delay exceeds the acceptable level. And as demand pushes up against "throughput" capacity, delays begin to become infinite. This occurs because the number of users demanding service, per time period, begins to become greater than the ability of the system to serve them, resulting in an ever growing line of users waiting for service.

It is important to note that delays begin to occur before capacity, under either definition, is reached. This happens because of the random nature in which system users demand services. If all users of a system consistently arrived at evenly spaced intervals, the system could provide service hourly to a number of users equal to the "through put" capacity rate. No delay would occur until "through put" capacity was

actually exceeded. In actuality, system users do not arrive consistently at evenly spaced intervals. Sometimes several users arrive at one time and sometimes no one arrives. As a consequence, some of those who arrive at the same time as do others must be delayed.

Measurement of capacity and delay benefits requires that the relationship depicted in Figure 3-2 be determined for both the existing system and the proposed new one. The general form of such relationships is shown in Figure 3-3. Each has the same general form as that of Figure 3-2, but with the proposed new system having greater capacity and lower average delays that the old one at each level of demand. 85.187

The average delay reduction per system user at the current level of demand, Do, is Mo-M1 minutes. This is not the delay reduction that will occur if the indicated capacity increase is provided at demand level D1 after system users have adjusted to the increase, however. Capacity improvements will reduce the costs of using the system both in terms of passenger time and aircraft operating expense.

As indicated in Figure 3-1, cost reductions will generally lead to an increase in the quantity of any good or service demanded. In this case, assume system demand increases from Do to D1 resulting in delay of M2 per user. This level of delay is above M1 and represents that level which will result from the indicated increase in capacity once demand has adjusted to the lower costs brought about by the capacity increase."[11]

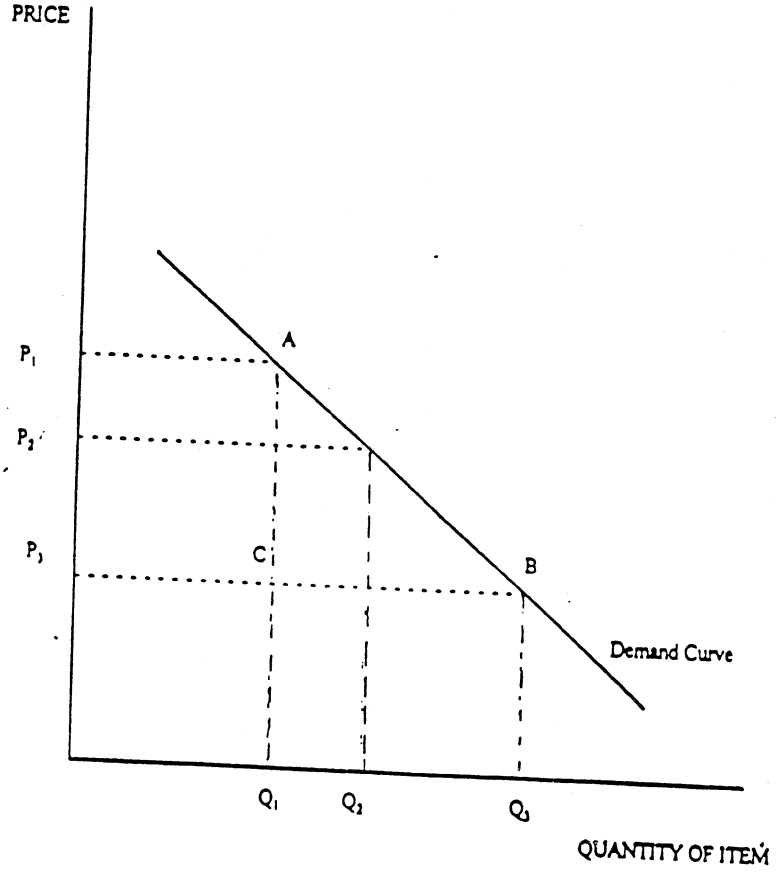
The DELAYSIM model does not take into account the capacity increase because of stimulated demand. This model also provides a higher value of delay savings because it is measuring the savings from Mo-M1 and not Mo-M2. Since FAA includes recognition of the stimulation effect in determining delay reduction, the model Massport uses should do the same. 85.188

The FAA Technical Center at Atlantic City, New Jersey, should assist in simulating operations of the proposed new runway to verify the validity of the sole-source models used by Massport. 85.189

[11] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", B "Capacity Increases which Reduce Congestion Related Delay", page 3-11.

FIGURE 3-1[12]

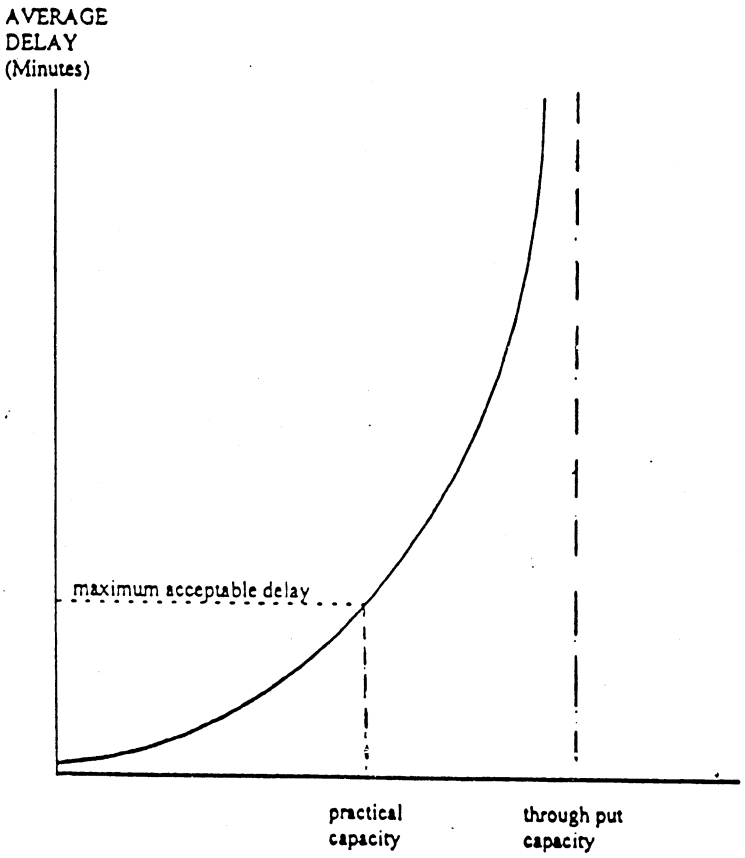
TYPICAL DEMAND CURVE



[12] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", B "Capacity Increases which Reduce Congestion Related Delay", page 3-3.

FIGURE 3-2[13]

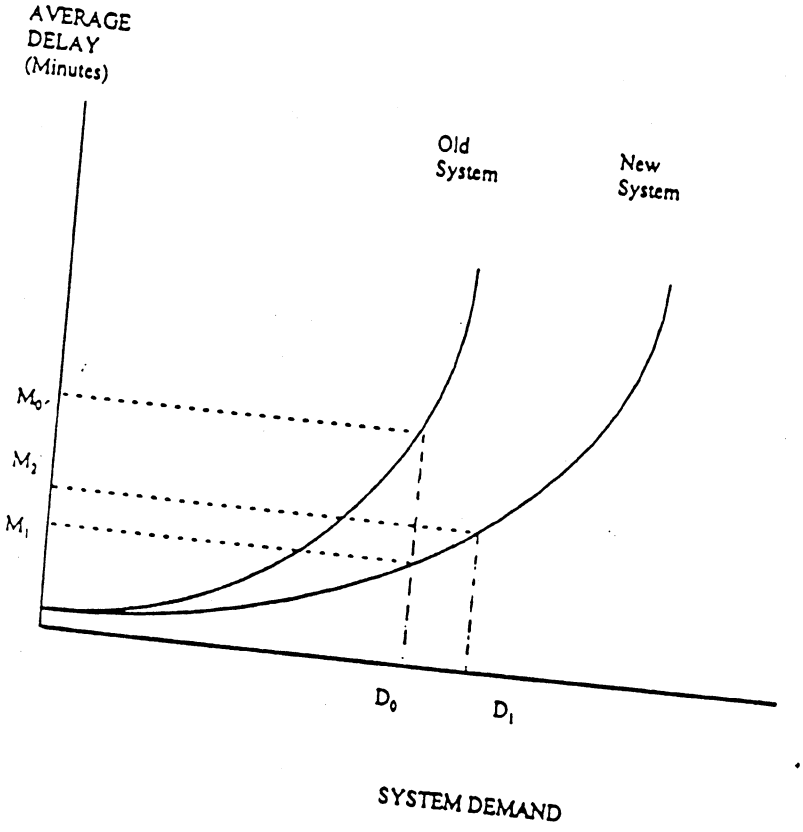
RELATIONSHIP BETWEEN CAPACITY
AND AVERAGE DELAY



[13] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", B "Capacity Increases which Reduce Congestion Related Delay", page 3-12.

FIGURE 3-3 [14]

DELAY REDUCTION MEASUREMENT



[14] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", B "Capacity Increases which Reduce Congestion Related Delay", page 3-14.

F. Delay

F.1 Introduction

Massport proposes addressing the delay problem in a limited way through the Airside Improvements Project, and to address impacts of ground traffic through increasing the usage of high-occupancy vehicles and through regional transportation improvements by others. However, Massport's Airside Improvement Project proposals will not preclude increases in the delay experienced by airlines and their passengers. By its own calculations, that delay under the most optimistic scenario will return to present levels within a very few years and increase after that. 85.190

The cited 1998 121,000 hours of delay equates to over 13 years of delay to a single aircraft. If this delay is divided among 10 air carriers, it equates to the operating expenses of one multi-engine passenger jet operating 24 hours a day for 1.3 years for each of the airlines. If these were true delays, many of the airlines involved in this area would already have found alternatives to operating from Boston.

The analysis of delay shows a 10 percent reduction in modeled delay for 1999 with implementation of Option 1A unless the air traffic increases to a projected higher number, in which case the projected delay will be above that modeled for 1998 traffic. Actual air traffic will likely fall somewhere between the two, and the delay for 1999 is likely to approximate that estimated for 1998. By 2010 projections, with all improvements completed and a low air traffic projection, runway delays are estimated to be approximately 171,900 hours, or 40 per cent more hours of delay than those estimated to have occurred in 1998. In view of these projections, it is apparent that building and operating an unidirectional Runway 14/32 is but a band-aid.

The DEIS/DEIR statement that if no actions are taken, Logan's annual runway and taxiway delays will rise from today's modeled level to a modeled level exceeding 596,000 hours in the 2010 45M High Fleet scenario ignores the multitude of other factors that would affect industry and passenger decisions. The modeling scenario of 596,000 hours for 656,000 forecast operations would have one believe that all flights would be delayed an average of 53 minutes per flight. The forecast delays, if all actions are taken, will still be double the 1999 forecast levels, or an approximate average of 21 minutes per flight. 85.191

Although expenditure of these funds to patch the Logan airfield may reduce forecast delays compare to the "no action" alternative, the delays will still be insurmountable. What will happen in 2010? Will Massport be back with another "patch" or will the visionaries realize that you can only patch something so many times and then something new has to be done? This was and is now the case in the Washington, DC area with Washington National and Washington Dulles Airports, with Houston

Intercontinental and Houston Hobby, with Dallas Love Field and Dallas/Fort Worth airport, with the New York City airports, with Chicago, etc. The cities and airports have continued to flourish with both the old and new airports. It has been proven that major cities can support more than one airport and that the older airports continue to thrive.

F.2 Calculation of Delay

The DEIS/DEIR indicates that the FAA's congestion threshold of 20,000 annual hours is used to identify severely congested (i.e., delay prone) airports. In 1997 and 1998, FAA[15] reported total operations delayed more than 15 minutes were 12,500 and 16,400; respectively.

The DEIS/DEIR indicates that "in 1998, it is estimated that Logan experienced approximately 121,000 hours of runway delay," this information is referenced between information on FAA OPSNET statistics and FAA's congestion threshold. In fact, the 121,000 hours of delay was generated by Massport's model and not by FAA. Presentation of this data, without reference, is misleading. 85.192

Information is provided on the delay as tracked by FAA, and Table 1.4-1 presents Logan's delay rank among U.S. Airports. It is useful to review this information, and a summary of the OPSNET information for the top ten delayed airports is presented in Tables 7 and 8.

In Table 8, delays due to equipment result from non-operating air traffic control equipment (not airline equipment); delays due to volume are included from both terminal volume and center volume; delays due to runways include closed runway for repair or reconstruction; delays due to weather "are largely the result of instrument approach procedures that are much more restrictive than the visual procedures in effect during better weather conditions. During the past few years, the FAA has developed new, capacity-producing approach procedures that take advantage of improving technology."[16]

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[15] FAA Air Traffic Operations Managements System - OPSNET for the 55 Select Airports Calendar Year Comparison

[16] 1994 Airport System Capacity Improvement Report, Section 1.4.2 Delay by Cause.

Table 7
FAA Statistics on Airports
with Delays of 15 Minutes or More Per 1,000 Operations[17]

	Delays Per 1,000 Operation								
Airport Name	CY90	CY91	CY92	CY93	CY94	CY95	CY96	CY97	CY98[18]
Newark Int'l Arpt.	84.94	67.26	83.48	87.88	74.29	33.81	65.25	57.89	69.08
N.Y. LaGuardia Arpt.	86.79	61.63	55.23	38.32	47.37	33.65	46.22	49.03	68.40
San Francisco Int'l Arpt	45.79	58.13	30.1	23.79	28.46	54.71	56.57	43.02	65.89
Hartsfield Atl. Int'l Arpt.	44.08	22.09	29.9	23.28	19.98	24.26	23.88	31.80	33.06
LambertSt.Louis Int'l Arpt	25.24	29.90	14.96	19.54	22.72	33.87	34.04	30.48	31.70
Boston Logan Int'l Arpt.	32.36	32.84	34.61	39.23	29.79	22.15	26.37	25.19	31.84
Chi. O'Hare Int'l Arpt.	64.61	47.94	45.40	47.49	26.83	30.93	34.36	23.52	32.07
N.Y. JFK Int'l Arpt.	68.33	41.67	41.23	35.68	35.79	17.38	29.53	18.32	36.28
Los Anglese Int'l Arpt.	7.11	14.80	19.75	9.15	10.96	27.03	24.13	17.69	9.73
Philadelphia Int'l Arpt.	35.44	16.87	18.47	18.75	20.85	6.89	17.95	16.23	24.58

Table 8
FAA Statistics[19]
Operations with Delays of 15 Minutes or More

Boston Logan Int'l Airport	CY98	Percent of Total Operations	CY97	Percent of Total Operations
Equipment	388	2.3 %	382	3.1 %
Volume	273	1.7 %	310	2.5 %
Weather	14,657	89.4 %	10,849	86.8 %
Runway	127	0.8 %	280	2.2 %
Other	955	5.8 %	679	5.4 %
Total	16,400	100.0 %	12,500	100.0 %
Total Activity	515,119		497,097	
Delays per 100,000 operations	3,183.7		2,514.5	

[17] FAA, ASC-1, 1998 Aviation Capacity Enhancement Plan, Information from CY93-CY97.

[18] FAA Air Traffic Operations Managements System - OPSNET for the 55 Select Airports Calendar Year Comparison.

[19] FAA Air Traffic Operations Managements System - OPSNET for the 55 Select Airports Calendar Year Comparison.

FAA calculated and reported delay at Logan has decreased almost 19% between 1993 and 1998. This information is not in DEIS/DEIR. This reduction in delay has occurred without the implementation of any of the airside improvements proposed in the DEIS/DEIR. 85.193

Also the DEIS/DEIR indicates that FAA identifies a 20,000 annual hour threshold for identifying delay problems at airports. In 1997, delay hours measured by FAA were 25,190 hours. The DEIS/DEIR indicates that Logan's delay is six times the FAA's threshold; however, this analysis is flawed since the 121,000 hours of delay are measured by a different method than FAA's measurement. Again, Massport chose to portray the information in a misleading way. 85.194

The DEIS/DEIR indicates that the FAA ATOMS method understates total delay since delays of less than 15 minutes are not recorded. However, the DELAYSIM, the model used for the Logan Airside Planning Project, overestimates the amount of delay hours. 85.195

Over scheduling of capacity is also a by-product of airline marketing tactics. Should over scheduling of Logan's capacity occur, resultant delays would be compounded by and become more evident when wind and weather conditions add to the delay impact. There is no configuration available at any airport that can handle such a situation without delays. Until airline marketing personnel change their mind set, delays are inevitable. Even airports with three sets of parallel runways incur delays brought about by over scheduling. It is important to note that although this over scheduling is given as a scenario, airline schedules are now such that in no hour is the normal three runway capacity at Boston Logan airport exceeded by scheduled flights.

F.3 Cost of Delay

Cost of Delay is a subjective term. Massport exaggerates the cost of delay to airport users (airlines) and airport passengers. First, the DELAYSIM model overestimates delay hours by counting cancelled flights (where costs would not be minimized from other delays). 85.196

For airline passengers, the DELAYSIM model calculates all delay. Airline schedules take into account typical delay times when publishing departure and arrival information. Thus, airline passengers idea of delay (according to the OAG data) is different and substantially less than assumed by Massport using DELAYSIM delay hours. Moreover, the travelling public accepts some delay time when using air travel. The delay to an airline passenger is time over and above the acceptable delay measuring stick. Massport also assumes that all passengers can be represented by a single "representative passenger" when economically there are different economic values for business versus pleasure travellers. 85.197

The document quotes a value of $ 27 per hour of time from the 1997 APO Bulletin; however this document further details categories for personal and business travel as well as a low and high sensitivity range or each category. The generalized use of $27 per passenger overestimates the value of delay for airline passengers at Logan. 85.198

Massport did not present the cost of delay information in any meetings with the CAC or its consultants. In fact, they indicated cost information would not be provided except the initial construction cost of the project. 85.199

Massport overestimates the costs to airlines and passengers. Information should not be reflected unless a more detailed cost-benefit analysis is conducted. Massport presents only costs to airlines and their passengers. If cost information is to be presented as part of the analysis process for the DEIS/DEIR, a full cost-benefit analysis should be provided. Providing only part of the story is misleading. 85.200

As stated in 40 CFR Part 1502 Environmental Impact Statements regarding cost-benefit analysis[20]: "If a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed actions, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences. To assess the adequacy of compliance with sec. 102(2)(B) of the Act the statement shall, when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analysis of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations In any event, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision."

F.4 Aircraft Delay and Runway Use Results

The Airside Improvements Feasibility Study (dated July 1995) addressed the anticipated level of flight delays if no measures were enacted to improve operating efficiency. The DEIS/DEIR indicates that "1998 delays are less than those experienced in 1993." Thus, the selection and justification of 1993 as the base year for the development of an DEIS/DEIR report (dated February 1999) is inappropriate based on a) existing conditions and b) results of prior studies. It is inconceivable that an airport delay analysis presented in 1999 would use a base year that is five years old. Massport chose to delay submittal of the DEIS/DEIR until early 1999, and should be required to provide analyses that are appropriate to forecasting techniques based on recent (not five year old data). Massport is presenting information based on five year 85.201 85.202

[20] Council on Environmental Quality, 40 CFR Part 1502.23

old data and analyzing the results for only a ten year period in the future. This is not an acceptable approach to the delay analysis.

Moreover, the DEIS/DEIR indicates that analysis was provided for the base year; yet Table 4.5-1 does not indicate the total delay hours for 1993 for the five forecast scenarios for each of the proposed Logan Airside Improvement Packages. The statement that "1998 delays are less than those experienced in 1993" points up the flaws with the forecasting of delay using the methodology and approach presented in the DEIS/DEIR. *(Note: Table 4.5-1 does not label the Alt. 1 vs Alt 4 & Alt. 1A vs. Alt 4 as delay reduction.)*

85.203

85.204

F.4.a Total Delays

The document compares the FAA delay threshold to Massport's model and indicates that FAA's threshold is to be exceeded by eight times. This comparison is inappropriate since the measures of delay are not the same (FAA's definition of delay is significantly different than Massport's model). This statement misleads the reader to think that FAA's threshold is being exceed by a factor of eight when, in fact FAA only counts delay hours over 15 minutes and Massport's model counts every minute of delay.

85.205

Again, in this section the DEIS/DEIR puts a value on the delay savings that is inappropriate and inaccurate. An interesting comparison should be noted:

85.206

1993 Base Year	159,000 modeled delay hours
1999 29M Low	157,500 modeled delay hours
Delay Reduction:	almost 1 %
No Action:	almost 1%

F.4.b Runway Related Delays

The DEIS/DEIR states that implementation of Alternative 1 or 1A will substantially reduce the growth in delays occurring in VFR conditions. It should be noted that the key points presented in Chapter 1 (point 5) indicate the "principal cause of delay at Logan is the substantial drop in airfield capacity that occurs when wind and weather conditions force controllers to utilize configurations with fewer than three runways or when poor weather requires increased separation distances between aircraft." These conditions occur during IFR conditions, thus the implementation of Alternative 1 or 1A is not just providing reduction in weather related delay but is providing additional capacity during VFR conditions. While the peak hour capacity does not increase with construction of the runway, the additional runway will provide the controllers the option to use higher-capacity configuration more of the time. This ability is providing additional "through-put" of aircraft operations.

85.207

The guise of constructing the new runway to reduce weather related delays actually has the effect of increasing the all weather capacity of the airport; thus allowing for additional through-put of aircraft operations than without the new runway. If as the DEIS/DEIR states, there are delay savings realized by this delay reduction, then there is also a stimulation of air travel demand (caused by the market forces of lowering prices). This stimulation is not reflected in the annual hours of delay calculations. 85.208

F.4.c Taxiway-Related Delay

The DEIS/DEIR puts a value on the delay savings that is inappropriate and inaccurate. Please see comments under "Cost of Delay."

F.4.d Runway Use

Figure 4.5-3 Distribution of Jet Aircraft Operations by Operating Direction illustrates 1997 actual data. 1997 is not the base year. 85.209

The discussion of runway use fails to highlight that it is FAA controllers who make the decisions regarding the runway configuration that is selected. The DEIS/DEIR assumes that FAA controllers would select the a) highest capacity configuration b) meeting of PRAS goals. This assumption has not been historically proved to be true. 85.210

The section "Revised Wake-Vortex Turbulence Rules" implies that the "new"" wake turbulence rules require one aircraft to follow the other at the stated distances. These rules are applicable **only** to Air Traffic Controllers for providing required spacings between aircraft for following and crossing traffic. The distances behind large and heavy aircraft are those that air traffic will use to provide initial separation until other separations, such as visual separation, can be applied. These rules are not applicable to a pilot who chooses to follow another aircraft visually. This information is verified through the FAR 91 Flight Rules, appropriate advisory circulars, and the Air Traffic Control Handbook, 7110.65L and revisions. A prudent pilot, when operating in VFR conditions behind a larger or heavy aircraft, will adjust his path behind the aircraft to ensure a safe flight. 85.211

F.5 Delay Conclusion

Page 4-41 describes 1998 annual delay as 143,000 hours where as Page 1-12 describes 1998 annual delay as 128,000 hours. These are modeled hours, a product of "DELAYSIM", not measured hour or "FAA" hours. 85.212

The use of 1998 data rather than 1993 data strengthens the argument that the "base Year" must be revised. 85.213

According to the FAA, operations delayed over 15 minutes in 1998 totalled 16,400[21]. At a minimum this would be 16,400 operations @ 15 minutes / 60 minutes per hour or 4,100 total delay hours. At a maximum, assuming that delays over five hours are canceled, the annual delay would be 16,400 operations @ 5 hours or 82,000 total delay hours. Now, obviously, this is a simplistic method of applying the FAA reported data since all of reported delays are over 15 minutes (since it is the minimum threshold for reporting) and not all the reported delays will be five hours. However, using this basic approach, delay hours would be between 4,100 hours and 82,000 hours. These figures are substantially lower than the DELAYSIM model and bring into question the validity of the methodology and approach. 85.214

[21] FAA Air Traffic Operations Managements System - OPSNET for the 55 Select Airports Calendar Year Comparison.

G. Alternatives

Massport has not met the requirements of the 40 CFR Part 1502 Environmental Impact Statements regarding "alternatives including the proposed action" for this DEIS/DEIR which require[22]: "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" and "Include reasonable not within the jurisdiction of the lead agency."

No discussion of alternatives not considered in this DEIS/DEIR was included. A reasonable person could expect alternatives to include the following:

a. Development of a new airport to accommodate demand and reduce delays at Logan 85.215
b. Consideration of Implementing a High-Density Rule (Slots) to control congestion at Logan. " In order to avoid excessive congestion at several of the nation's airports, access is capped through regulations which establish a fixed number of landing and takeoff rights ("slots")."[23] 85.216
c. Consider Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan to provide noise relief to affected communities. A specific measure that could be considered is a cap on night-time operations. 85.217
d. Diversion of general aviation traffic and origin/destination traffic of both regional non-jet and short-haul jet traffic to Massport's Hanscom Field. 85.218

At the present time, Massport presents only a limited suite of measures that could be effective in addressing this issue. The general approaches that could be implemented that have not been forestalled by other actions, and are not mutually exclusive are discussed below. However, the political will has not been demonstrated for the required combination of a level of commitment and of supporting measures sufficient to prevent the growth of aircraft impact at and around Logan Airport.

G.1 Regional Airports

Diversion of passengers to other airports has major potential to absorb current and future growth in air travel demand of the Boston Metropolitan and eastern New England areas. Hanscom Field, T. F. Green, Manchester, Worcester and potentially Pease, are the candidate facilities. Massport has made an effort to evaluate the potential for such diversion, and some of the recent growth in travel through those airports has certainly been from passengers who could and would otherwise have

[22] Council on Environmental Quality, 40 CFR Part 1502.14

[23] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", e-4 "Regulatory Changes in Capacity at Access Capped Airports", page 3-22.

utilized Logan. However, those airports do not now offer the full suite of services and destinations available to and from Logan. Without additional support and stimulation it is unlikely they will. Therefore, if market forces are left to drive growth in traffic at those airports, growth at Logan will not be significantly constrained. Specific goals would have to be established, and a series of measures implemented to stimulate shift of traffic demand from Logan.

Hanscom Field is owned and operated by Massport. We believe it has significant potential to absorb passenger traffic that does not seek connections to other flights, i.e., Origin & Destination traffic to and from the Boston Metropolitan area. Many "General Aviation" corporate flights, and some "Regional Non-jet" and "short-haul" jet traffic could find Hanscom an attractive alternative to Logan if appropriate services and facilities were provided and a marketing campaign implemented. Hanscom has the capacity to handle an additional 40-50,000 operations annually, even if current operations including 'touch and go' are not modified. 85.219

The only mention of a Second Major Airport in the DEIS/DEIR is the information presented on the 1991 MAC Second Major Airport Siting Study. This study which concluded that it would take at least 10 years of planning from site selection to construction indicated it was not a solution for the next decade and a half. Logan's airside improvements are to be implemented, if on the schedule presented, by the beginning of 2005. Does not the very conclusion of the Second Major Airport study point out that long term considerations to meet increasing demand require that a second airport (either a greenfield airport and/or significant expansion of an existing airport) be an alternative to the improvements recommended? 85.220

Per 40 CFR Part 1502 Environmental Impact Statements regarding alternatives including the proposed action: "In this section: Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. Include reasonable not within the jurisdiction of the lead agency."[24]

The ENF Certificate dated November 22, 1999 cited that the alternatives analysis must be broadened to include off-airport alternatives[25]. Although Massport includes some options off-airport, the development of another air carrier airport has not been reasonably discussed nor have the reasons for its elimination as an option. 85.221

The fact that Massport does not provide long-term planning forecasts (at least 20 years from submission of DEIS/DEIR) teamed with its inability to provide as an

[24] Council on Environmental Quality, 40 CFR Part 1502.14

[25] ENF Certificate dated November 22, 1995, page 3, last line of alternatives section.

option the development of a second airport highlights the short-sightedness of the long term development.

85.222

Per 40 CFR Part 1502 Environmental Impact Statements regarding purpose requires that [26]: " . . . It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." In the case of many of the close-in neighborhoods, the option for a second airport is reasonable to minimize adverse impacts on their quality of life.

The presentation of the potential diversion of Logan passengers due the alternatives of regional airport use, rail use and video and online conference use are indicated to be the same at a 45M forecast level and a 37.5M forecast level. It is unclear why if almost 20% of passengers would use these alternate modes at 37.5M demand level, why at a higher passenger demand level, more passengers would be diverted to these alternate modes at a 45M forecast level.

85.223

One of the assumptions regarding the recapture rate from the analysis described in Table 2.4-4 is that the estimated service area of the alternate airports remains the same in 2010 as it is in 1994. This is not an accurate assumption since the service areas for each of these airports will grow significantly as they improve air service routes and frequencies. Massport fails to list Hanscom Airport as a potential diversion airport.

85.224

85.225

Massport projects a relatively small potential for shifts of transportation and communication demand away from Logan Airport as a result of use of high-speed rail, other regional airports, and telecommunications. These shifts do not, according to Massport, come anywhere near absorbing the projected growth in passenger demand.

The Massport Logan Community Advisory Committee (CAC) argues that the incursions of Massport and Logan upon the communities must be rolled back. This can only be accomplished by deterring air traffic growth at Logan Airport. This is a regional problem demanding of regional solutions. While Massport has taken preliminary steps in this direction, the overall effort and the present potential are seriously inadequate. The New England governors, the FAA, and the Federal Highway Administration must assist state government and the Boston Area communities in devising and implementing programs to ensure that Massport's numbers grow no larger, while not inhibiting normal beneficial economic growth of Eastern New England. The Airside Improvement Project must be viewed in this larger regional context. It is not just a set of projects designed to reduce airside delays and improve safety.

85.226

[26] Council on Environmental Quality, 40 CFR Part 1502.1

G.2 Peak Hour Pricing

Congestion pricing, peak-period pricing and techniques that base landing fees on functional categories relating to operations (landing or take-offs, weight (or size) of aircraft, and capacity to meet peak period demand could be particularly useful in reducing delays. The basic assumption was made that peak period pricing needed to be revenue neutral, pertaining only to airfield revenue and airfield costs at Logan. This assumption resulted in impacts to airlines that operate small aircraft only. Should airfield costs to develop capacity enhancement supporting Logan (i.e., an alternate airport) be allowed, then the results would have an affect on larger aircraft and the results would provide additional delay reduction. 85.227

A properly-designed and implemented form of congestion pricing, among the alternatives under consideration, will afford a great degree of delay reduction at Logan, for a given investment. Massport's previous experience with regulatory challenges in implementing a demand management technique has affected the assumptions of the model developed. 85.228

Consideration should be given to a quite different approach to addressing the efficiency of Logan Airport during peak operating periods and in carrying out its primary mission. In a simple form, the mission of the airport might be defined as "the accommodation of as many passengers as feasible under existing conditions with a minimum of delay" with some stated commitments to minimizing impacts of operations. The measure of efficiency presently used by Massport and the FAA relates to numbers of aircraft operations handled in specific periods (i.e., per hour); and the hours of delay experienced in handling those operations. Massport's efforts have focused on operational and facility expansion approaches to increase the capacity for total aircraft operations under restrictive conditions. *Refer to Appendix C for additional discussion of alternative approaches to peak hour pricing.*

If the aircraft passenger is identified as the "unit of concern" in the airport's primary mission, the fundamental measure of efficiency and the principal objective of the airport would be to maximize the number of passengers transiting the airfield per hour. If maximizing the throughput of passengers was the dominant objective of the management and operation of the airport facilities under the control of Massport, the measures considered might differ from the current models. 85.229

One approach might be to use the hourly integral of aircraft type/seat capacity adjusted by the current or projected average load factor for each aircraft type and operator or route. To maximize facility efficiency and to provide the maximum feasible throughput of passengers during critical periods, Massport could through defined mechanisms encourage or give preference to the use of its facilities under its control (i.e., gates, hold rooms, terminals) during critical periods by aircraft and

operators providing service to the greatest number of passengers. Massport would apply this approach through lease terms and operating agreements with its lessees and aircraft operators.

Massport's model for peak hour pricing has chosen too narrow a definition of the regulatory criteria it must meet to establish a peak hour pricing structure. It also has chosen a higher operational threshold (115 operations) which underestimates the delay reduction capabilities of peak hour pricing. 85.230 85.231

Massport chose varying data information, both 1993 and 1995 flight schedules, for modeling the peak hour pricing simulations. Massport has again, chosen the input of information which will provide the output it expects. 85.232

The option of utilizing "costing" (including peak period pricing) approaches for the purpose of delay reduction should be retained. It should be the first option selected for implementation, as a non-capital intensive, adjustable measure to move toward a goal. 85.233

G.3 Other Alternatives

A shift away from air travel through reliance on other means of travel or communication is essential. Vigorous measures to foster and encourage this shift should be undertaken by State government in cooperation with Amtrak and telecommunications providers. 85.234

High-speed rail in the Northeast Corridor and telecommunications as a substitute for business travel is briefly explored in the DEIS/DEIR. Should energy cost and availability become a much more significant factor in the cost of air travel, these measures would become increasingly attractive and effective to divert Logan passenger load. Neither is effective in absorbing vacation travel demand, which particularly contributes to peak-period loading.

Massport has worked to reduce automobile travel to and from Logan Airport by providing and encouraging use of short-range mass transport. Rail and bus transportation could also replace some of the short-haul feeder/distributor traffic at Logan. Much of this traffic in smaller aircraft is the most likely to be squeezed out as economic measures are applied to address future congestion at the airport. Furthermore, these smaller aircraft do not create significant community impacts. Their presence and operations are primarily a concern to Massport and the airlines as a significant factor in airfield and air space congestion and as a factor in creating equity of access among passengers.

H. Benefit-Cost Analysis

The development of the preferred alternative is anticipated to cost over $60 million (presumably in 1998 dollars although this information is not provided in Table 6.7-2) plus planning, engineering, and resident inspection fees likely adding at least an additional 30% to the construction for a total project cost of around $80 million. No indication of how the project is to be financed is provided in the DEIS/DEIR document. This information should be discussed as it may be relevant to the alternative selection. 85.235

FAA legislation requires that airport sponsors conduct a benefit-cost analysis for capacity-related airport projects, particularly when the sponsor anticipates the need for $5 million or more in Airport Improvement Program discretionary grants, or any capacity project for which an letter on intent is sought.[27] Table 8.8-1 does not include the benefit-cost analysis as part of the anticipated permits and approvals required by the FAA. This is obviously a critical oversight since the valuation of both benefits and costs including dis-benefits to affect communities that provide the economic justification of this project is also missing from the DEIS/DEIR. 85.236

Massport indicates there are environmental benefits with implementation of the various alternatives. However, there is no economic analysis of the noise impacts regarding the various alternatives. Massport should be required to identify the specific dis-benefits for the various alternatives proposed as stated in the following FAA-APO document[28]: "Noise Reduction - The provision of air transportation services generates noise which imposes costs or dis-benefits on those who are subjected to this noise. Government investments which promote aviation may have the accompanying effect of increasing aircraft noise. Government activities have been undertaken to reduce aircraft-generated noise. The benefits of noise mitigation activities are the reductions in noise-produced costs which the activities achieve. These noise related costs and benefits should be addressed in economic analyses of activities which result in increases or decreases in aircraft noise. Although it is possible to establish a conceptual framework which correctly measures the social cost of aircraft noise, deriving empirical estimates for such a framework is a difficult undertaking requiring numerous assumptions and estimation compromises." 85.237

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[27] FAA, Office of Aviation Policy and Plans "FAA Airport Benefit-Cost Analysis Guidance", June, 1997, page 1.

[28] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 3, "Benefit Estimation", e-1 "Noise Reduction", page 3-20.

I. Airfield Layout & Utilization

I.1 R/W 14/32 Layout Options

The selected preferred layout option for "unidirectional" Runway 14/32 is Option C. (See page 3-28.) Option C is a 5,000-foot runway shifted slightly to the southeast along the centerline so that a small portion of the approach runway safety area is over water (rather than filling or creating a deck (Option B)). This will require a "Modification of Conditions" by the FAA. The discussion of this as a feasible option did not include a discussion of aborted takeoffs in the 14 direction, and whether the reduced safety overrun would be approvable under that scenario. If the runway cannot be so shifted, Option A or a shorter runway would be the only viable option. Option A has a significant impact on Hyatt parking, as it would require a substantial reduction in that parking for which there appears to be no alternative. If this project is to proceed to the Final EIS/EIR stage, there should be a determination by FAA that Option C will be permitted. 85.238

The DEIS/DEIR refers to a crosswind being a determining factor in runway availability. A statement is made (on Page 3-7) that ". . . runways at Logan are only available if there is a tailwind of less than seven knots and a crosswind of less than 20 knots."" This statement is inaccurate since the criteria is "a crosswind component of 20 knots" as the determining factor. A wind at a 45 degree angle across a runway at approximately 30 knots can equate to approximately an 18 knot crosswind. Other contributing causes to a crosswind being a factor for runway selection are airline regulations, pilot proficiency and preferences, and aircraft types and capabilities. 85.239

I.2 Taxiway Improvements

The summary of advantages cited for the Centerfield Taxiway (page 3-29) supports the community concern that the presence of the Centerfield Taxiway will make the use of the 4/22 runway combinations more attractive and therefore will tend to strengthen the bias of the tower toward use of those runways. Not only would this operate contrary to the goal of shifting operations from those runways, it would increase the tendency to stack aircraft in the northern section of the airfield. 85.240

I.3 Modifications to Standards

The preferred alternative recommendation does not state which runway option is being recommended. If as page 3-28 indicates, Option C is the preferred layout option for the runway, then it is critical to note that this option would require a modification to standard from the FAA regarding the runway safety area. 85.241

The discussion of Option C does not evaluate the potential of declared distances or displaced thresholds in lieu of requesting a modification to standard. Option C would require a modification to standards for: 85.242

* Penetration of FAR Part 77 for Harborside Drive
* Penetration of FAR Part 77 Transition Surface for Hyatt and Buildings 56&57
* Part of the Runway Safety Area is over the water

I.4 Aircraft Type Proposed to Use Runway 14-32

In Section 3.2.2.4 (page 3-24), there is a very brief discussion of the type and size of aircraft that will typically use the proposed new runway compared to the aircraft of maximum size that could use the runway. The aircraft mix projected to use Runway 14/32 that was used in the noise analyses should be stated, and justified. If the mix so used excludes certain aircraft based on landing or takeoff requirements this should be stated. If the mix so used includes a lesser proportion of certain other aircraft than does the Logan fleet mix this should be stated and justified. 85.243

The justification on Page 3-24, that only regional and commuter aircraft will use the runway is not consistent with the Airport Design Category (ARC) selected for the Runway which is C-III[29]. C-III aircraft[30] include the following: 85.244

* Airbus A-320-1000
* BAC 111-200, -300, -400 & -475
* Boeing 727-100 & -200
* Boeing 737-100, -200, -300, -400 & -500
* Fokker F-28-3000 & -4000
* MDC DC-9-10, -15, -20, -30, -40 & -50
* MDC DC-9-80 & -82

I.5 Procedures

Page 3-12 indicates that the approach procedure is to be a non-precision approach for proposed Runway 14/32. However, page 3-14 indicates that future use of a Global Positioning System could require a 1,000 ft wide primary surface. This 1,000 ft primary surface would be required for a precision instrument approach. Page 3-24 indicates that NAVAIDS for Runway 32 will consist of a localizer and glide slope for precision guidance. This is in direct conflict with the statement on Page 3-12 indicating a non-precision approach. It appears that Massport is presenting the

[29] DEIS/DEIR, Page 3-11

[30] FAA Advisory Circular 150/5300-13CHG4, Appendix 13

proposed runway as a non-precision runway used only by commuter aircraft. However, it is obvious that long-range plans include precision instrument capabilities and operations by a variety of large jet aircraft.

85.245

The DEIS/DEIR should clarify both the short and long term NAVAIDS being considered for the proposed runway. Deviations to standard should be included for the long term NAVAIDS with precision instrument capabilities (either ILS or GPS equipment) to illustrate the long term implication of the runway. As stated in 40 CFR Part 1502 Environmental Impact Statements regarding unavailable information[31]: "If the information relevant to adverse impacts is essential to a reasoned choice among alternatives and is not known and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement." This information should be easily attainable by Massport.

I.6 Uni-directional Runway

Under the Supreme Court decision in *Griggs v. Allegheny County*, 369 U.S. 84 (1962), proprietors of the airport are liable for aircraft noise damages resulting from operations from their airport since they planned the location of the airport and the direction and length of the runways. Because they are liable for airport noise as proprietors, airport owners have limited authority to determine the "permissible level of noise" of aircraft operations under their proprietary powers. Airport owners may not use this limited authority to interfere with Federal responsibilities for flight safety and efficiency. Thus, Massport cannot, as proprietor of the airport, ensure that proposed Runway 14-32 will be uni-directional. It is also important to note that they can; however, determine the "permissible level of noise" of aircraft operations.

85.246

I.7 Future Use

Although Massport states that Runway 14/32 will be built with a non-precision approach, their discussion shows that there may be the possibility of making this a precision approach. Massport further states that Runway 14/32 is to be equipped with an ILS localizer and glide slope for instrument approaches. The approach will be considered a non-precision approach due to higher weather minima for use of this runway.

The proposed approach is to follow the precision guidance until approximately 450 feet above the airport and then proceed visually to the runway. This altitude would be reached approximately one and one half miles from the runway. The approach for this runway is proposed to be similar to those for Runway 22L and Runway 27. To change this non-precision approach to a precision approach would require three

[31] Council on Environmental Quality, 40 CFR Part 1502.22

events, of which two are physical changes. One would require the modification of the runway to medium or high intensity lighting, the second construction of approach lights for Runway 32, and the third an EIS by the FAA to lower the minima on this runway.

While precision approaches are not feasible for runways 22L and 27, they might be feasible for runway 32 with construction of a light pier similar to that on Runway 33L. If that were done, the runway combinations of arrivals on Runways 33L and 32, with departures on Runway 27, would become the highest capacity combination under IFR conditions. 85.247

J. Preferred Alternative

J.1 Key Points

The delay hours projected by Massport are the artifacts of its own model, and do not comport with the FAA's procedure for calculating delay at airports. In addition to calculating every minute of delay associated with every scheduled flight, it fails to take into account normal flight cancellation activities by airlines. Additionally, the FAA calculation and tabulation of delays at Logan over the last five years shows little change either year to year or as a trend. 85.248

The rejection of peak period pricing by Massport ignores two factors: First, that the construction project itself may increase delays marginally during the five-year construction period, although Massport pledges to avoid that effect. Second, that by the time the project is fully implemented, any delay-reduction benefits it may afford will be overcome by the projected growth in air travel operations, and conditions will be no better than now. The peak period pricing option should be implemented immediately to gain its delay-reduction benefits throughout and beyond the construction period. Massport appears reluctant to adopt a program that could adversely impact Cape Air, but we believe legal ways can be found to avoid that impact. 85.249

Layout Option C for Runway 14/32 requires the FAA to issue a "Modification of Standards." Should the FAA decline to do that, the possibility of constructing the runway, and/or the environmental impacts of constructing the runway, may change. These eventualities are not thoroughly explored in the DEIS/DEIR. 85.250

We believe there are adverse air quality impacts associated with construction of Runway 14/32 and the Centerfield Taxiway. 85.251

Residential "sound-proofing" does not fully mitigate the impacts of the increased overflights noise that would result from implementation of Alternative 1 or Alternative 1A, especially in the East Boston/Chelsea/Everett flight corridor. 85.252

The reduction in ground noise impacts claimed for Alternative 1 or Alternative 1A are almost entirely associated with a projected reduction of use of Runways 4/22. As pointed out elsewhere in this report, that benefit is likely to be short-lived, as traffic grows and the FAA controllers respond to their primary imperative of maintaining airport capacity. Further, the Centerfield Taxiway is intended to improve the performance of those runways, suggesting they are likely to continue as the primary runways. 85.253

A major element of the proposal to mitigate impacts on the state-listed upland sandpiper, that of creation of a replacement habitat on Cape Cod, appears to ignore geography and is of questionable benefit. 85.254

As stated above, we disagree with the recommendation to defer implementation of peak-period pricing. In fact, Massport does not commit to future implementation of peak-period pricing, should and when delay becomes a significant problem in its judgment. 85.255

The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible. That, and the signal this project sends that Massport continues to be committed to expansion of Logan Airport, are the two greatest concerns of the surrounding communities. 85.256 85.257

J.2 Other Comments

Massport is not including Alternate 1 as the preferred alternative which according to its own models provides the highest reduction in delay. Massport states that because of current conditions, peak hour pricing is not included but is an administrative option that they can later implement.

Because of the controversial nature of the peak hour pricing concept, Massport has recommended an alternative that does not include it. The selection of the preferred alternative responds solely to the current conditions and points out Massport's continued blindness to the long-term demand and capacity issues. 85.258

Alternate No. 3 provides delay reduction without the build option. Alternate No. 2 provides significant delay reduction allowing maximization of existing airfield capacity through the construction of a parallel taxiway. These two alternatives appear to be the most viable for the community. 85.259

According to 40 CFR Part 1502 Environmental Impact Statements regarding environmental consequences[32], the DEIS/DEIR must address the environmental consequences regarding the following "The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. It shall include discussions of: .... (g) Urban quality, historic and cultural resources, and the design of the built environment . . ." The DEIS/DEIR discusses the preferred alternatives effect on historic districts but does not comment on the urban quality, or the design of the built environment. 85.260

Massport and the FAA state "when dealing with an existing airport (such as Logan Airport) within an urban setting (such as metropolitan Boston), any change in operating conditions aimed at more equitably distributing noise impacts (here, in accordance with the PRAS goals) may result in some increase in noise at specific historic areas while at the same time decreasing noise at other historic areas."[33]

We state that changes to Logan's operating conditions are <u>not</u> more important than the cultural, historical and urban quality of life in the metropolitan Boston community. The external costs ("costs which third parties are involuntarily forced to bear as a consequence of the undertaking of an action by others"[34]) that the preferred alternative would impose on the Logan communities are substantial. These costs have not been adequately assessed in the DEIS/DEIR. Noise impacts on historic sites are but one example that was not adequately evaluated in the draft document. The long-term prospects are for further worsening the "quality of life" situation in the community. 85.261 85.262

[32] Council on Environmental Quality, 40 CFR Part 1502.16

[33] DEIS/DEIR Section 8.6.1.2 "Assessment of Impact"

[34] FAA-APO-98-4, "Economic Analysis of Investment and Regulatory Decisions -- Revised Guide", Chapter 4, "Cost Estimation", Section II.D, page 4-2.

Appendix A

Draft White Paper on
"Alternatives to Reduce Delay at Boston Logan Airport"
prepared by Consultants to CAC
dated June 13, 1996

Draft

White Paper

on

Alternatives to Reduce Delay at Boston Logan Airport

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Prepared on:
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Alternatives to Reduce Delay at Boston Logan Airport

Background

This paper discusses several alternatives to reduce the current and forecasted aircraft delay at Boston Logan Airport. In considering alternatives for delay management and reduction at Boston Logan Airport, a multitude of options may be considered including those that are dependent on:

- airside development and expansion,
- improvements to air navigation equipment,
- intercity/corridor transport ground transportation alternatives,
- improvements in communication industry,
- using and expanding under-utilized airports,
- improvements in airspace and approach/departure management and procedures, and
- demand management policies.

Addressing the Logan delay problem has long been the subject of various analysis. While most agree that a solution for airport capacity and delay problems must be beneficial for the majority, those named parties typically include the FAA, the airlines, the airports, and the traveling public, rarely the general public, the neighbors of the airport and the communities surrounding the airport.

Some of the alternatives proposed in this report may be implemented within a short-term time period. However, most of the proposed options require significant time for development and implementation. This fact alone supports immediate action to seriously pursue these alternatives to reduce delay at Boston Logan.

Delay at an airport is caused by various reasons. The FAA groups delay causes into various categories[1] including delay due to:

* weather,
* airport capacity of the landside (ability of the terminal to accommodate the passengers, meeters, and greeters in the terminal facilities including ticket counters, gates, and baggage handling facilities),
* airport capacity of the airside (ability of the physical layout of airfield to accommodate the aircraft based on aircraft mix, wind, weather, airspace control, and operational control),
* volume of traffic compared to the ability of air traffic controller to handle it,
* closed airfield pavements including down-time for maintenance or construction,
* availability or non-performance of navigational equipment, and
* other reasons.

Adverse weather conditions are the principal uncontrollable factor intermittently reducing the achievable capacity of the airfield to a value below its theoretical physical capacity. Over-scheduling, shifting of scheduled operations from earlier periods because of prior delays or delays elsewhere, and unscheduled operations, can all result in circumstances where demand exceeds available capacity even in the absence of adverse weather. These and the other listed factors may all contribute to the gap, known as delay, created when the demand for the airport is greater than the capacity available.

The FAA has lead recent efforts in addressing the delay problem at all heavily congested airports including Boston Logan Airport. **Exhibit 1** addresses various strategies considered by FAA to reduce the delay at Logan. The summary of the recommendations was developed as part of the "1993 Boston Logan Capacity Enhancement Plan".

[1] FAA, 1993 Aviation System Capacity Plan

Exhibit 1
Summary of Recommendations
Boston Logan Capacity Enhancement Plan

Strategy: Alternative Description		Estimated Savings in Delay (000 hrs) 412,000 ops/year	450,000 ops/year	504,000 ops/year	Status
Strategy A. Separation of Small and Jet Aircraft Operation					
A-1	New commuter Rwy 14/32, undirectional	33.6	81.3	171.4	further study
A-2	New commuter Rwy 14/32, bi-directional	34.8	86.0	193.1	not recommended
A-3	Extend runway 15L/33 R to 3,500 w/ new taxiway	34.9	85.0	[illegible]	further study
A-3a	Combine alternatives A1 and A3	34.0	84.4	178.4	not recommended
A-3b	Combine alternatives A2 and A3	34.4	85.1	181.9	not recommended
A/B-4	Removal of noise restrictions on arrivals on Rwy 22R	0.222	0.255	[illegible]	not recommended
A-5	400' extension of Rwy 9 for commuters to hold short of Rwy 15R	1.8	5.6	12.9	^
A-6/D-2	Application of MLS technology with new procedures		see narrative		^
A-7	Simultaneous parallel approaches to Rwy 33L circle to Rwy 4L	1.5	0.0	0.0	^
Strategy B. Expand The Number of Rwys For Simultaneous Jet Operations					
B-1	East extension Rwy 27, hold short of Rwy 22L daylight, VFR	0.089	0.12	0.5	not recommended
B-2	Simultaneous approaches to Rwys 4R,4L, 22R & 22L < VFR 1 cond's	15.1	30.0	30.2	^
B-3	Simultaneous IFR approaches to Rwy 27, 22L 4L & 33L	2.1	4.0	4.5	^
A/B-4	Removal of noise restrictions on Rwy 4 departures	0.332	0.255	0.6	not recommended
A/B-4a	Remove noise restrictions on Rwy 4L & extension to TwyB.	0.2	0.2	0.6	not recommended
B-5	Side step approaches from Rwy 4R to Rwy 4L	1.6	0.7	0.0	further study
B-6	Utilize fan headings for aircraft departing Rwys 22L & 22R.	1.9	2.7	6.2	not recommended
B-7	Use of hold short procedures Rwys 15R, 22L 33L	3.2	8.3	17.9	^
Strategy C. Improve Taxiway Circulation					
C-1	New parallel taxiway between Rwys 4L-22R & 4R-22L		see narrative		Massport is currently pursuing a comprehensive system analysis of the taxiway system using a simulation model to improve taxiway efficiency and reduce the potential for runway incursions
C-2	New south exit parallel taxiway for Rwy 27		see narrative		
C-3	Add fillets at intersection of Twys D and C with Rwy 15R/33L	0.061	0.104	0.156	
C-4	Staging areas for Rwys 15R/33L, 27, 4R, 22R and 33L/TwyG	0.75	0.83	1.6	
C-5	New taxiway from the end of Rwy 27 to the end of Rwy 33L				
C-6	Extend TwyD to Rwy 4R/22L.		see narrative		
Strategy D. Lowering Approach Minimums					
D-1	Install CAT II/II ILS on Rwys 15R, 22L, 27 and 33L	1.1	1.3	1.7	^
A-6/D-2	Utilization of Microwave Landing Systems (MLS) technology		see narrative	^	
D-3	Reduce min's to 250' & 3/4 mi on Rwy 22L for CAT I approaches		see narrative	^	
Strategy E. Demand Management Policies					
E-1	Increase the % of large and heavy jets in the fleet mix.	0.6	0.8	2.7	not recommended
E-2	Redistribute airline schedules within the hour	8.2	20.7	28.4	not recommended
Strategy F. Develop More Efficient Use of The Airspace					
F-1	Improve metering and spacing and segregate heavy jets	1..8	2.8	3.2	not recommended
F-2	Benefit of Vortex Advisory System	12.8	20.9	24.2	^
F-2a	Benefit of Wake Vortex Avoidance System	17.7	29.6	41.1	^

^ Will proceed toward implementation, unless otherwise noted

In the capacity enhancement plans for the most congested airports, the FAA evaluated how each individual airport could operate more efficiently for the air traveling public. The FAA did not consider nor were they asked to address the broader question that investigates how to economically, effectively, and efficiently move people from place to place.

As airports become more congested and individual airports can not keep pace with the demand, the answers to the capacity dilemma will need to consider using a full range of multi-modal transportation methods. The need to remedy the capacity problem is not being solved with the incremental addition of more airside and landside facilities. Additional construction has not and will not solve the problem.

Massport projects Logan's annual passenger demand is projected to grow from 24 million in 1993, to 29 million in 1999, and to the range of 37 to 45 million by 2010. Others[2] [3] have projected numbers in the low 30's by about 2010. Annual passenger loadings in even the mid-thirties likely exceed the effective capacity of the airfield. To address the ever-growing problem of delay by solely trying to increase airfield capacity by constructing additional pavement does not address the real issue of effectively and efficiently transporting people from place to place.

The air transport industry is a part of the overall transportation system. Solutions to reducing delays must be a part of the entire system; not just incremental construction of more runways at delayed airports. Shifting of a large portion of the airport passenger growth to other transportation modes, to under-utilized airports or to using new technology in communications is critical lest the demand chokes the existing system. This shifting is particularly relevant when the reduction is evaluated as

[2] Strategic Assessment Report, Arthur D. Little for Massachusetts Aeronautics Commission, 1993

[3] "Does New England Need Another Airport?", Dawson, Michael, L.M. Dean, and J.R. Meyer, Harvard University, August 1995

part of a total delay reduction strategy for the entire air transportation system.

It is time to consider an approach to address capacity constraints other than by solely building more runways. It should be especially noted that the airlines and passengers voluntarily schedule more flights in given periods than the airport can handle without delays, and the airport (with the federal government) allows this scheduling practice to continue.[4]

The Logan Airside Feasibility Study indicates the current level of delay at Logan is about 80,000 total hours annually.[5] Massport argues further that in 1999, with unidirectional runway 14/32 in operation, delay hours at Logan will be about 180,000 hours per year.[6] A memo prepared by Massport's consultants[7] which addresses cost of delay argues for a per-hour average cost of delay of about $3,100 per aircraft hour. Therefore, Massport's projection of the current cost of delay would seem to be about $250,000 annually, while the projection for the annual cost of delay at Logan in 1999, from Massport's figures, appears to be in the range of $550,000,000, increased slightly if 14/32 were not built.

It appears, based on these numbers, that the air transportation system is now and will be imposing

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[4] Position Paper - Airport Capacity in the 1990s, Meeting the Challenge, Aviation Systems Research Corporation, April, 1992

[5] Logan Airside Improvements Feasibility Study - Phase I Report, Massachusetts Port Authority, Jason M. Cortell and Associates, Inc., July 20, 1995, Table V-3

[6] Logan Airside Improvements Feasibility Study - Phase 1 Report, Massachusetts Port Authority, Jason M. Cortell and Associates, Inc., July 20, 1995, Table V-17

[7] Memorandum to Flavio Leo and Betty Desrosiers of Massport from David Holland of SH& E memo on May 18, 1996 referencing "Cost of Delay"

a cost each year on the Boston metro and New England area ranging from a quarter of a billion dollars (current) to over half a billion (near future) without counting the environmental, social, and other costs imposed on the area communities and residents. One might expect a significant concern with such costs. The somewhat surprising absence of a high level of complaint and of corrective actions suggests that as a whole society either does not perceive these "costs" or is inclined to accept and somehow compensate for them.

Such costs do justify major actions to control and reduce them. The actions which can be most useful in this regard are those which enhance and develop alternatives to air travel. An annual investment of a significant portion of these "delay costs" in the development and promotion of the several alternatives suggested would produce large dividends. Some of these would be appreciated in the short term while others, such as full high-speed rail service in the Northeast Corridor with ready access, major enhancements of regional airports, and replacement of many of the smaller aircraft would take much longer.

Of course, no one single entity or even a limited number of entities experiences these "costs". Seventy percent ($390 million annually for 1999) of the "costs", previously referenced by Massport's consultants, will be borne by passengers; of whom about 30 million are expected in 1999 (not all delayed). By contrast, the airline industry bears a much smaller share, projected to amount to around $ 150 million annually in 1999.

A part of the problem, therefore is how to support the costs of developing and implementing alternatives. Options might include additional "airport ticketing fees" levied on passengers, assessments against aircraft operators (in the form of increased and dedicated user fees), the proceeds of "congestion fees", and general or special levies not directly linked to the air transport system.

Another part is how to allocate such funds among the several alternative modes of communication and transport which could serve to ameliorate the delay situation. A third part is the control of the funds and their expenditures. By contrast, decisions concerning responsibility for collecting such funds are simple.

Massport is currently pursuing several options identified in the FAA's Boston Logan Capacity Enhancement Plan in the airside improvements planning project (including construction of a new commuter and jet uni-directional runway 14/32, a centerfield taxiway, other taxiway improvements, and administrative techniques). However, a review of the summary list from the Boston Logan Capacity Enhancement Plan may provide some insight into additional actions that may be considered by Massport in the future.

A real-life example of FAA acting on the airport delay problem is the history of the high density rule (HDR). About 28 years ago, FAA established restrictions on operations during peak hours at some of the nation's most congested airports. While this paper does not advocate the introduction of "slots" for Boston Logan, this historical action does point out that airport capacity constraints can result in substantial political actions besides construction and expansion. A brief history of the HDR and a summary of a comprehensive review of this rule will provide some insight to the concerns over airport capacity and delay.

High Density Rule[8]

In 1968, the FAA established a regulation to address delay problems at five of the nation's busiest airports. The regulation, known as the High Density Rule (HDR) implemented in 1969 governed the

[8] Information on HDR Rule summarized from "A Report to Congress - A Study of the High Density Rule", USDOT, May 1995.

allocation of capacity at Chicago O'Hare, Washington National, New York area's: Kennedy, LaGuardia, and Newark airports (Newark was later exempted from the rule).

The HDR allocates capacity at these four airports by imposing limits on the number of operations during certain periods of the day. A single operation, commonly called a "slot," is authorized by the Department of Transportation under the FAA for air carrier, commuter, and other types of operations.

In 1968, rising flight demand, work slow-downs between FAA management and air traffic controllers, over-scheduling by the airlines, limited airport capacity and unlimited access by general aviation led to a determination by the air carriers, air travelers and the federal government that a short-term solution was needed to reduce congestion, thus the high density rule was implemented.

For each airport, the rule imposes limitations or quotas on the number of slots allocated per hour (or half hour) for three classes of users: Air carriers, scheduled air taxis (regional carriers and commuters), and other operators (general aviation, charter operators, military, and other nonscheduled operators).

After nearly 25 years in operation, a long term capacity solution was still not in-sight and the HDR rule was still in effect at these four airports. The rule has evolved to change with the aviation industry environment as a result of the introduction of wide-body and jumbo jets, airline deregulation, airline mergers and acquisitions, bilateral agreements, growth in international service, airline hubbing, and FAA flow control management.

In 1993, the National Commission to Ensure a Strong Competitive Airline Industry urged a review of the HDR rule and gave consideration of lifting the operational restrictions. The Report to

Congress on "A Study of the High Density Rule" as a response to the Industry Commission reported[9]:

* Changing the HDR will not affect air safety
* While each of the four HDR airports has unique characteristics, eliminating or substantially changing the HDR is likely to result in an increase in the number of airport operations. These increased operations will carry both benefits and costs, including:
  * Benefits to consumers in the form of new and expanded air services and reduction in air fares,
  * Increase in revenue for each airport as a result of a larger number of operations,
  * A reduction in airline profits when fare premium presently charged at 3 of 4 HDR airports is lost due to increased competition,
  * An increase in travel delay time and costs -- for consumers and airlines -- due to increased "peaking" of demand in airport operations as users opt to fly at their most desired times, and
  * A near-term increase in the size of the population affected by aircraft noises at each airport.

The report also noted that "if lifting the HDR precipitates significant travel delays, consumers, airlines, and the airports will be motivated to adjust their behavior in response to market forces, as happens at non-HDR airports across the U.S. Consumers, for instance, might elect to fly during "off-peak" hours, and airlines could modify their flight schedules to mitigate increased delay costs."

Relevant to Boston Logan is the discussion in the cited report on peaking, or as in the case of the HDR, changes in peaking. It was noted "increased peaking has important potential consequences for noise impacts, delays and economic benefits. If more operations are concentrated into shorter periods of time, perceived noise, and therefore noise impacts, increase.

Similarly, delays may be exacerbated by the concentration of operations in shorter time periods. At any given time an airport's capacity to process traffic on its airfield is fixed, depending on weather

[9] Excerpts from Executive Summary of "Report to the Congress: A Study of The High Density Rule", USDOT, May 1996

conditions and runway configurations. A higher concentration of operations is likely to cause longer queues of both arrivals and departures."

One important reason that change to the rule was considered is the advances made in air traffic management. The FAA's traffic management system has changed dramatically since 1969 when the slot rule was implemented. Traffic management innovation and sophisticated technology equipment has enhanced the efficiency of the air space system.

The above cited comprehensive report on the High Density Rule, released by the U.S. Department of Transportation, concluded that the projected costs to consumers, airlines and communities of eliminating or modifying the rule currently outweigh the benefits, and that it would not be in the public interest to initiate a rulemaking on this issue.

In this paper, a brief summary of some alternatives to more and more construction at Logan are introduced. Some of these concepts are an out-growth of a simple idea but complex to put into practice. The solutions require action on a local regional, and national basis so political support will need to be garnered to effectively solve the delay dilemma.

Airside Development and Expansion

Since the concerns of expanding the airfield to squeeze what additional capacity there is left on the physical facility by constructing more pavement for landing, departing and taxiing aircraft is being pursued by Massport, this report will not address the alternatives of expanding the Logan airside to gain additional capacity. The current Massport proposals, were they to be allowed and implemented, represent the maximum feasible significant expansion of airfield pavement at Logan.

There are significant obstacles to these proposed improvements including legal obstacles, environmental issues and the disapproval of citizens of communities in the Greater Boston area which are already impacted by noise, air pollution, and construction activities at Logan.

Instead of building additional pavement, Massport needs to explore other options that might relieve existing and future airport delay at Logan. These larger scale issues may require action from various agencies going across state lines and focusing regionally or even nationally to find a solution that looks at the larger problem of airport congestion.

Improvements to Air Navigation and Equipment

The FAA is currently working on several programs to enhance air traffic control, air navigation, and weather information that may be able to reduce future airport and airway congestion and delay. There are several types of emerging technologies that should help pilots navigate and land during low or reduced visibilities.[10]

An Enhanced-Vision System (EVS) uses different types of sensing methods like forward-looking infrared and millimeter wave radar to allow the pilot to view the approach and objects that could be obscured due to weather or darkness such as hill, towers, or other objects which could be a hazard to air navigation. Synthetic-Vision System (SVS) is enhanced EVS using information included in a data base regarding the terrain and runway. SVS information would be displayed "in front" of the pilot through the use of a head-up display.

[10] J. Glen Moore cited by CRS Report for Congress: Airport Congestion: Background and Some Policy Options, Stephen J. Thompson, May 20, 1994

A head-up display (HUD) of an enhanced-vision system (EVS) or synthetic vision system (SVS) is a tool being developed that allows the pilot to see the runway better through a pull-down piece of equipment located in front of the pilot. The HUD allows the pilot to view the approaching runway in natural light without the need to move his head or adjust his vision from far-sight to short-sight to observe the EVS or SVS display.

While certainly adding to safety considerations during any IFR approach procedure, these emerging technologies may be able to ultimately provide reduced minimums for certain approach configurations; thus allowing additional operations to occur in poor weather conditions than are presently feasible. These improvements may have a significant impact on reducing weather-related delays.

The Global Positioning System (GPS) now jointly operated by the U.S. Department of Defense and the U.S. Department of Transportation is highly likely to make precision instrument approaches available to many runway ends where no physical obstacles exist. It is the FAA's intention to provide new approaches using GPS instead of the traditional Instrument Landing System (ILS) presently in wide use.

The cost of GPS equipment supplemented by some ground equipment is significantly less than ILS. The data received from this system of earth-stationary and earth-orbiting satellites would allow pilots to determine the latitude, longitude, and altitude of their aircraft to precision level standards.

Already GPS is widely being used as a non-precision approach at air carrier and general aviation airports. FAA is currently testing its usage for precision instrument capabilities. The FAA is hopeful that GPS can increase airport capacity because it will allow for the implementation of additional instrument approaches, giving air traffic controllers more options to route traffic into the airport.

One cautionary note regarding the advent and usage of GPS is the shifting of the operational patterns which may occur because of the greater airfield operational flexibility. *Massport is urged to coordinate implementation of new GPS approaches with the community so that noise, frequency of operations, odor, and other concerns of the community can be carefully considered in the choice of runway approaches and runway priorities.*

Intercity/Corridor Transport Ground Transportation Alternatives

Providing alternatives to air transportation by focusing on improvements in ground transportation including rail and transit systems could reduce the need for new airport capacity. If ground transportation options were more convenient and competitive for traditional air travelers, these transportation modes could present a viable alternative to congested airports for travel in corridors where these modes are available.

Setting regional and national policies to promote better ground transportation alternatives and new technologies such as high speed rail, magnetically levitated trains, and other related technologies must be a priority to reduce airport congestion. In a congressional research service report it was noted that "Public policies regarding ground transportation alternatives, and related emerging technologies, might be able to significantly reduce future airport congestion and delays, at least in some corridors such as Boston to Washington, D.C.".[11]

According to the FAA's 1993 Aviation System Capacity Plan, nine of the 33 airports anticipated by to be "congested" by 2000 (exceeding over 20,000 hours of delay) lie along the Atlantic Seaboard between Washington, D.C. and Boston. These airports include the following:

[11] Congressional Research Service, The Library of Congress, "Airport Congestion: Background and Some Policy Options", Stephen J. Thompson, May 20, 1994

- BDL Windsor Locks, CT
- BOS Boston, MA
- BWI Baltimore Washington, MD
- DCA Washington National, VA
- EWR Newark, NJ
- IAD Washington Dulles, VA
- JFK New York John F. Kennedy, NY
- LGA New York LaGuardia, NY
- PHL Philadelphia, PA

The ability to provide alternate modes of transportation rather than air travel will be crucial to the entire eastern coast. The currently-programmed improvements (electrification) to the railroad corridor between New York City and Boston should provide an increase in service frequency and a reduction in rail time travel to about three hours, city to city. Better railroad travel time and increased frequency should lead to a shift to rail transportation between these two cities. The Harvard University paper previously cited projects a shift from air to rail of about one million passengers annually in 2010, about three percent of projected demand at that time. Others who have studied the issue are in general agreement with this estimate.

Unfortunately, further significant improvements, such as "mag-lev" trains operating in the 150-200 mile per hour range on new rights of way could cost as much as $20 to $ 30 million per track mile, plus rolling stock. In addition, significant right of way and environmental obstacles would have to be surmounted.

As an example of airport revenues being used to fund alternative transportation sources: New York's Governor George Pataki has recently outlined a plan that will eventually link J. F. Kennedy Airport to Pennsylvania Station in downtown New York. The Kennedy/Penn rail link would be funded as part of the "Master Links Transportation Plan" using $ 750 million in passenger facility charge

revenues, with the balance coming from the Port Authority of New York and New Jersey's capital funds.[12]

It is recognized that alternatives to develop ground transportation modes is a national as well as regional issue. *It is recommended that Massport actively pursue regional development of rail and bus capacity and capability for the purposes of relieving future airport delay through enhanced Northeast Corridor surface transport, as well as enhanced surface transport to and from Logan. Massport should support and contribute funding for these efforts.*

Improvements in Communications Industry

Developing technologies including video conferencing, world-wide-web communications and other emerging communications industry improvements may indeed influence future air transportation for business travelers. While the impacts of these communications enhancements are currently difficult to quantify, the improvements could change the way of doing business, saving costs and expenses while providing economies in resources. This may facilitate a dramatic change in the way our society does business and travels to meet business needs. For example, satellite inter-active telecasts are now a regular feature of the information transfer programs of major professional groups.

As airport delay increases, many business people may find it more effective to use these emerging techniques rather than to travel by air. This may be especially true of business travelers on one to two day trips. The air transportation industry, though hardly currently threatened by this communications technology, may find that this alternative may impact future travel forecasts.

[12] As cited in Airports, 1996 The McGraw-Hill Companies, May 7, 1996, page 180

Educating the business travelers to allow them to experience this new technology would provide a future resource to choose this option over air travel, reducing demand for limited airport capacity. It is not practical at this time to estimate the extent to which growth in demand for air travel might thereby be reduced.

Massport should expose business travelers to the potential of these emerging technologies. These efforts should be cooperative with leading providers of electronic communications technology, with business groups and professional associations, and with universities. In addition to supporting marketing efforts, Massport should participate in the development of facilities and the enhancement of technologies. In both cases it should encourage participation by Airports Council International and similar groups.

Using and Expanding Under-Utilized Airports

Another alternative is to provide an air transportation system that allows further utilization of currently available New England region airports, instead of increasing the capacity of Logan.

However, it was noted in a report prepared for Massport entitled Air Service Patterns in New England[13] that "unless there are significant changes in demand patterns, capacity, or ground access times at Logan, the regional airports are not expected to attract significant levels of traffic away from Logan within the immediate future." This report points out that over 70% of the total operations at Boston, Bradley, Providence, Portland, Manchester, Hyannis, Nantucket, and Worcester airports were recorded at the seven smaller airports. However, these seven regional airports account for only

[13] LOGIC - "Air Service Patterns in New England", prepared for the Massachusetts Port Authority by Flight Transportation Associates, Inc. subconsultant to Frederick R. Harris, Inc., February 8, 1993, page 41

30% of the enplanements. Thus, Logan accommodated 70% of the enplaned passengers with only 30% of the operations. The report recognized two types of regional airports, including:

- Type A — those who have established air carrier services parallel to Logan, and
- Type B — those that serve primarily as commuter feeders to Logan.

The report indicates that the "larger regional airports experience sufficient demand to provide origin-destination services for their respective market areas. Although some destinations can only be reached through connections at Logan or other major cities." Further, "The role of Boston or New York as a hub has become less significant for those regional airports which have attracted sufficient demand to establish services beyond the most important markets." **This suggests that as the regional airports develop more mature markets and additional air service the demand for hubbing activities at Logan may be reduced.**

In order to decrease delays at Logan, it will be necessary for more Type B airports who are commuter feeders to Logan to provide "stand-alone" air service from their own regional facility. In addition, the larger regional, Type A airports must expand their market base to reduce their connection requirements with Logan. Expansion of these regional airports is an on-going process, and much has been or is being done. Airside, landside, and terminal construction will be an important element in allowing these facilities to become poised to expand their air service. The Air Service Patterns in New England Study indicated that all the regional airports could accommodate "very significant expansions in passenger handling capability" and many of the airports have already completed terminal expansion projects. However, that report further stated airside expansions including new runways would be difficult to accomplish due to environmental constraints.

This cited report suggests that because of the continued congestion surrounding Logan, both from an airport delay standpoint and a ground access problem, that passengers will voluntarily choose other alternative airports for service. It was recognized though, that these regional airports have a tough time competing with Logan for frequency, international activity, and market competitiveness for fare prices.

Since many agree that help for delay increases at Logan can come from the further development of the regional airports and establishing a market base for these under utilized airports, the key to the solution will be to identify what specifically can be done to set up additional air services at these regional airports.

An Air Passenger Service Study on New England's Regional Airports[14] identified that "each of the regional airports has some service underdevelopment and could viably support additional jet service". It was noted that of the eight regional study airports analyzed, Portland, Manchester, Worcester and Providence are the most impacted by Logan in terms of service area traffic using another airport. Hartford and New Haven were identified as being related to the New York airports in terms of traffic diversion. Burlington and Bangor airport service areas were identified as autonomous.

From the noted passenger survey, the fare survey at the regional airports noted that the air fares are generally higher at the regional airports relative to Boston or New York although not in all markets. The most significant differences in fares tended to be in the shorter haul business travel markets to New York, Washington and Philadelphia. Nonstop flights at the regional airports generally have higher fares than connecting services.

[14] New England Regional Airports Air Passenger Service Study, Phase I Summary Report, prepared by New England Council, Hoyle, Tanner Associates, Kramer Associates, SH&E, Inc, November, 1995.

If profitability to the airlines is the only factor that will establish convenience to passengers and minimize Logan's demand, it will be necessary to look toward ways to attract service, provide incentive packages, and make deals with the carriers to establish the service that will serve the overall public interest not just the airlines.

The cited passenger survey recommended a strategy of identifying opportunities for fare parity to local carriers and demonstrating that fare reductions will be offset by increased revenues. It was noted that because "regional carriers have fewer seats to sell, the chances of obtaining fare parity are enhanced where there is the most jet service".

All agree that there is no simple solution to change the way airlines do business. However, the idea that the passenger will eventually re-shape the scheduling of the airlines does not appear to be a viable approach, either for the short or long time-frame. The distribution of traffic between the regional airports and Logan has remained fairly constant. Thus, the pressure from market forces has not induced any substantial changes in the way the regional air service market in New England is operating.

One specific need which has been identified is to substantially improve ground access to the Worcester airport, to overcome one of the major impediments to its marketing and use. This should be a responsibility of the Massachusetts Highway Department. Reconsideration of the role of Hanscom Field has also been urged, coupled with an enhanced ground link between Hanscom and Logan. A joint effort of Massport and the Massachusetts Executive Office of Environmental Affairs would be needed.

It is time to take some measures to induce those changes. It is recommended that Massport step-up their existing activities to promote the development of the other New England Airports. Massport's

participation in the New England Council Study is a beginning which has provided marketing assistance and technical services to specific regional airports. Follow-on efforts to marketing regional airports to air carriers, and to research and analyze traffic leakage should be fully supported by Massport. More aggressive tactics are needed to actively induce additional services to the regional airports. *Massport, together with the other regional airports, should make regional airport market service expansion a priority.*

There are financial constraints on the airports whose "logical service areas" abut Logan's. There are impediments to Massport providing significant assistance to facilities in which it has no "stake". Therefore, it is recommended that Massport pursue the acquisition of partial interest in those airports with the greatest potential to provide alternative service to Logan, with the view of a) making Massport resources available to those airports and b) diversifying Massport's interests.

Improvements in Airspace and Approach/Departure Management and Procedures

A goal of the FAA's traffic management function is to ensure that the number of aircraft in the air to any location and in any airspace does not exceed the personnel or equipment capability to handle these aircraft. To ensure attainment of that goal, the FAA will hold aircraft on the ground, and assign a departure time that limits the demand to a manageable number of aircraft at the destination airport. This "ground delay program" is a keystone of the modern traffic management system.

For a given set of operating conditions (wind, weather, runway configuration) with operational limits, the ground delay programs define specific departure times for flights to match the demand to the available capacity at an airport, or in a sector of enroute or terminal airspace.

There are three types of ground delay programs currently in use: Select (selected flights, individual time assignment), general (fifteen minute block delay factors), and a combination of select and general. Other programs that are currently available to assist in the management of delay from an airspace perspective and to ensure operational safety include:

* Preferred Routes
* National Route Program
* Managed Arrival Reservoir
* Limited Airborne Holding
* Special Event Programs
* Airport Reservation Office
* Sector Traffic Management Program
* Severe Weather Management
* Severe Weather Avoidance Plan
* Departure Flow Management
* En Route Flow Management
* En Route Spacing Program
* Miles-in-Trail and Altitude Restriction
* Arrival Flow Management
* Arrival Sequence Program
* Enhanced Traffic Management System
* Terminal Air Traffic Control Automation
* Airport Surface Traffic Automation
* Terminal Doppler Weather Radar
* Wind Shear Warning Systems
* Collision Avoidance Systems
* Precision Runway Monitoring System
* Global Positioning System

These improvements to the traffic management system have favorably affected delay at congested airports. Other programs to enhance Air Traffic Control facilities, programs, and processes will be a further step in making the air traffic system run as efficiently as possible - a key link in the transportation system.

An issue at Logan is whether the FAA can and will be proactive in concert with Massport to further reduce delay; moving beyond its apparent support of the airfield improvements project. For example, might the FAA expand and enhance its implementation of selected elements of the above measures to influence the scheduling practices of air carriers?

Additionally, it is recommended that Massport enhance electronic navigational aid in the following ways:

* Provide precision instrument equipment (GPS or CAT II ILS) on Runway 33L
* Implement Parallel/LDA Point in Space Approaches to Runway 4L
* Install the following systems as developed:
  - ◊ Wake Vortex Avoidance System
  - ◊ Vortex Advisory System
  - ◊ Global Positioning System on all candidate runways
  - ◊ Precision Runway Monitoring Radar System

With the full electronic navigational aid upgrades, an Enhanced Preferential Runway Advisory System can be developed that will reduce delay at Boston Logan Airport while also reducing impacts.

Massport, in conjunction with the FAA, should implement new traffic management systems that work with the goals of the community to reduce noise and congestion. In addition, work should continue to quantify the benefits that improvements in airspace, approach and departure management and procedures can have in reducing delays at Logan.

Demand Management Policies

The establishment of congestion fees, or peak-period pricing, in which such fees would charged for use during peak hours would have the objective of shifting some aircraft operations to other times of the day or week, thereby lessening the number of operations during the peak. Using peak period pricing to improve the airport's capacity during periods on congestion and delay is favored as a tool by many economists.[15]

A goal of charging additional fees at Logan during peak hours is to induce a shift in the aircraft operations during the existing peak time period to less congested hours of the day and days of the week. The result would be to reduce the delay during peak-hour operations.

Another goal of congestion fee pricing would be to encourage the airlines to expand services at other under-utilized airports. Could the peak-hour pricing revenue to be used to promote airline expansions into these other market areas?

An example of a demand management policy is an action of the Port Authority of New York and New Jersey which operates LaGuardia, John F. Kennedy, and Newark Airports. In 1968, the Port Authority raised the minimum landing fee for aircraft during peak hours by a factor of 5, while keeping the off-peak fee the same. Peak-hour surcharges produced significant beneficial results at all three of these airports.

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[15] "It may be possible to say with considerable confidence that use of the facility with a congestion toll, although not globally optimal, would be more efficient than use without the toll." In Alan Carlin and R.E. Park, "Marginal Cost Pricing of Airport Runway Capacity", American Economic Review, Vol. 60, June 1970, pp. 310-319, at p. 310 as cited from CRS Report for Congress, Airport Congestion: Background and Some Policy Options, Stephen J. Thompson, May 20, 1994

The Port Authority's congestion fee was challenged in a court suit, and was up-held by the court as follows:

> "The United States District Court found in favor of the Port Authority, ruling that the defendants were justified in distinguishing different classes of aircraft on the grounds of safety and efficient use of landing facilities. The court further recognized that the fee was meant to induce aircraft operator to use other times of the day or other facilities."[16]

The Port Authority continues the policy of using peak hour pricing at all three of the metropolitan New York airports although the peak-hour fees have not substantially changed since their initial implementation. The result of the low price fee surcharge limits the effectiveness for significantly shifting operations during the peak period.

In 1988, Massport instituted a management pricing program at Logan entitled PACE which based its landing fees both on the weight and the operations of the aircraft where previously the landing fees were based (as is traditional) only on weight. The PACE program succeeded in reducing the number of smaller planes by this pricing program. Logan increased its on-time performance record during this period.

[16] U.S. Congress, Congressional Budget Office, Paying for Highways, Airways and Waterways: How Can Users be Charged?, Report Number ISBN 0-16-03797-7, May 1992, Washington, D.C. U. S. Government Printing Office, 75 p., at p.24 as cited by CRS Report for Congress: Airport Congestion: Background and Some Policy Options, Stephen J. Thompson, May 20, 1994

The U.S. Department of Transportation disallowed this program[17], citing the PACE program as discriminatory pricing since it did not differentiate between congestion and non-congestion periods and the allocation of cost between weight and operations was found to be arbitrary.[18] (It is noted that Massport plans the release of a study of the impacts of the PACE program for mid-summer 1996).

Because Logan has such frequent commuter services acting as a New England hub for both code-sharing regional affiliates (typically a smaller airline which agrees to share similar functions like reservations, frequent flyer programs, gates, etc. with larger, name-recognized airlines) and smaller, independent airlines, the number of passengers on these aircraft are small but their frequency is high.

As noted in one report[19] noted "More than 60 percent of regional flights at Logan are in aircraft with 19 or fewer seats. Logan also has the highest overall percentage on non-jet aircraft operations at more than 50 percent and the smallest average aircraft size among major U.S. airports".

This same report from the Transportation Research Board concluded that certain factors must be present for a peak period pricing program to offer tangible benefits at an airport. These include:

* Regularly occurring, measurable congestion,
* No external regulatory scheme that reduces market forces (i.e. slots),
* Peak-period fleet mix sensitive to small fee changes,
* Quantity of air service is available so as not to eliminate access to a particular community.

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[17] The Boston Sunday Globe, "Small planes a big factor in airport congestion", Charles M. Sennott, April 14, 1996

[18] Peak Hour Pricing at Logan Airport, Massachusetts Port Authority, April 1993

[19] Transportation Research Board Record 1461, Peak Pricing As It Might Apply to Boston-Logan International Airport, Claire Barrett, Richard J. Murphy, Scott Lewis, Mark Drazen, Lynn Pearson, Amedeo R. Odoni, and William Hoffman

The TRB Report modelled the impact of a revised fee structure and resultant cancellations and flight shifts, predicting a reduction in delay hours at Logan and significant benefits. The effect on the air carriers shown in this model indicated that the three major code-sharing airlines (Delta, Northwest, and USAir) would be most affected by cancellations of flights.

It was noted that "although these three major regional airline systems would be affected, they and their code-sharing jet partners (and their passengers) also would be among the primary beneficiaries of the reduced congestion and delays at Logan". Obviously, one of the key goals of a demand management policy would be to encourage regional flights with fewer passengers to re-schedule activities in non-peak hours; thus, spreading out the use of the airfield to accommodate the demand and minimize the delay.

Still another goal for a demand management policy would be to encourage the use of larger aircraft carrying more people while using relatively the same operational time on the airfield. Eliminating or consolidating flights to provide higher load factors would maximize airline revenue, reduce operations, and provide for delay reduction. Scheduling for flights and selection of aircraft size has traditionally been market driven. It is time to introduce other economic factors into the decision matrix.

The public interest is a key concern in trying to get the greatest benefits with the existing system. Maximizing net benefits consistent with public interest considerations is particularly important at congested facilities, since access must be limited in the interest of providing efficient operations. In domestic markets, flights using large jet aircraft tend to produce greater benefits than commuter or general aviation flights with smaller prop aircraft.[20] Therefore, it makes sense to look at management

[20] "Report to the Congress: A Study of The High Density Rule", USDOT, May 1995, Chapter 7, Sub-Section: Reallocate Slot Pools Among User Groups, Page 111

techniques that will encourage usage of larger aircraft at Logan. Assisting the airlines in scheduling to maximize load factors in a manner which did not materially affect their competitive position, would not only be profitable for the airlines but would also reduce delay.

Congestion pricing, peak-period pricing and techniques which base landing fees on functional categories relating to operations (landing or take-offs, weight (or size) of aircraft, and capacity to meet peak period demand will be particularly useful in reducing delays.

The models which have been previously performed on peak period pricing scenarios have shown that this management technique can produce tangible benefits in reduction of delays. This type of management technique allows for better utilization of the airfield over time while encouraging additional development of under-utilized airports. It has advantages of negligible initial capital costs for all participants, of flexibility and specificity in design, in phasing-in to allow optimum "adjustment" periods for affected carriers, and in the ability to be readily revised as conditions warrant.

A properly-designed and implemented form of congestion pricing, among the alternatives under consideration, will afford the greatest degree of delay reduction at Logan, for a given investment; and overall has the greatest potential for benefit. It must be recognized, however, that the operations profile at Logan is comparatively rather flat, and thus the extent to which flights can be rescheduled from peak hours to non-peak hours in response to fee changes is limited. The greatest benefit will likely come from consolidation of flights, thus increasing load factors.

Obviously Massport has previously experienced some regulatory and political challenges in implementing a demand management technique. Peak period pricing is currently being evaluated as an alternative in the Environmental Impact Statement and Environmental Impact Report being prepared for the Logan Airside Improvement Planning Project.

Consideration should also be given to a quite different approach to addressing the efficiency of Logan Airport during peak operating periods and in carrying out its primary mission. In a simplistic form, the mission of the airport might be defined as "the accommodation of as many passengers as feasible under existing conditions with a minimum of delay" with some stated commitments to minimizing impacts of operations.

The measure of efficiency presently used by Massport and the FAA relate to numbers of aircraft operations handled in specific periods (i.e. per hour); and the hours of delay experienced in handling those operations. Massport's efforts have focused on operational and facility expansion approaches to increase the capacity for total aircraft operations under restrictive conditions (i.e., when use of Runway 15/33 is required, or when visibility is restricted).

However, if the aircraft passenger is identified as the "unit of concern" in the airport's primary mission, the fundamental measure of efficiency and the principal objective of the airport would be to maximize the number of passengers transiting the airfield per hour. If maximizing the throughput of passengers were the dominant objective of the management and operation of the airport facilities under the control of Massport, the measures considered might differ from the current proposals. Massport is already expanding the capacity and improving the efficiency of access roads, parking garages, and terminals, with the principal measure being the number of passengers able to be accommodated in an interval of time.

One approach might be to use the hourly integral of aircraft type/seat capacity adjusted by the current or projected average load factor for each aircraft type and operator or route. To maximize facility efficiency and to provide the maximum feasible throughput of passengers during critical periods, Massport could through defined mechanisms encourage or give preference to the use of its facilities under its control (i.e. gates, hold rooms, terminals) during critical periods by aircraft and operators

providing service to the greatest number of passengers. Massport would apply this approach through lease terms and operating agreements with its lessees and aircraft operators.

At some point in the future, Massport, the FAA, and other transportation officials will have to make a decision about mass public air transportation. If it is decided that "the good of the many outweigh the good of the few" for the use of limited physical facilities, then management techniques could be implemented that encourage larger aircraft users and higher load factors. It is noted that the effects of these techniques may well have a larger impact on the regional carriers and lower load factor routes. In addition, an increase in the disturbance to neighbors to Logan may be effected since these techniques encourage use by larger aircraft.

Massport is encouraged to develop congestion pricing, peak-period pricing and other delay management programs encouraging increases in load factors, more even distributions of operations throughout the day and expansion of airline services at regional airports. Evaluation of specific strategies to manage demand should evaluate the impact of the various fees established for the peak period pricing technique. Modelling should include a variety of price scenarios to determine the relationship between spreading demand to non-peak hours as well as shifting demand to other airports.

Concluding Comments

Efficient management of the existing airport facility, improvements to air navigation equipment and airspace control, uses of all modes of transportation to transport people where they want to go, increased use of existing under-utilized airports by increased air service and frequency, and providing aggressive measures to manage the demand at the airport are all alternatives that will reduce the current and forecasted aircraft delay at Boston Logan Airport.

It is recognized that combinations of these alternatives will be necessary to address the growing delay concerns at Logan. Too much time has been spent trying to solve the problem by constructing more pavement. It is recommended that Massport focus substantial efforts (as are other airports) on implementing some of these alternatives to reduce delay at Boston Logan Airport.

Specifically, Massport should establish some goals for shifting the demand at Logan by using or implementing other alternatives than airfield expansion. Some suggestions to consider would include:

1. Establishing goals to gradually shift future demand at Logan to other transportation modes, other airports, or communications techniques over a set time period including 5, 10, 15, and 20 year goals. This type of master planning technique will focus attention on shifting demand to other avenues and will allow for a concentrated effort to recognize the growing delay concern.

2. For each alternative, specifically target activities that Massport can develop that support each of the goals. Establish time-frames in which these activities can be accomplished. Identify obstacles including economic, political, and policies issues that may retard progress for each alternative. Develop a strategy to overcome those obstacles.

3. Implement demand management policies that will augment the goals established. Document their effectiveness and expand these polices to induce a shift in demand for Logan.

4. Measure and monitor the effectiveness of delay reduction for each alternative. Encourage exploration of other alternatives as they develop over time.

It is recommended that Massport, the Department of Transportation, the Massachusetts Executive Office of Transportation and Construction, and the airline industry step further away from their traditional roles and responsibilities, and attempt to minimize the interference of self-interest, in order to cooperatively develop coordinated recommendations to senior legislative and executive bodies and commitments to funding and implementations. Otherwise, the future holds only increasing impacts, frustration, and costs; with the concomitant development of greater and opposing pressures for action.

Appendix B

Memorandum by David Standley, P.E.

dated March 27, 1996

on Logan Odor Issue

regarding "Analysis of Odor Complaints at Logan Airport"

prepared by KM Chng Report, March 1996

DAVID STANDLEY, P.E.
Consultant in Environmental Management

MEMORANDUM

To: Bernice Mader, Chair, MPA Logan Community Advisory Committee
Subj: Logan odor issue
Ref: "Analysis of Odor Complaints at Logan Airport", KM Chng Report, March 1996
Date: March 27, 1996

I have reviewed the subject report, prepared by KMC for Massport (through Vanesse Hangen Brustlin Inc.), and have asked Myleen Leary to provide additional copies for you and the other members of the Consultant Team. KMC analyzed Massport odor complaint data for the years 1991-1994, and has produced a very interesting document. The purpose of this memo is to highlight the KMC findings and discuss the implications for the CAC review and response to the Airside Improvements Project.

Sources of Odors:
KMC reports that jet engine idling and low power taxiing are the operating conditions during which the greatest concentration of potentially odorous compounds are emitted, the cause being inefficient combustion. KMC also suggests that high-thrust operations (i.e., start of take-off roll) may produce significant amounts of odorous compounds even though combustion is relatively efficient, because large quantities of fuel are consumed. All of these operations are, of course, conducted at ground level. KMC also reports that considerable variation in discharge of odorous compounds occurs among aircraft and aircraft engines, attributable to differences in engine design and maintenance.

I agree with these conclusions. While a close look at the KMC data might suggest some odor impact of overflights, I feel the data is too limited to support any speculation in that regard.

Period of Review and Sources of Data:
The review period of the KMC study was the years 1991 through 1994. The source of complaint data was the records of the Massport Noise Complaint Line (which generate Aircraft Disturbance Reports). Meteorological data was obtained from both the National Weather Service and the Massport ADRs. Runway use configurations associated with complaints were obtained from the ADRs. Other operational data was provided by Flight Transportation Associates.

Factors Causally Associated with Complaints:
KMC statistically analyzed the association between a number of factors which might be causally associated with the complaints received, and the complaint history. While a number

of factors were associated in time with specific complaints, the ones which appeared to be causal and explain the largest percentage of complaints were, in order of importance,

- Ambient temperature—61-80° F
- Time of Day—7-10 a.m., 4-9 p.m.
- Critical wind direction/runway use combinations for the downwind location of interest

The "Ambient temperature" range is suggested by KMC to represent conditions maximizing outdoor activity and open windows.
"Time of Day" appears to be a metric which both substitutes for and incorporates airfield activity and community activity, resulting in maximum exposure potential. Probably the most important activity factor is queuing of aircraft on taxiways (explicitly recognized by the community-FAA "agreement" to limit queuing of jets on TW November to five planes).
These first two factors account for a majority of all complaints registered.
The third factor accounts for the largest single group of complaints in a given neighborhood, as would be expected.

I was somewhat surprised at the outset to read that wind speed, atmospheric stability and turbulence did not appear to be significant. On reflection, I would attribute that to the fact that the NWS measurements of those factors are "gross" and likely rather different from the conditions which exist at ground level at the ends of operating runways; where pavement and water temperatures, and aircraft activity, may establish local conditions not measured by the available instrumentation.

Number of Complaints:
During the period considered by KMC, Massport received a total of 272 odor complaints through its Noise Complaint Line. (These are distinguished from those complaints which were about noise, but also mentioned odor as a source of irritation.) This is an average of slightly more than one complaint per week! I would consider this to be a rather low response rate to an odor source, in the absence of other factors. KMC further isolates the combinations of conditions likely to create odors in the neighborhoods around Logan, and finds such conditions occurring during about 10% of the total hours analyzed. Treating each complaint as an "incident" representative of one hour, KMC derives an overall "incidence frequency" of about 8%. In other words, during only about 8% of the time during which one might expect complaints were complaints actually registered through the Noise Complaint Line. KMC attempts to analyze the factors which might affect the response rate, and does so competently. Principal factors suggested by KMC as potentially influencing the "complaint rate" include physical factors (i.e., micro-meteorology) which would preclude significant concentrations of odorant in the presence of the analyzed factors predisposing to complaint; as well as factors affecting the predilection of residents to phone the Complaint Line.

My observation is that these numbers are not consistent with the stress placed on odor concerns by residents of the communities immediately adjacent to Logan, both over the years in my experience and during the current ARC/CAC process. This requires discussion among the participants.

My concern is that Massport may interpret these numbers as indicative of a "*de minimus*" problem

Neighborhoods Principally Affected by Odors:
KMC found that three neighborhoods were the principal origin of the complaints received during the four-year study period. These are Court Road in Winthrop (86), "Orient Heights" in East Boston (which I assume includes the Bayswater Street area) (71), and Pleasant Street in Winthrop (40). All other areas registered less than 20 complaints each over the study period, with Eagle Hill, Jeffries Point, Harborview (all East Boston), and "Upper Winthrop" each registering in the 10-20 complaint range.

I am surprised that the Jeffries Point and Eagle Hill areas seem not to be heavily impacted by odors generated by aircraft activity in the immediate vicinity of the terminals. Otherwise, I think the findings, in terms of the areas most affected by odors from aircraft engine emissions, are consistent with logic and past representations by community representatives.

Odor Response and Potential for Reduction of Odor Impacts:
KMC correctly observes that human response to odor stimulus is non-linear; in fact it is logarithmic. That is, the relationship between the perceived odor intensity, "I", and the concentration of odorant, "C", is expressed as $I = k (C)^n$ where k is a constant and n is an exponent, both of varying magnitude but always positive. This yields a straight-line plot on log-log paper, with **k** establishing the intercept on the y-axis and **n** the slope of the line. (**n** is normally less than unity). Under the case where n = 0.7 (the uppermost of its usual range), a reduction of the concentration by a factor of ten would change perceived odor intensity by a factor of about 5; in other words, the result is only about half the effort. Were **n** = 0.2 (the lower end of its usual range), the same reduction of the concentration by a factor of 10 would change the perceived odor intensity by only about 1/3; in other words, the result is less than 5% of the effort. Typically, a change in odorant concentration must exceed about 20% to be generally detected as a change.

A conclusion to be drawn from the above is that major reductions in source strength (aircraft engine emissions of odorous compounds in specific locations) will be required to effect perceptible improvement in odor impacts. Conversely, changes in aircraft operating procedures and locations, as proposed in the Airside Improvements Project, should not be expected to result in significant improvement.

Of much greater potential odor impact is the projected increase in aircraft operations at Logan over time. Without significant reduction in the rate and change in the nature of jet engine emissions, a 25% increase in operations would have two impacts readily detectable as increases in odors in the community. First, the concentration of odorous compounds would increase during those time periods when operations increased by such a percentage; and second, the time periods of intensive aircraft operations would be significantly extended

to accommodate the increase in operations (since the airfield is at or near capacity during peak hours now).

Summary and Conclusions:

KMC stresses that the problem of odor impacts on residents of the adjacent communities must be considered real and significant. I feel that the data supplied by Massport likely under-represents the scope and intensity of odor impacts because of a general tendency of the (relatively stable) population of the communities to (a) become disillusioned about the value of complaints, (b) utilize other methods and fora to express their concerns, and (c) to become somewhat desensitized or inured to this odor stimulus. It is impossible to judge whether different and more representative data might result from a different method of determining either or both community response or odor concentrations in the neighborhoods. However, I suggest Massport consider a trial implementation of a focused odor complaint survey project in one of the most impacted areas, over the coming summer season.

Conversely, again, were a significant change in operating procedures or locations to expose a new population to jet engine odors, there would likely be a substantial increase in the number of complaints registered. The construction of RW 14/32, and its use by jet aircraft for a takeoff in the 14 direction, would result in a start-of-roll point moving about 2500 feet closer to Jeffries Point compared to takeoffs on RW 9. Jeffries Point would be downwind of such operations on a southeasterly wind. The effect of construction of the Centerfield Taxiway on odors in the Court Road and Pleasant St. areas of Winthrop would be similar in manner but not in magnitude. The distance between these areas and the Centerfield TW would be about 2-3000 feet, compared to 3-4000 feet from TW November. These areas are and will continue to be impacted by operations involving RW 4R/22L, which is about 1000 feet from the backyards of houses on Court Road.

The identification of the more impacted areas is consistent with other information, and intuitively correct; despite the relatively small number of registered complaints.

The potential odor impact changes which may be associated with the current Airfield Improvement Project are overshadowed by the potential odor impact changes associated with the growth of Logan operations, and the shift of commuter traffic from propeller to jet propulsion.

David Standley, P.E.,
Consultant to the CAC

Appendix C

Draft Proposal for Discussion

prepared by David Standley, P.E.

dated May 24, 1996

on "Efficiency of Utilization of Facilities during Peak Hours"

MASSPORT LOGAN COMMUNITY ADVISORY COMMITTEE
LOGAN AIRSIDE IMPROVEMENTS PROJECT

EFFICIENCY OF UTILIZATION OF FACILIITIES DURING PEAK PERIODS

A DRAFT PROPOSAL FOR DISCUSSION

May 24, 1996

The Consultant Team to the Logan CAC suggests consideration be given to addressing the **efficiency of Logan Airport** during peak operating periods, in carrying out its primary mission. We understand that mission to be the accommodation of as many **passengers** as feasible under the extant conditions with a minimum of delay. (There are, of course, modifiers to this mission expressed as commitments to minimizing impacts of operations; but discussion of those constraints is not the purpose of this paper.)

Heretofore, the metrics of efficiency utilized by Massport and the FAA relate to numbers of **aircraft operations handled** in specific periods (i.e., per hour); and the **hours of delay** experienced in handling those operations. Their efforts have focused on operational and facility expansion approaches to increase the capacity for total aircraft operations under restrictive conditions (i.e., when use of Runway 15/33 is required, or when visibility is restricted).

We propose that the **aircraft passenger** is the "unit of concern" and the *raison d'etre* of the airport (with a bow to transport of parcels, not critical to this discussion). This, we believe, is also the fundamental concern of Massport, although it has not so expressed it to our knowledge. The expansions and modifications underway and proposed by Massport its for terminals, garages, and other landside facilities, and the investments therein, are testimony in support of that assumption. It follows, therefore, that maximizing the throughput of **passengers** should be the **dominant objective** of the management and operation of the airport facilities under the control of Massport.

Thus, we further propose the fundamental measure of efficiency and of attainment of the principal objective of the airport, be the **number of passengers transiting the airfield per hour.** The total would be derived as the sum of all passengers arriving at and departing from all gate and apron positions within the hour of concern. It is unnecessary and probably

impractical to measure the comparable throughput of landside facilities (access roads, garages terminals). In any event (as noted) Massport is expanding the capacity and improving the efficiency of those facilities, **with a principal measure being the number of passengers able to be accommodated in an interval of time.**

As a prospective planning and management tool, a surrogate for the measurement of the number of actual passengers transiting the airfield per interval must be established, of course. Our proposal is the hourly integral of aircraft type/seat capacity adjusted by the current or projected average load factor for each aircraft type and operator or route.

Massport would apply this approach, **the minimizing of costs to the user community**, to its management of the facilities under its control terminals, hold rooms, gates, and aprons through lease terms and operating agreements with its lessees and aircraft operators. To maximize facility efficiency, to provide maximum feasible throughput of passengers during critical periods, and thereby attain this objective, Massport would through those mechanisms encourage or give preference to the use of its facilities during critical periods by aircraft and operators providing service to the greatest number of passengers. A form of agreement for use of facilities is anticipated which would not cede full control at all times over a specific portion of Massport's property to a specific operator.

The effect would be observed in the scheduling of operations by the aircraft operators and owners using Logan in response to the incentives and strictures that Massport elected to institute. No actions or decisions by the FAA or DOT would be required. The effects would not be immediate in most cases, since current lease terms would be respected for as long as mandatory; but on the other hand, they do not need to be.

Letter 85
Community Advisory Committee
Anastasia Lyman, Co-Chair

Code	Topic 1	Topic 2	Comment	Response
85.1	Environmental Review Process	MEPA, FAA/NEPA	Massport for too long has been allowed to take a segmented approach to Logan's development, arguing that landside projects are designed to accommodate ground passenger handling; airside improvement projects are designed to accommodate aircraft handling; that neither generates traffic; and that Massport has no control over passenger and cargo growth.	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's Environmental Planning and Status Report (ESPR, formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."
85.2	Purpose and Need	Delays	The Airside Improvement Planning Program is a short-range and limited response to a major concern about long-term trends, future growth, and increasing impact.	The Airside Project will provide immediate delay reduction benefits to Logan Airport users, and the delay savings will grow over time as passenger traffic increases. Although Massport only has jurisdiction over Logan Airport and Hanscom Field, and now operates Worcester Regional Airport, the agency has for years taken a leading role in supporting regional transportation initiatives and the development of alternate modes. In fact, since 1996, eight out of ten new air passengers in New England have used the regional airports rather than Logan Airport. Massport's support for regional transportation initiatives, its proposed PPP monitoring program, and the Preferred Alternative are part of Massport's long-term strategy for reducing delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
85.3	Analysis Assumptions/ Methodologies	Forecasts	Base year should be 1998 and planning period should extend to 2020.	Consistent with the request made by EOEA in its Certificate, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport is not expected to reach the 29 million passenger forecast presented in the Airside Project Draft EIS/EIR until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is not expected to achieve the 37.5 million passenger forecasts until 2015, and the 45 million passenger forecasts will not be achieved until 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.
85.4	Delay	Model	The FAA data on delays show that the delay situation at Logan has improved since 1993 and is essentially in equilibrium, as assessed by the FAA.	Section 1.4 and Appendix C of the Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
85.5	Analysis Assumptions/ Methodologies	Base Year	The Airside delay model (DELAYSIM) used hourly weather observations from 1981 to 1990. Weather patterns have changed significantly within the last five years due to effects from El Niño and La Niña. A new 10-year average should be constructed and used.	Comparative analysis of 1981 to 1990 weather with 1989 to 1998 weather identifies no significant differences in statistical properties.
85.6	Regional Transportation	Cargo	Item not specifically addressed in the DEIS/DEIR: Discussion of diversion to cargo to off-airport alternatives.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Secretary of Environmental Affairs' Certificate on the ENF directed Massport to "discuss [these] off-airport alternatives and analyze the potential each has to divert passengers and/or cargo from ... Logan Airport." Cargo operations were not specifically analyzed because they account for only two percent of aircraft activity at Logan Airport and since most all cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
85.7	Regional Transportation	Regional Airports	Item not specifically addressed in the DEIS/DEIR: Considering the off-airport alternatives as a separate scenario.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives.
85.8	Regional Transportation	Regional Airports	Item not specifically addressed in the DEIS/DEIR: Failure to consider Hanscom Field in Bedford as a reliever airport for general aviation operations, origin/destination regional non-jet traffic, and short-haul origin/destination jet traffic.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
85.9	Regional Transportation	Regional Airports	Item not specifically addressed in the DEIS/DEIR: Considering the development of a second major airport, in discussion of environmental justice.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.

Code	Topic 1	Topic 2	Comment	Response
85.10	Delay	Model	Item not specifically addressed in the DEIS/DEIR: Detailing of the existing delay at Logan including delay derived directly from wind/weather and indirectly from delay at other airports.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
85.11	Noise	PRAS	Item not specifically addressed in the DEIS/DEIR: Documentation of history of PRAS and problems implementing it.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Section 4.3 of the Supplemental DEIS/FEIR contains a history of PRAS development and performance at Logan Airport.
85.12	Environmental Review Process	MEPA	The Secretary of Environmental Affairs should determine that significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
85.13	Delay	Model	The proposed projects provide only limited and interim relief to whatever aircraft operating delays at Logan Airport are caused by or as a result of the airfield configuration. The delay problem as modeled and represented by Massport will get worse.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

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85.14	Regional Transportation	Regional Airports	There is no plan or program to deal with long-term growth at Logan. There are measures that could be instituted to effectively address transportation in eastern New England, but there is no discussion in this document. There must be a plan and a program to shift some current, and most growth in, air traffic and passengers away from Logan. Major expansion of service and capacity of other airports must be undertaken.	Massport continuously engages in planning for Logan Airport through the GEIR process (now called the *Logan Airport 1999 Environmental Planning and Status Report, ESPR*). The 1994/95 GEIR, subsequent Annual Updates including the 1999 ESPR, the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR all recognize the role that Logan Airport plays in the larger regional transportation context and acknowledge inter-city travel alternatives to Logan Airport. Furthermore, Massport and the FAA have taken the lead in promoting the development of regional airports as an alternative to Logan Airport. In 1995, the FAA and Massport co-sponsored the New England Regional Airports Air Service Study, which estimated the number of passengers that bypassed regional airports in favor of Logan Airport and recommended strategies for increasing regional airport air service levels and their attractiveness. FAA is sponsoring an upcoming New England Regional Airports System Study. Since 1996, there has been tremendous growth at the regional airports. In fact, eight out of ten new air travelers in New England have chosen the regional airports over Logan Airport. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to Logan Airport. Nevertheless, the proposed Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of growth at the regional airports, including capital improvements and traffic growth.
85.15	Noise	Fleet Mix	Massport should evaluate increase in "equivalent jet operations."	Refer to Appendix C of the Supplemental DEIS/FEIR for equivalent jet operations by project alternative.
85.16	Alternatives	Runway 14/32	Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan directly, because of delay reduction.	Implementation of the elements of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. Refer to the discussion in Section 4.2 in the Supplemental DEIS/FEIR.

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85.17	Alternatives	Demand	This project and landside projects at Logan are interdependent, and both will increase capacity and stimulate demand.	The Airside Project has independent utility from existing and proposed landside projects at Logan Airport. The proposed Airside Projects at Logan Airport are designed to improve airport efficiency and better accommodate current and future levels of demand. Long-term growth in air travel demand is a recognized worldwide phenomenon that results from economic and demographic growth. Massport has no control over the underlying determinants of aviation growth. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway will not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year. The runway does not induce or stimulate new traffic that would otherwise not occur at Logan Airport.
85.18	Ground Transportation	Access to Logan Airport	Massport's proposal to increase the percentage of passengers accessing Logan Airport who do so in high-occupancy vehicles falls far short of absorbing the full projected increase in passenger ground access requirements.	The *Logan Airport 1999 ESPR* (previously GEIR) which was filed December 15, 2000, examines the feasibility of reaching a higher target percentage for air passenger HOV ridership than 35.2 percent when annual air passengers reach 37.5 million.
85.19	Alternatives	Runway 14/32	There can be no guarantee of "unidirectional use" of Runway 14/32.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only - i.e., all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from Runway 14 heading out over Boston Harbor. State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Appropriate supporting documentation will also be issued (e.g., appropriate designations in the Airport/Facility Directory, and Notices to Airmen or NOTAMS). Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of Runway 14. The location of the Hyatt Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to Runway 32. The unidirectional limitations of Runway 14/32 allow for maximum use of over-water operations which would thereby limit operational impacts over residential areas. To reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. It is anticipated that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.

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85.20	Noise	PRAS	... airfield operations are unlikely to attain, and even less likely to sustain, the progress toward attainment of PRAS goals that Massport projects.	During very high demand periods, the controllers have little or no flexibility for runway selection and PRAS recommends an appropriate runway configuration given the extant demand. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals. The Supplemental DEIS/FEIR demonstrates that the controllers have been improving performance with respect to PRAS recommendations. Section 8.5 of the Supplemental DEIS/FEIR contains methods for more comprehensive monitoring of PRAS. These methods will be implemented as part of the mitigation program for the Airside Project.
85.21	Noise	PRAS	PRAS goals may well no longer represent community consensus.	The PRAS goals were established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. As demonstrated in the Supplemental DEIS/FEIR, there have been no significant demographic changes since the time of the establishment of the PRAS goals. An update of the PRAS goals is therefore not warranted. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.
85.22	Noise	Fleet Mix	Most of the projected increases in passenger demand will be met by increased operations of the "passenger jet" fleet. This of course is the fleet that creates the noise impacts at Logan and elsewhere.	The operations forecast accounted for passenger growth and how that growth would be accommodated within a range of future fleets. The noise analysis reflects the impacts associated with these fleets. Refer to Chapter 6 of the Supplemental DEIS/FEIR.
85.23	Noise	Runway Use, PRAS	There will be significant increases in overflights of East Boston, Chelsea, Everett and other "15/33" communities, and of South Boston, South End, Roxbury and other Runway 27 communities.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
85.24	Noise	Hushkitted Aircraft	Massport overstates the benefit of further conversion to Stage 3 aircraft on future noise levels around Logan Airport.	The study does not overstate the benefit of further conversion to Stage 3 aircraft on future noise levels. It uses two fleet scenarios in which almost all aircraft meet Stage 3 requirements, either as hushkitted Stage 2 aircraft or new Stage 3 aircraft, and three fleet scenarios in which all the aircraft meet Stage 3 requirements. Most of the aircraft are new high-bypass, engine-powered Stage 3 aircraft. Many of the hushkitted aircraft have been retired.

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85.25	Noise	Nighttime Noise	The number of nighttime jet operations can be expected to double within the foreseeable future under conservative forecasts. The noise impacts of this increase are huge, and are not mitigated by use of Stage 3 aircraft since night operations are now required to be only of that type.	Table 6.2-17 of the Supplemental DEIS/FEIR shows nighttime jet operations projected to increase from 106 in 1998, to as many as 259 under the No Action Alternative with the 2015 High Regional Jet Fleet. However, regardless of the fleet, many of the future night operations are the result of delays that will occur as demand at Logan Airport continues to increase. One of the direct benefits of the Preferred Alternative is that it will reduce these night operations by 32 to 43 flights depending on the fleet forecast, though *any* alternative to the No-Action scenario will help alleviate some of the projected delays. In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.
85.26	Noise	Nighttime Noise	An alternative that should be considered is the creation of a cap on nighttime operations pursuant to FAR Part 161.	Since a low level of flight operations occurs during nighttime hours, very few delays occur during these hours. Therefore, eliminating night flights would not be a viable alternative as a delay reduction measure.
85.27	Noise	Runway Use	A significant number of flights did not conform to the published departure tracks, and re-crossed the shoreline over Hull and were also below 6,000 feet.	Comment noted.
85.28	Noise	Sound Insulation	We disagree with the statement, "After sound-proofing to mitigate impacts within the 65 DNL Contour, the full-build alternatives provide net long-term benefits."	Long-term benefits are derived from reduced delays, increased achievement of PRAS goals, and the reduced numbers of people exposed to the highest noise exposure levels. Each of these benefits becomes more substantial as aircraft operations are projected to increase over time. Refer to, for example, the comparison of exposed populations presented in Table 6.2-3 of the Supplemental DEIS/FEIR. Sound insulation reduces noise inside the home. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative.
85.29	Noise	Sound Insulation	Concerns about Massport's residential "soundproofing" program include the pace of the program, the failure to provide air conditioning in conjunction with the "soundproofing" program, and the small number of dwelling units that are eligible for the program.	By the end of the 2000 construction season, Massport sound insulated approximately 3,400 residential buildings containing about 6,000 dwelling units, constituting one of the largest sound insulation programs in the country. Construction over the last seven years has proceeded at the rate of 550 to 800 dwelling units per year. Mitigation of noise impacts from the Preferred Alternative is estimated to add up to 1,450 units to the program. At current construction rates, that work could be complete in approximately two years. FAA policy regarding sound insulation programs requires that "positive air ventilation" be provided in conjunction with sound insulation treatment so that windows may be left closed during all seasons to maintain adequate noise reduction. The Massport residential sound insulation program is designed to comply with this requirement.
85.30	Noise	Sound Insulation	FAA Order 5100.38A makes ineligible for AIP funding any non-related code-required building improvements necessary to accommodate acoustic treatment improvements. This may impose significant burdens on some property owners.	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport-sponsored sound insulation program. However, to address impacts in particular projects such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of this mitigation program to the extent such improvements are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes.

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85.31	Air Quality	Odor	The proposed Airside Improvement Project provides minimal long-term air quality benefits. Changes in air quality associated with the proposed project are likely to be undetectable, with the exception of adverse odor impacts. There is potential for adverse odor impacts in certain areas proximate to the airport, as a result of this project. Changes in odor impacts are most likely to occur in the Jeffries Point neighborhood from takeoffs on Runway 14.	The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. However, decreases in odorous emission concentrations will be imperceptible.
85.32	Air Quality	Odor	The odor modeling and odor impact assessment procedure is inadequate.	Neither the EPA nor the FAA provides specific requirements, guidelines, or standards for assessing odors at airports. The modeling of odor-causing hydrocarbons was used as a surrogate in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. The results are used as an indicator of odor-causing compounds.
85.33	Air Quality	Impacts	For all modeled contaminants other than VOCs, the difference (if any) among Airside Improvement Project alternatives is much less significant than the projected growth of emissions over time.	The growth in emissions over time will occur with or without the Airside Project. However, the Preferred Alternative presents a significant decrease in emissions compared to the No Action Alternative.
85.34	Air Quality	Model	Massport should have used the ten-year hourly average meteorological input for the air quality dispersion model, and should be required to rerun to dispersion model for all of the conditions modeled for the DEIS/DEIR.	In accordance with EPA, MDEP, and FAA modeling guidance, DELAYSIM uses ten years of weather data, not an average of ten years of data. These data were obtained from the National Climatic Data Center. Also, the air quality dispersion model that was used complies with EPA and FAA standards.
85.35	Ecosystems	Rare Species	A program is required to compensate for impacts to the nesting habitat on Logan Airport of the state-listed endangered upland sandpiper. The suggested program appears highly speculative as described. Massport should be required to set forth the resolution with NHESP in the DEIS/DEIR.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport associated with construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far in excess of the 40± acres to be lost at Logan Airport. A Memorandum of Agreement will be signed between Massport and the Massachusetts Army Air National Guard for implementation of the program.
85.36	Construction	Mitigation	Massport has failed to demonstrate how fugitive dust emissions from construction operations on the airfield will be controlled during winter months.	Construction-period air quality impact mitigation will include the steps specified in FAA Advisory Circular 150/5370-10A, Standards for Specifying Construction of Airports. These and other measures are listed in Section 8.5.2 of the Supplemental DEIS/FEIR.
85.37	Construction	Noise	Shortcomings of the Massport construction noise analysis include its failure to address the matter of pure tones and of impact noise (i.e., paving breakers and hoe rams), and the failure to separate out and separately analyze nighttime construction noise levels against nighttime ambient levels. The noise criteria applied by Massachusetts Department of Environmental Protection are applicable to this project.	The analysis of nighttime construction noise levels does not show any significant impact from construction noise, since no pure tone noise is allowed to be emitted from construction equipment such as back-up alarms, as specified in Massport's construction mitigation guidelines.
85.38	Noise	Sound Insulation	We disagree with the statement, "After sound-proofing to mitigate impacts within the 65 DNL Contour, the full-build alternatives provide net long-term benefits."	Refer to response to Comment 85.28.
85.39	Environmental Review Process	FAA/NEPA	Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan.	Refer to responses to Comments 85.1, 85.16 and 85.17.

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85.40	Analysis Assumptions	Forecasts	The planning period is inadequate, and should be extended to 2020. There is no plan or program to deal with long-term growth at Logan, which will soon overwhelm any interim benefits of this project.	Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.
85.41	Purpose and Need	Delays	Delay does not appear to be a major problem at Logan, based on Massport's two-year history of inaction and on FAA analyses.	Refer to response to Comment 85.4.
85.42	Environmental Review Process	MEPA	The DEIS/DEIR should be found inadequate ...	Refer to response to Comment 85.12.
85.43	Analysis Assumptions	Forecasts	The airside project and the landside projects at Logan are interdependent, and both will increase capacity and stimulate demand.	Refer to responses to Comments 85.1, 85.16 and 85.17.
85.44	Delay	Model	Background information on the development of these models [FLAPS and DELAYSIM] is not presented, as required by FAA.	FLAPS and DELAYSIM have been discussed in Section 4.4 of the Supplemental DEIS/FEIR. These models were originally developed for Logan Airport under Massport and FAA funding, and have been used in airport planning studies in the United States and internationally.
85.45	Delay	Model	Massport did not use the FAA-approved SIMMOD model for the airport simulations, but chose to develop its own model for estimating delay.	The Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of computer models for estimating flight delays, including their limitations. SIMMOD is not well suited for conducting the long-term delays analysis that DELAYSIM provides for the Airside Project study. FAA reviewed and approved the simulation models used in this study.

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85.46	Delay	Model	The delay hours projected by Massport are the artifacts of its own model, severely overstate the actual situation, and do not comport with the FAA's procedure for calculating delay at airports.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
85.47	Noise	PRAS	The DELAYSIM model should use as the leading criteria the highest capacity configuration and air traffic controller workload weighting approved by FAA ATC.	The FAA has signed a MOU with Massport to follow PRAS recommendations, when feasible. Implementing a maximum capacity policy would ignore the agreement for equitable distribution of noise among the surrounding communities, and cause use of the northeast-southwest runways to grow to 70 percent or higher. The workload weighting factor used in DELAYISM was developed in conjunction with FAA ATC.
85.48	Delay	Model	The report compares Massport's calculation of delay with FAA's calculation of delay. This comparison throughout the DEIS/DEIR is incorrect and misleading.	Refer to response to Comment 85.46.
85.49	Delay	Model	The FAA data on delays cited elsewhere in this report shows that the delay situation at Logan has improved since 1993 and is essentially in equilibrium ... The DEIS/DEIR does not reflect this information.	Refer to response to Comment 85.4.

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85.50	Delay	Model	Modeled delay under the most optimistic Massport scenario will return to present levels within a very few years and increase after that. The stimulation of demand is not reflected in the annual hours of delay calculations.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate *and long-term* benefits by lowering runway delays by 38,000 hours under 1998 conditions, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. The sooner airside efficiencies are implemented, the more benefits will accrue over time. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used during high demand periods. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions, and will represent a real benefit to the passengers and airlines that currently experience them. However, these wind conditions and the associated delays are not predictable and cannot be anticipated, so Runway 14/32 will not stimulate growth in Logan Airport passenger demand above the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the airside operational and environmental analyses would capture any potential variation in future passenger and aircraft activity at Logan Airport.
85.51	Alternatives	Runway 14/32	While peak hour capacity does not increase with construction of the runway, the additional runway will provide the controllers the option to use higher-capacity configuration more of the time. This ability is providing additional "throughput" of aircraft operations.	Runway 14/32 would correct an airfield deficiency in the northwest operating direction by increasing the capacity of that configuration closer to the airport's normal operating capacity of 120 operations per hour.
85.52	Environmental Review Process	FAA/NEPA	Massport has not met the requirements of the National Environmental Policy Act ... No discussion of "alternatives not considered in this DEIS/DEIR" was included.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to FAA scoping directives, applicable FAA environmental orders and all other NEPA requirements.
85.53	Regional Transportation	Regional Airports	DEIS/DEIR should include development of a new airport.	Refer to response to Comment 85.9.

Code	Topic 1	Topic 2	Comment	Response
85.54	Alternatives	Other Non Construction Alternatives	DEIS/DEIR should include Consideration of Implementing a High-Density Rule (Slots)	Neither federal nor state scoping directives required an analysis of slotting. Imposition of slot controls constitutes a federal policy that has been preempted to the FAA under federal law and is not within Massport's jurisdiction. Congress determined that the slot program has a number of significant problems. The U.S. DOT has studied options for reducing slot controls at airports. As a result, the AIR-21 Act, which was enacted in March 2000, eliminates all slots at three of the nations slot controlled airports. Slots at the Chicago O'Hare airport will be eliminated by July 1, 2002 and slots at New York LaGuardia and New York JFK will be eliminated by January 1, 2007. PPP represents a market approach that should encourage the highest value services to use Logan Airport during periods of scarce capacity without the market disruption and other inefficiencies related to slot control.
85.55	Noise	Nighttime Noise	DEIS/DEIR should consider implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan to provide noise relief to affected communities. A specific measure that could be considered is a cap on nighttime operations.	The phaseout of Stage 2 aircraft operations was complete as of December 31, 1999. Refer to response to Comment 85.26.
85.56	Regional Transportation	Regional Airports	The New England governors, the FAA, and the Federal Highway Administration must assist state government and the Boston area communities in devising and implementing programs to ensure that Massport's numbers grow no larger, while not inhibiting normal beneficial economic growth of Eastern New England. The Airside Improvement Project must be viewed in this larger regional context.	While Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport, Massport is engaged in promoting the use of other alternative regional airports and travel modes to relieve traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci sponsored a Regional Transportation Summit that involved the New England Governors, transportation officials, and business leaders. The summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.
85.57	Regional Transportation	Regional Airports	Massport argues that the growth in passenger traffic experienced at the Manchester, New Hampshire Airport and the T.F. Green Airport in Warwick, Rhode Island represents shifts of demand from Logan Airport. It is equally likely that the introduction of those two airports of low-cost carriers has stimulated overall regional air travel growth, the bulk of which has been absorbed at those two airports.	Until Southwest Airlines, Delta Express and MetroJet introduced low-fare services into the region, the New England region had been one of the only regions in the United States without a significant low-fare carrier presence. The resulting stimulation of traffic at the regional airports consists of both induced demand and diversion from Logan Airport. This diversion results from a recapture of traffic within Manchester and T.F. Green/Providence airports primary markets that was previously using Logan Airport. The slowing of Logan Airport's growth rate is a clear indication that the new services at the regional airports have diverted traffic from Logan Airport. The induced demand resulting from Southwest Airline's low cost service is being accommodated at the regional airports and not at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
85.58	Regional Transportation	Regional Airports	If market forces are left to drive growth in traffic at those airports, growth at Logan will not be significantly constrained. Specific goals would have to be established, and a series of measures implemented to stimulate a substantial shift of traffic demand from Logan.	Market forces have been responsible for the shift in airport usage from Logan Airport to the regional airports. Since 1996, when low-fare services were first established at T.F. Green/Providence Airport, eight out of ten new air travelers in New England have chosen to use the regional airports over Logan Airport. Regional airports have become attractive alternatives to Logan Airport because of airline decisions to increase the frequency and quality of regional airport services (i.e., jet versus turboprops), the availability of lower airfares, convenient access relative to Logan Airport, and increased public awareness of the regional airports. Given this situation, growth is expected within Logan Airport's primary service area that will now shift to Manchester or T.F. Green/Providence airports.
85.59	Regional Transportation	Regional Airports	Although Massport includes some off-airport options, the development of other obvious alternatives has not been reasonably discussed nor have the reasons for their elimination as options.	The discussion of alternatives in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR responds to federal and state scoping directives and provides appropriate analytical context for assessing the need for the Preferred Alternative.
85.60	Regional Transportation	Regional Airports	The conclusion of the MAC Second Major Airport Study points out that long-term considerations to meet increasing demand require that a second airport (either a greenfield airport and/or significant expansion of an existing airport) be an alternative to the improvements recommended.	Refer to response to Comment 85.9.
85.61	Alternatives	Peak Period Pricing	Peak Period Pricing is but one form of economic incentive or control that should be considered in evaluating measures to reduce airspace and airfield congestion.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Additional analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR. This analysis includes the High Fleet scenario. Demand management measures at other United States and international airports are discussed in Section 3.5. For a review of demand management policies at other U.S. and international airports, refer to Section 3.5 of the Supplemental Draft EIS/FEIR.
85.62	Alternatives	Peak Period Pricing	The basic assumption was made that peak period pricing needed to be revenue neutral, pertaining only to airfield revenue and airfield costs at Logan. This assumption resulted in impacts to airlines that operate small aircraft only.	The PPP program evaluated in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR was designed to comply with pertinent U.S.DOT and federal court precedent in the PACE proceedings and with existing federal regulations regarding airport rates and charges. Revenue neutrality was incorporated in the tested program for this reason. Massport's prior experience with the PACE landing fee structure demonstrates that changes to the existing weight-based landing fees will undergo thorough legal and regulatory review, and that the program must be carefully structured to withstand this process. This was examined in developing the illustrative program.
85.63	Alternatives	Peak Period Pricing	Consideration should be given to a quite different approach to addressing the efficiency of Logan Airport during peak operating periods and in carrying out its primary mission.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. The application of a fixed peak period surcharge corresponds to the Citizens Advisory Committee's recommendation that an appropriate demand management program provide mechanisms to encourage the use of larger aircraft at higher load factors. Flights carrying greater numbers of passengers will minimize the cost per passenger impact of the surcharge.

Code	Topic 1	Topic 2	Comment	Response
85.64	Alternatives	Peak Period Pricing	Massport's model for peak hour pricing has chosen too narrow a definition of the regulatory criteria it must meet to establish a peak hour pricing structure.	Refer to response to Comment 85.62.
85.65	Alternatives	Peak Period Pricing	The range of options considered for Peak Period Pricing is insufficient.	The Airside Project analysis of PPP examined an operations threshold of 110 operations per hour, which is already below Logan Airport's normal operating capacity of 120 operations per hour. There is no legitimate operational justification for imposing a peak period surcharge at an operation level significantly lower than Logan Airport's normal operating capacity which is achieved 80 percent of the year without any delays. Even at 75 operations per hour, Logan Airport would be subject to delays from northwest wind conditions. The Airside Project analysis in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR indicates that, with the Preferred Alternative, Logan Airport can accommodate existing and foreseeable future levels of demand without imposing a drastic administrative restriction to artificially revise Logan Airport's existing capacity.
85.66	Alternatives	Peak Period Pricing	The option of utilizing "costing" (including peak period pricing) approaches for the purpose of delay reduction should be retained. It should be the first option selected for implementation, as a non-capital intensive, adjustable measure to move toward a goal.	Analysis of PPP is set out in Section 4.5 of this Supplemental DEIS/FEIR.
85.67	Regional Transportation	Diversion	A shift away from air travel through reliance on other means of travel or communication is essential. Vigorous measures to foster and encourage this shift should be undertaken by State government in cooperation with Amtrak and telecommunications providers.	The acceptance of videoconferencing and other means of telecommunications by businesses as a substitute for air travel are largely dependent upon the quality of the available technology and private sector decisions outside the authority of FAA and Massport. Massport encourages such initiatives from state government, Amtrak, and others. Massport forecasts in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR took account of the likely effect of such factors as videoconferencing over the forecast period.
85.68	Environmental Review Process	FAA/NEPA, MEPA	The DEIS/DEIR does not indicate the requirement of a benefit-cost analysis.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..."
85.69	Noise	Studies	There are no economic analyses of the noise impacts regarding the various alternatives.	Analysis of noise impacts of the various airside alternatives was performed and is described in Chapters 6 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. The noise analysis complies with federal and state scoping directives on the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR.
85.70	Environmental Review Process	FAA/NEPA	No indication of how the project is to be financed is provided . . .	The Airside Project is programmed into Massport's standard five-year capital budget process. An appropriate financing plan, including AIP funds and other grant funds, will be developed at the time the project is ready for financing. Sufficient funds will be available to complete the project.
85.71	Alternatives	Preferred Alternatives	Full impact of FAA not issuing a "Modification of Standards" for Layout Option C needs to be discussed.	A Determination of Acceptable Level of Safety, not a Modification of Standards, is required from FAA for Option C.
85.72	Alternatives	Runway 14/32	The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible.	Refer to response to Comment 85.19.

Code	Topic 1	Topic 2	Comment	Response
85.73	Alternatives	Runway 14/32	Massport indicates that only regional and commuter aircraft will use the proposed runway. The Airport Reference Code (C-III) for the proposed runway includes the following aircraft types: Airbus A-320s, BAC 111s, Boeing 727s, Boeing 737s, Fokker F-28s, and MDC DC-9s. Therefore, large jets can and will use the runway.	Design Category C-III indicates the highest approach speed and widest wingspan of the aircraft to use the runway. Approach Category C includes those with speeds from 121 to 140 knots. Design Group III designates wingspans from 79 to 117 feet. Several of the general aviation and commuter aircraft have approach speeds or wingspans in these classes. Most of the types cited in this comment are Stage 2 aircraft that were phased out of service in 2000. Required runway takeoff and landing distances would prevent most of these aircraft operations on Runway 14/32. For operating efficiency, FAA controllers would keep the large jets on Runway 33L and the smaller aircraft on Runway 32.
85.74	Alternatives	Taxiway Improvements	The summary of advantages cited for the Centerfield Taxiway supports the community concern that the presence of the Centerfield Taxiway will make the use of the 4/22 runway combinations more attractive ...	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays, thereby reducing associated noise and emissions. Section 3.3 of the Supplemental DEIS/FEIR describes several operating situations that would benefit from these improvements. Unidirectional Runway 14/32 would allow more evenly distributed runway use, reducing the use of the Runways 4/22 from 60 to 70 percent to 35 to 40 percent. When using Runways 22L/R for departures, the Centerfield Taxiway would be used for Runway 22L departures to bypass the queue for Runway 22R.
85.75	Alternatives	Peak Period Pricing	Massport is not including Alternate 1 as the preferred alternative, which according to its model provides the highest reduction in delay.	The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR.
85.76	Alternatives	Peak Period Pricing	The peak period pricing option or an alternative congestion approach should be implemented immediately to gain its delay-reduction benefits throughout and beyond any construction period.	Refer to response to Comment 85.66.
85.77	Air Quality	Odor	There are adverse air quality impacts associated with construction of Runway 14/32 and the Centerfield Taxiway that are not sufficiently explored in the DEIS/DEIR. These include odor impacts, especially in the Jeffries Point area, and potential construction dust problems.	Section 6.4 of the Supplemental DEIS/FEIR contains a thorough analysis of adverse air quality impacts. There are no anticipated odor-causing operations during the construction process. Fugitive dust from construction will be minimized by using methods described in FAA Advisory Circular 150/5370-10A, Standards for Specifying Construction of Airports.
85.78	Ecosystems	Rare Species	A major element of the proposal to mitigate impacts on the state-listed upland sandpiper, that of creation of a replacement habitat on Cape Cod, appears to ignore geography and is of questionable benefits.	Refer to response to Comment 85.35. In addition to shifting Upland Sandpiper habitat areas at Logan Airport from proposed construction sites to other grassland areas on the airfield, Massport has worked closely with NHESP to develop an off-site habitat enhancement plan for this species. The individual birds that use the airfield are part of a larger Upland Sandpiper population in Eastern Massachusetts. The proposed off-site habitat enhancement program will significantly improve regional opportunities for Upland Sandpiper and restore habitat for the declining population at Camp Edwards on Cape Cod. The on-site mitigation program is designed to maintain the existing population.
85.79	Alternatives	Runway 14/32	The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible.	Refer to response to Comment 85.19.

Code	Topic 1	Topic 2	Comment	Response
85.80	Alternatives	Runway 14/32	... this project sends [the signal] that Massport continues to be committed to expansion of Logan Airport ...	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.
85.81	Alternatives	Preferred Alternatives	Alternate No. 3 provides delay reduction without the build option. Alternate No. 2 provides significant delay reduction by allowing maximization of existing airfield capacity through the construction of a parallel taxiway. These two alternatives appear to be the most viable for the community.	The Preferred Alternative contains the elements of Alternatives 2 and 3. The elements contained in Alternatives 2 and 3 are each part of the long-term delay reduction strategy for Logan Airport. However, only the proposed unidirectional Runway 14/32 addresses delays caused by northwest winds and the corresponding reduction in airfield capacity that occurs in this operating direction.
85.82	Analysis Assumptions/ Methodologies	Planning Period	... the DEIS/DEIR document should indicate: a) what the long-term (20-year) needs are.	The analysis in Chapters 4 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR clearly indicate that airside delays and congestion at Logan Airport will worsen over the long term (ten- to 20-year time frame) if no actions are taken. The Preferred Alternative is designed to address the long-term need to reduce future growth in airside delays.
85.83	Purpose and Need	Delays	... the DEIS/DEIR document should indicate: b) how the alternatives considered meet these [long-term] needs.	Refer to response to Comment 85.82 and Section 4.6 of the Supplemental DEIS/FEIR.
85.84	Environmental Review Process	MEPA	Logan was constructed into a residential setting. The history of the airfield at Logan is noted in Appendix B but does not point out the residential development existing during the phases of development.	Comment noted. All planning efforts for Logan Airport, including the Airside Project, that are the subject of this environmental review take into account impacts on affected residential areas.
85.85	Environmental Review Process	FAA/NEPA, MEPA	Massport for too long has been allowed to take a segmented approach, arguing that landside projects are designed to accommodate ground passenger handling; airside improvement projects are designed to accommodate aircraft handling; that neither generates traffic; and that Massport has no control over passenger and cargo growth.	Refer to response to Comment 85.1.
85.86	Regional Transportation	Diversions	There needs to be a reallocation of roles and responsibilities, a primary objective of which should be to significantly temper the adverse impacts of air and ground vehicle operations to and from Logan Airport.	Massport has a long-standing commitment to minimizing and where possible, mitigating, environmental impacts associated with Logan Airport. The *Logan Airport 1999 ESPR* (previously GEIR) discusses the status of Massport overall mitigation for the groundside and airside impacts of the airport. The ESPR was filed on December 15, 2000.
85.87	Analysis Assumptions/ Methodologies	Base Year	This project, initiated in 1995 with the filing of an ENF, uses 1993 as its "base year" for planning purposes ... The passage of over five years from the "base year," ... should require that 1998 and data therefore constitute the "base year" for this Planning Project.	Refer to response to Comment 85.3.
85.88	Analysis Assumptions/ Methodologies	Planning Period	... the project should be extended to a 20-year planning horizon, to 2020 ... Massport claims that there has been no change in schedule ... This is untrue.	Refer to responses to Comments 85.3 and 85.40.
85.89	Environmental Review Process	FAA/NEPA MEPA	... Massport and the FAA have not complied with the required timing of the DEIS/DEIR document.	Massport and FAA have complied with all applicable state and federal requirements.
85.90	Analysis Assumptions/ Methodologies	Base Year	... the analysis uses baseline data of 1993 for a document submitted in 1999. [Is not appropriate]sic	Refer to responses to Comment 85.3.

Code	Topic 1	Topic 2	Comment	Response
85.91	Delay	Model	The FAA data on delays cited elsewhere in this report shows that the delay situation at Logan has improved since 1993 and is essentially in equilibrium, as assessed by the FAA.	Refer to response to Comment 85.4.
85.92	Purpose and Need	Delay	Massport has clearly demonstrated, by its action placing this project on hold for nearly two years, that the problem is not "a matter of priority."	Delay is a current problem that is only going to worsen. Massport is committed to improving airfield efficiency and reducing delays. Refer to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of how the Preferred Alternative reduces airfield-related delays at Logan Airport.
85.93	Regional Transportation	Cargo	The ENF Certificate required ... discussion of diversion of cargo to off-airport alternatives.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act..." Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
85.94	Regional Transportation	Regional Airports, Passenger Rail	The ENF Certificate required consideration of...the off-airport alternatives as a separate scenario evaluated during the DEIS/DEIR.	The Secretary of EOEA determined in the May 7, 1999 Certificate that the Draft EIR complied with applicable legal requirements. The certificate also provided a scope for the Final EIR in response to the May 7, 1999 scoping directives. Chapter 2 of the Supplemental DEIS/FEIR provides an evaluation of options to Logan Airport, regional airports and regional rail projects. These alternatives are expected to accommodate an increasing share of the region's overall growth in inter-city travel demand and provide relief to traffic growth pressures at Logan Airport. Nevertheless, the proposed Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as regional alternatives reduce the rate of future growth at Logan Airport.
85.95	Environmental Justice	Impacts	The ENF Certificate required consideration of ... the development of a second major airport in discussion of environmental justice.	Refer to response to Comment 85.9.
85.96	Delay	Model	The ENF Certificate required ... detailing of the existing delay derived directly from wind/weather and indirectly from delay at other airports.	The Secretary of EOEA determined in the May 7, 1999 Certificate that the Draft EIR complied with applicable legal requirements. Refer to response to Comment 85.10.
85.97	Noise	PRAS	The ENF Certificate required ... documentation of history of PRAS and problems implementing it.	Refer to response to Comment 85.11.
85.98	Environmental Review Process	MEPA	... DEIR is submitted subject to Massachusetts' laws, policies and regulations, in addition to federal regulations and guidance. As such, it is subject to the determination of the Secretary of Environmental Affairs as to whether cumulative impacts have been adequately addressed.	The Secretary of Environmental Affairs determined in the Certificate on the DEIR, dated May 7, 1999, that the document complied with all applicable state requirements.
85.99	Environmental Review Process	MEPA	The Airside Improvement Planning Program is a short-range and limited response to a major concern about long-term trends, future growth, and increasing impact. The DEIS/DEIR does not address the long-term implication of growth.	Refer to response to Comment 85.82.

Code	Topic 1	Topic 2	Comment	Response
85.100	Analysis Assumptions/ Methodologies	Passenger Forecasts	In our opinion, the statement (page 7-3) that "The Airside Project has independent utility, and will not stimulate, preclude, or otherwise determine other development anticipated as part of Massport's landside planning effort" is incorrect. Massport argues the Airside Improvement Project is independent of the landside projects in every way. We disagree.	Refer to responses to Comments 85.1, 85.16 and 85.17.
85.101	Environmental Review Process	FAA/NEPA	The full implementation of the Airside Improvement Project ... is expansion of capacity. Such as increase must be translated into a projected increase in demand, as the FAA has stated in its regulations.	Refer to response to Comment 85.80.
85.102	Analysis Assumptions/ Methodologies	Planning Period	This DEIS/DEIR ... does not cover a sufficient planning period. Massport continues the fiction that 1999 is the near future and 2010 the far future. As a standard, FAA typically reviews and evaluates 20-year forecasts. ... No justification for using these short time frames was given.	FAA has no standard that requires a 20-year forecast. Refer to responses to Comments 85.3 and 85.40.
85.103	Analysis Assumptions/ Methodologies	Forecasts	The base year for the development of these forecasts is 1993. ... A more updated forecast for passengers at Logan in future 5, 10, and 20 years with high and low fleet scenarios should be provided for evaluation.	Refer to response to Comment 85.40.
85.104	Analysis Assumptions/ Methodologies	Base Year	... Massport cites significant changes since 1993 in the aircraft fleet mix; thus, the validity of the base year and high-range fleet forecasts are not appropriate for consideration in this analysis.	Consistent with the request made by the EOEA in its Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. The High and Low Fleet scenarios for 37.5 and 45 million passengers represent a range of possible future activity—both levels and fleet mix—at Logan Airport.
85.105	Analysis Assumptions/ Methodologies	Passenger Forecasts	Massport should provide recent and relevant passenger forecasts for a 20-year period with associated operational forecasts using high and low fleet scenario assumptions that are consistent for all forecast years.	Refer to response to Comment 85.40.
85.106	Analysis Assumptions/ Methodologies	Passenger Forecasts	The DEIS/DEIR does not indicate the detailed methodology used to develop the levels of passenger forecasts presented. ... Massport must clearly identify the basis for the passenger demand projections, and must state the confidence level in those projections. Similarly, it must state the confidence level in the projections of diversion at each projected passenger level, and show the resultant range of passenger level projections.	The Airside analysis is based on a range of historic, current and future passenger levels. The Airside Project Draft EIS/EIR included the analysis of 1993 Historic Modeled Conditions with 24 million passengers. The Supplemental DEIS/FEIR was updated to reflect 1998 current conditions, i.e.: 26.5 million passengers. To account for the uncertainty associated with any forecasting effort, the Airside analysis considered a range of future passenger levels from 29 million (expected to be reached in 2003), to 37.5 million (2015), and 45 million (2024). Furthermore, the results of the Airside analysis indicate that the delay reduction benefits of the Preferred Alternative are not dependent upon the future forecast passenger level. As demonstrated in Section 4.6 of the Supplemental DEIS/FEIR, the Preferred Alternative would produce significant delay reduction at current, 1998 activity levels, as well as the wide range of current and future forecast passenger levels.
85.107	Analysis Assumptions/ Methodologies	Passenger Forecasting	The distinction between the "low operations fleet" and the "high operations fleet" is confused in the DEIS/DEIR.	As described in Chapter 4 and Appendix E of the Airside Project Draft EIS/EIR and in Section 4.2 of the Supplemental DEIS/FEIR, the high fleets are characterized by comparatively larger number and share of operations with smaller regional carrier aircraft, consistent with the three carrier network observed in the early 1990's. The low fleets exhibit fewer small aircraft and a larger average aircraft size at Logan Airport, resulting in fewer aircraft operations required to accommodate the specified number of passengers. The alternative fleet forecasts examined in the Airside analysis permitted Massport and the FAA to compare the relative merits of different improvement concepts against a wide range of current and potential future activity levels.

Code	Topic 1	Topic 2	Comment	Response
85.108	Noise	Fleet Mix	... the percentage distribution of passengers between "passenger jets" and "regional carriers" presented ... indicate that most of the projected increases in passenger demand will be met by increased operations of the "passenger jet" fleet. This is the fleet that creates the noise impacts at Logan and elsewhere.	Refer to response to Comment 85.22.
85.109	Analysis Assumptions/ Methodologies	Cargo	It should also be noted that cargo fleet operations in 1999 were held constant in both the "low fleet" and the "high fleet" projections ... the increased economic growth projection ... should also include a concomitant increase in the cargo jet operations forecast ... These corrections will affect the noise and noise impact forecasts of Chapter 5 and Appendix L.	Cargo activity at Logan Airport changes from year to year. Despite strong economic growth over the last few years, cargo operations at Logan Airport increased by less than two percent in 1999 and actually declined by 1.2 percent in 1998. Since cargo operations account for only two percent of aircraft activity at Logan Airport and occur during off-peak hours, cargo operations do not contribute to delays at Logan Airport. By reducing delays during the peak hours, the Preferred Alternative reduces the number of passenger operations that are delayed into the nighttime and thus reduces late night noise exposure for the surrounding communities.
85.110	Analysis Assumptions/ Methodologies	Planning Period	In our opinion, Massport should be carrying its projections a minimum of 20 years from a base year of 1998, for a draft environmental impact statement and report published in 1999.	Refer to responses to Comments 85.3 and 85.40.
85.111	Noise	Fleet Mix	Massport projects air traffic operations to increase substantially over the project planning period. ... A more important assessment is the projected increase in "equivalent jet operations," which ... approaches 50% over the next decade.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities.
85.112	Ground Transportation	Access to Logan Airport	Massport proposes to increase the percentage of passengers accessing Logan Airport who do so in high-occupancy vehicles, but its proposal falls far short of absorbing the full projected increase in passenger ground access requirements.	The *Logan Airport 1999 ESPR* (previously GEIR) which filed on December 15, 2000, evaluates the feasibility of a higher target percentage for air passenger HOV ridership than 35.2 percent and discusses parking demand and management.
85.113	Regional Transportation	Regional Airports	A new class of much larger aircraft is under active development by several manufacturers. ... Their size and height, and the number of passengers, pose significant terminal problems. They are expected to require runways of about 11,000 feet in length. ... This therefore becomes another argument for the development of a major international airport serving New England that will have the capacity and capability to handle this generation of planes.	The Airside Project analysis is based on alternative 20-year forecasts of operations by aircraft type. Only larger aircraft compatible with the existing facilities at Logan Airport are included in the future forecasts for Logan Airport fleets on which the delay and environmental analyses are based. Also, refer to response to Comment 85.9.
85.114	Mitigation	Initiatives	These documents fail to address how Massport, the air transportation system, and the regional transportation and communication systems will cope with continued passenger and operations growth while simultaneously maintaining and improving environmental quality and quality of life, and an efficient transportation and communication system in the future.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.

Code	Topic 1	Topic 2	Comment	Response
85.115	Noise	PRAS	Massport argues that the project "will not result in the division or disruption of established communities." This must refer solely to physical division or disruption, since Massport's promotional and political strategy has clearly been to effect division among the communities around Logan Airport. Some of these communities will be further disrupted by the short-term shifts in runway usage which are the basis for Massport's claims of "net benefits", all will be disrupted by further growth in Logan air operations over the near and far futures. Furthermore, this is the last possible physical project to increase Logan airfield capacity that could be undertaken without "division or disruption of established communities," or of the waters of and lands under Boston Harbor.	Projected changes in flight patterns and associated noise shifts are consistent with the PRAS goals, which were studied and approved by the community when established. Activity increases over certain communities are offset by activity reductions over other severely impacted communities and by activity increases over water.
85.116	Noise	Hushkitted Aircraft	Concerned that aircraft operations will continue to increase with the noise impact per operation unlikely to diminish.	The noise impact per operation is expected to diminish in the future for several reasons. The two largest airlines at Logan Airport, Delta Air Lines and US Airways are replacing their hushkitted shuttle fleets with full Stage 3 aircraft. US Airways took delivery of Airbus 320 aircraft in the fall of 1999 and Delta Air Lines has ordered Stage 3 Boeing 737-800s for its Boston to New York shuttle operations. By the end of 2000, approximately 24,000 annual operations were replaced by full Stage 3 technology aircraft.
85.117	Purpose and Need	Delays	It seems inevitable that Logan Airport will experience growing congestion, and with that congestion will come increasing pressure for additional measures to reduce it.	The Airside Project analysis shows that the Preferred Alternative will significantly reduce the growth in airside delays compared to the No Action Alternative. Refer to Section 4.6 of the Supplemental DEIS/FEIR. Massport will continue to examine ways to make Logan Airport more efficient.
85.118	Environmental Review Process	MEPA, FAA/NEPA	... The DEIS/DEIR should be found inadequate, ...	Refer to response to Comment 85.12.
85.119	Environmental Review Process	MEPA	The boundaries of the Airfield Study Area, Figure 5.1-2, should be extended to include the Hyatt Hotel and the waters to the east of Governor's Island, in order to include the runway safety areas and other protective envelopes.	The study area shown in Figure 5.1-2 of the Airside Project Draft EIS/EIR is intended to include all aircraft movement areas at Logan Airport.
85.120	Noise	Impacts	Concerned the 60 DNL contour does not include any areas of Milton/Quincy/Braintree, nor the town of Hull, whose residents are distressed by airport noise.	The Secretary of Environmental Affairs has requested that Massport examine noise exposure out to the 60 DNL contour. There is no evidence either from noise exposure contours or from measurements to suggest these communities experience noise greater than DNL 60. Also refer to Figure 5.2-3 and Table 5-6 of the *Logan Airport 1998 Annual Update*.
85.121	Noise	Impacts	The most salient observation is that "equivalent operations" will increase substantially over almost all areas over time. ... while the different alternatives slightly shift overflight impacts among communities, most residential areas will experience significant increases in impacts over time.	Refer to response to Comment 85.111.

Code	Topic 1	Topic 2	Comment	Response
85.122	Noise	Impacts	The plan to add another runway on the southern boundary of the airport will definitely alter the noise patterns for those south and southwest of the proposed runway....The South Boston and Jeffries Point areas will definitely have an increase in noise above 60 dB and possible above 65 dB. ... There is forecast to be an increase of five or more dB in approximately a three square mile area on the south shore of the Inner Harbor.	The only change in the shape of the noise contours from the addition of Runway 14/32 is the addition of a contour into the harbor in the general direction of the extended runway centerline (refer to Figures 6.2-5 through 6.2-14 in the Supplemental DEIS/FEIR). No increase is forecast for Jeffries Point (refer to Tables 6.2.4, 6.2.5, and 6.2-22 in the Supplemental DEIS/FEIR). Also, the Day-Night Sound Level for Noise Monitor No. 2 at B Street and Bolton Street in South Boston is expected to *decrease* (not increase) from 66.7 decibels (dB) in 1998 to between 63.4 and 64.5 dB with the 29M Low Fleet scenario, depending on the alternative; to between 58.7 and 63.8 dB with the 37.5M High Fleet scenario, and to between 58.1 and 63.0 with the High Regional Jet Fleet, depending on the alternative.
85.123	Noise	Model	Two sensor sites to the west-northwest of the airport are those at the Jeffries Point Yacht Club and at Summer, near [Lamson] in East Boston....According to the day-night contours in the analysis, the noise level would never reach 60 DNL. The Times Above Noise Levels (TANL) tables contradict these figures. ...	There is no contradiction between the tables of Day-Night Sound Level (DNL) values at the noise monitoring sites and the Time Above (TA) threshold values. The graphics in Appendix L of the D EIS/EIR and the new graphics in the Supplemental DEIS/FEIR (for example Figures 6.2-7 and 6.2-8 showing exposure levels for the 29M Low and 37.5M High fleets) indicate that both sensor sites (Sites 14 and A, respectively) are properly situated on or between the 60 and 65 DNL contours, their locations accurately matching the tabular values of DNL listed in Tables 6.2-10 and 6.2-of Supplemental DEIS/FEIR. Comparable comparisons also exist between the noise contours of Figure 6.2-12 and Table 6.2-26 of the Supplemental DEIS/FEIR for the 2015 High Regional Jet Fleet. However, the commentor appears to be confused over the difference between the DNL and Time Above noise metrics. The time-varying sound level of a passing aircraft can rise to a numeric value that exceeds a threshold of say 65 dB, then fall back below that threshold and in so doing will add several seconds to the Time Above noise metric. Yet that threshold exceedance does not mean the DNL value (a cumulative measure of exposure for a full 24-hour period) will be greater than 65 dB. Readers unfamiliar with these technical issues should refer to Section 5.2.3 of the DEIS/EIR, *Appendix G of the Logan Airport 1998 Annual Update,* or Appendix E of this document for background explanations of the noise metrics used in this evaluation.
85.124	Noise	PRAS	PRAS goals are advisory...We believe airfield operations are unlikely to attain, and even less likely to sustain, the progress toward attainment of PRAS goals that Massport projects. Therefore, the projected noise reduction "benefits" of the proposed project for the communities impacted by operations using the 4/22 Runways are not likely to be attained or, if attained, to be sustained.	Refer to response to Comment 85.20.
85.125	Noise	Hushkitted Aircraft	The number of nighttime jet operations can be expected to double within the foreseeable future under conservative forecasts. The noise impacts of this increase are huge. All nighttime operations of jets weighing over 75,000 pounds are required to be of Stage 3 aircraft, at this time. Therefore, the growth in numbers and percentage of nighttime jet operations will not be mitigated by the conversion to Stage 3 aircraft.	Refer to response to Comment 85.25.
85.126	Noise	Nighttime Noise	An alternative [to the projected increase in nighttime operations] that should be considered is the creation of a cap on nighttime operations pursuant to FAR Part 161.	Refer to response to Comment 85.26.

Code	Topic 1	Topic 2	Comment	Response
85.127	Noise	Nighttime Noise	There has been a program at Logan for preferential use of over-water approaches and departures, in effect from midnight to 6:00 a.m. The DEIS/DEIR should report on the current status of the program, and discuss/explain the apparent diminution in its application.	The *Logan Airport 1998 Annual Update* indicates that late night preferential runway use improved on an annual basis in 1998. Also refer to Section 4.3.6 of the Supplemental DEIS/FEIR for a discussion of the impact of extending the late-night overwater routing preference to begin earlier than midnight.
85.128	Noise	Nighttime Noise	Comparison of the report of the flight track monitoring program in the 1994/1995 GEIR Update with that reported in the 1997 GEIR Annual Update shows the following. While the number of aircraft departing Runways 22 that subsequently cross the Hull peninsula on their westbound leg did not increase appreciably, the percentage of aircraft crossing that peninsula below 6,000 feet increased from about 8% to about 42%...It appears from the data that a significant percentage of operations failed to conform to the procedure in two ways—the Hull peninsula was crossed, and it was crossed at less than 6000 feet altitude.	While the current use of Runway 22 L/R for departures exceeds the PRAS goal (Refer to the *Logan Airport 1998 Annual Update*, Table 5-12), the Airside Project analysis indicates that, with the Preferred Alternative, use of Runway 22 for departures will fall below the PRAS goal under future short-term and long-term scenarios. The analysis also shows that Runway 22's departure use will exceed its PRAS goal in the long term if no actions are taken.
85.129	Noise	Nighttime Noise	The 1997 GEIR Study does not report on compliance with the flight tracks for Runway 27 departures as established by the FAA in 1996.	Both the *Logan Airport 1997 Annual Update* and *Logan Airport 1998 Annual Update* reported that aircraft were not achieving the goals of the 1996 FAA ROD and that further testing was needed to get improved conformance. The FAA is currently funding an analysis of the procedure and meets periodically with the Runway 27 Advisory Committee to report interim findings. The *Logan Airport 1999 ESPR* (previously GEIR) reports on flight track monitoring which includes Runway 27 test results. The Runway 27 departure tracks have been reviewed in more detail in Section 4.3.4 of the Supplemental DEIS/FEIR.
85.130	Noise	Hushkitted Aircraft	The Logan Low Frequency Noise Study reported in 1996 by Harris, Miller, Miller & Hanson, Inc. indicates that Massport overstates the benefit of further conversion to Stage 3 aircraft on future noise levels around Logan Airport.	Refer to response to Comment 85.24.
85.131	Noise	Monitoring	[Asks that specifics of each noise event be included which] might allow those concerned to better understand community perceptions of aircraft noise and the lack of broad community acceptance of the use of DNL contours as an adequate means of expression of aircraft noise impacts.	It is impossible to show the specifics of each noise event for each location. Rather, the Supplemental DEIS/FEIR provides data at 23 sites, mostly noise monitoring locations, to enable comparisons to measurements and to provide information in several metrics. Included are the annual Day-Night Sound Level for each fleet scenario, the nighttime Leq, the 24-hour and the nighttime Time-Above threshold and the maximum, single event, sound levels. This constitutes a comprehensive set of data, enabling a statistical view of the noises during the average 15-hour day and nine-hour night.
85.132	Noise	Sound Insulation	... acoustic treatment should not be regarded as a full substitute for reduction in ambient levels of aircraft noise.	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
85.133	Noise	Sound Insulation	Concerned that FAA eligibility rules makes ineligible for AIP funding any non-related code-required building improvements necessary to accommodate acoustic treatment improvements. This may impose significant burdens on some property owners.	Refer to response to Comment 85.30.
85.134	Noise	Sound Insulation	Another concern is the failure to provide air-conditioning in conjunction with the "soundproofing" program.	Refer to second paragraph of response to Comment 85.29.
85.135	Noise	Sound Insulation	A further concern is the eligibility of dwelling units for the program. At present, eligibility is determined by the location of the unit within the 65 DNL noise contour, as determined by the application of the Integrated Noise Model. Massport should consider whether other factors should be included in the determination of eligibility that might not be adequately captured by the use of the 65 DNL noise contours. Consideration should also be given to establishment of an interior noise level goal for the program regardless of location of the dwelling unit.	Massport has investigated possible hill effects to explain some larger differences at individual sites and plans to petition FAA for approval to modify the INM contours, where applicable. FAA policy on sound insulation already includes an interior design goal. FAA Order 5100.38 states "A 45 Ldn [DNL] within the major habitable rooms of a dwelling is considered the reasonable design objective for selecting noise attenuation measures". The policy also requires that a minimum of 5 dB of noise reduction be provided by a treatment to assure that the benefit will be noticeable.
85.136	Noise	Sound Insulation	The shortcomings of the INM [Integrated Noise Model] should be recognized and accommodated in the further development of the acoustic treatment program and with respect to eligibility for the program.... Credence should be given to the measured values in determining eligibility and design of corrective measures.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update*). In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
85.137	Noise	Sound Insulation	Want discussion on adequacy of school soundproofing program.	The Airside Project does not adversely affect any schools. In response to the SDEIS Panel, the Supplemental DEIS/FEIR includes a school day/school year contour.
85.138	Air Quality	Odor	Changes in odor impacts are most likely to occur in the Jeffries Point neighborhood from takeoffs on Runway 14...This would constitute a new source of odors in the Jeffries Point area and would also affect the Hyatt Hotel.	One-hour VOC concentrations (used as an indicator of odor) increase only slightly at Jeffries Point with the Preferred Alternative, when compared to the No Action Alternative. The predicted increase is so small that changes in odor will remain imperceptible, as measured against the No Action Alternative. Concentrations decrease at all other receptors with the Preferred Alternative.
85.139	Air Quality	Model	Increased use of Runway 15 for takeoffs can be expected to have an influence on odor impacts downwind of Runway 15 in the Bremen Street/Eagle Hill area of East Boston...An odor receptor location in East Boston representing the most proximate residential receptor located along or near the extended centerline of Runway 15R/33L should have been selected for odor modeling rather than Location 10 at the intersection of Condor and Glendon Streets.	Receptor No. 10 is representative of conditions in East Boston and is located near the runway centerline. East Boston is bracketed by the receptors placed at Receptor No. 10, at Eagle Hill, and at Jeffries Point.

Code	Topic 1	Topic 2	Comment	Response
85.140	Air Quality	Odors	The construction and use at the Centerfield Taxiway would change odor impacts in the Bayswater Street area of East Boston...[and] place taxiing aircraft closer to the Court Road section of Winthrop, where the odor impact would depend on the crosswind component during operations on Runways 4 and 22.	The emission inventory results show that the Airside Project, including the Centerfield Taxiway, would lead to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. The small changes in emission concentrations at Bayswater Street, East Boston, and Winthrop will meet federal standards for hydrocarbon emissions.
85.141	Air Quality	Odor	... the introduction of a new source [of odor emission] as in the case of Runway 14, is very likely to be detected, noted, and complained of. The same is probably true of an increase in frequency at which detectable odors are present, as could be the case for increased use of Runway 15 for takeoffs.	The Airside Project associated with Runway 14/32 would decrease overall odor-causing hydrocarbon emissions when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. The dispersion analysis indicates that the Preferred Alternative will have lower concentrations of odor-causing VOCs at all receptors other than at Jeffries Point. The minor increase at Jeffries Point is expected to be indistinct from the No Action Alternative.
85.142	Air Quality	Odor	Improvements in efficiency of ground taxi operations, while potentially yielding or resulting in reduction in odorous emissions generally on the airfield are not likely to be detected in the neighborhoods as reductions in odor intensity.	The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. Small changes in odorous emission concentrations will be imperceptible as measured against the No Action Alternative.
85.143	Air Quality	Impacts	The modeled increase in one-hour predicted levels of Volatile Organic Compounds ("VOCs") is of particular concern...It appears from the modeling results that the principal determinant of overall changes in VOC emissions would be the Taxiway Improvement Program. Runway 14/32 would have little impact...	Although VOC emissions increase over time because of increased aircraft operations activity at Logan Airport, emissions are lower with Alternatives 1 and the Preferred Alternative, when compared to the No Action Alternative. The decreases are attributable to both the proposed Runway 14/32 and the taxiway improvements.
85.144	Analysis Assumptions/ Methodologies	Base Year	The direct or indirect comparison of various alternatives to the baseline year 1993 is misleading. Conditions have changed substantially since 1993 in many respects, and emission rates for the various alternatives and for the various scenarios should be compared to 1998, the most current year for which operational data are available.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. The appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year.
85.145	Air Quality	Model	It is unclear why aircraft VOC emissions are not projected to increase with increasing numbers of aircraft operations. The KM Chng Environmental Study of 1996 reports that high-power operations may be significant sources of emissions of odorous compounds despite lower concentrations during that mode of operation, because of the high volume of contaminants discharged, yet this mode was not incorporated in the "odor emission" estimates.	Total VOC emissions increase with increased aircraft operations. However, low-thrust mode VOCs are reduced because of more efficient airfield operation (less delay). These emissions are most closely attributable to odor events.
85.146	Air Quality	Model	Massport should have used the same ten-year hourly average meteorological input for the air quality dispersion model [as was used for the DELAYSIM Model], and should be required to rerun the dispersion model for all of the conditions modeled for the DEIS/DEIR.	Refer to response to Comment 85.34.
85.147	Air Quality	Model	The use of the EPA Industrial Source Complex Dispersion Model utilizes too long an averaging time to adequately model peak odor concentrations...	A one-hour averaging time was used as the basis for all modeling results. This method is appropriate for estimating peak period concentrations.

Code	Topic 1	Topic 2	Comment	Response
85.148	Air Quality	Model	The modeling that was performed should be supplemented by the application of a "puff" model utilizing reasonable worst-case dispersion and dilution conditions and short-term peak emission rates, ...	Worst-case meteorological conditions have been modeled. Actual weather data and temporal aircraft distribution modeling were used to determine peak hours, days, and months of operations. Thus, true worst-case conditions have been modeled and supplemental modeling would not be instructive.
85.149	Air Quality	Model	No references are given for the assertion that newer engines associated with Stage 3 aircraft produce lower hydrocarbon emissions...Thus, the assertion that odorous emissions will decrease over time has not been substantiated.	Low-thrust mode VOCs are reduced because of more efficient airfield operation (less delay). These emissions are most closely attributable to odor events.
85.150	Ecosystems	Rare Species	The suggested program appears highly speculative...Massport should be required in the DEIS/DEIR to define a project fully acceptable to the Massachusetts Natural Heritage and Endangered Species Program that involves creation of a comparable habitat and its protection and preservation in the Metropolitan Area.	Refer to responses to Comments 85.35 and 85.78. Massport's program responds to directives from the EOEA and to its Natural Heritage and Endangered Species Program goals and guidelines.
85.151	Water Quality	NPDES permit	The presentation for minimizing water quality impacts during construction is completely inadequate and is substantively limited to the one paragraph on page 6-94.	Construction for Runway 14/32 and the Centerfield Taxiway would include excavation of unsuitable substrate, placement of clean new fill, and some regrading. Because of the flat topography on the airfield, erosion is more controllable than on more variable topography. As detailed in Section 6.9.4 of the Supplemental DEIS/FEIR, site-specific Stormwater Pollution Prevention Plans will be developed during design and as part of the NPDES construction permitting process. These measures will likely include siltation fencing, hay bales, sediment sumps, detention tanks, water quality monitoring and weekly Best Management Practices inspections.
85.152	Soil	Testing	Massport has performed no soil sampling and analysis in the principal areas of proposed excavation for the planned construction projects.	A sampling and analysis program to characterize soil conditions in potential construction areas was developed in support of the Supplemental DEIS/FEIR. The sampling and analysis involved the taking of 93 soil borings during July and August 1999 to determine both soil quality and structural characteristics. A summary of laboratory data and characterization of soils to be excavated is presented in Section 6.7.3 of the Supplemental DEIS/FEIR.
85.153	Soil	Reuse/ Disposal Options	Massport has indicated that the principal means of disposal of excavated material will be as landfill cover and contouring material. ... the Central Artery Project has substantially saturated the demand for materials for those purposes ...	Since filing of the Draft EIS/EIR, stockpiled materials at Governors Island have been moved off-site in response to a request from the receiver of the Rubchinuk Landfill in Middleton, Massachusetts. Section 6.7.4 of the Supplemental DEIS/FEIR describes this effort and identifies suitable reuse options for the remaining materials to be excavated.
85.154	Soil	Testing	... no assumption should be made about the chemical characteristics of the underlying material.	Refer to response to Comment 85.152.
85.155	Soil	Reuse/ Disposal Options	... management and disposal [of soil] is a significant program. The DEIS/DEIR treats this matter far too casually.	Refer to response to Comment 85.153.
85.156	Construction	Schedule	The statement that construction work with limited exception would only occur during the months of January, February and March, weather permitting, is puzzling. It is not consistent with Table 6.7-3; ... This matter needs to be clarified.	The only construction work proposed for the months of January, February and March is that associated with the demolition of Cargo Buildings 60 and 61. All other work associated with construction of Proposed Runway 14/32 and the taxiway improvements is proposed for the period of April through December.

Code	Topic 1	Topic 2	Comment	Response
85.157	Construction	Mitigation	Need to discuss construction worker access to site and related potential parking issues.	Runway and taxiway construction is similar to highway construction and is not labor intensive. As few as two and as many as 50 to 75 people would be working on the Airside Project construction at any one time, with an average of 15 to 20 workers on-site during a typical shift. By comparison an average of 15,000 non-construction employees work at Logan Airport on a daily basis. Parking on-site will be limited. Under Massport's construction period mitigation program, construction workers will be subject to a contractually required transportation management program. Workers are expected to commute to and from the construction site by using public transportation or high occupancy vehicles, such as shuttles or buses.
85.158	Construction	Air Quality	Massport has failed to demonstrate how fugitive dust emissions from construction operations on the airfield during winter months will be controlled.	Refer to response to Comment 85.36.
85.159	Construction	Mitigation	Wheelwash facilities generate considerable quantities of silt and sediment-laden water. Massport has not discussed how discharge of these contaminants will be controlled.	Wheelwash water will be discharged to grass areas on the airfield. This allows for the settling of sediments and the infiltration of water into the ground. Catch basins will be protected by silt fences or other suitable sediment barriers
85.160	Construction	Noise	Massport proposes to use the Federal FHWA Criteria for construction noise impact. Massport fails to recognize the criteria applied by Massachusetts Department of Environmental Protection, which limit construction noise increases to 10 dB(A) above background and prohibit pure tones as defined by DEP (DEP Policy 90-001). These criteria are applicable to this project.	The DEP identifies two criteria against which construction noise can be judged: it cannot increase ambient levels by more than ten dB, and it cannot produce a "pure tone" condition. Section 6.9.4 of the Supplemental DEIS/FEIR contains an analysis of construction noise with reference to these criteria. Refer to Comment 85.37.
85.161	Noise	Nighttime Noise	Other shortcomings of the Massport construction noise analysis are its failure to address the matter of pure tones and of impact noise and the failure to separate out and separately analyze nighttime construction noise levels against nighttime ambient levels ...	A discussion of nighttime construction noise levels has been included in the Supplemental DEIS/FEIR. The analysis of nighttime construction noise levels does not show any significant impact from construction noise.
85.162	Construction	Traffic	How will construction vehicles accessing or exiting via the North Gate be precluded from use of local streets?	The use of Neptune Road for *direct* connection to Route 1A (Northbound entrance ramp or southbound exit ramp) is the only portion of Neptune Road approved for contractor access or egress. This requirement will be contained within the contract specifications for the Airside Project.
85.163	Construction	Stormwater	The Soils Use Policy and the Stormwater Pollution Prevention Plan should be available for and subject to public review and comment.	The Massport Soil Use Policy and Stormwater Pollution Prevention Plan are available for review through the Massport Environmental Unit.
85.164	Noise	Sound Insulation	The statement is made, "After sound-proofing to mitigate impacts within the 65 YDNL Contour, the full-build alternatives provide net long-term benefits." We disagree with this statement.	Refer to response to Comment 85.28.
85.165	Air Quality	Odor	There is potential for adverse odor impacts in certain areas proximate to the airport, as a result of this project.	Odor impacts are generally lower with the Airside Project than without, as illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR.
85.166	Construction	Traffic	The statement expressing total peak construction trips as a percentage of the average annual daily traffic on the regional highway system is misleading, since most of the construction-related traffic consists of heavy vehicles.	Refer to Section 6.9 of the Supplemental DEIS/FEIR for an updated analysis of truck trips.
85.167	Environmental Review Process	FAA/NEPA	Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan. The DEIS/DEIR makes a clearly contrary statement (page 7-3): ...	Refer to response to Comment 85.16.
85.168	Analysis Assumptions/ Methodologies	Planning Period	The planning period is inadequate, and should be extended to 2020.	Refer to responses to Comments 85.3 and 85.40.

Code	Topic 1	Topic 2	Comment	Response
85.169	Alternatives	Delay	There is no plan or program to deal with long-term growth at Logan, which will soon overwhelm any interim benefits of this project. There are measures that could be instituted to effectively address transportation in eastern New England, but there is no discussion in this document.	Refer to response to Comment 85.14.
85.170	Environmental Review Process	MEPA	...the Secretary of Environmental Affairs should determine that these significant planning deficiencies exist in the DEIS/DEIR that must be addressed. The DEIS/DEIR should be found inadequate, and a new Draft document should be required.	Refer to response to Comment 85.12.
85.171	Purpose and Need	Delays	Delay does not appear to be a major problem at Logan, based on FAA reports and Massport's 5-year history of inaction.	The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States. Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. Refer also to response to Comment 85.4.
85.172	Analysis Assumptions/ Methodologies	Passenger Forecasts	This project and landside projects at Logan are interdependent, and both will increase capacity and stimulate demand.	Refer to responses to Comments 85.1, 85.16, 85.17 and 85.80.
85.173	Cumulative Impacts	Master Plan	The Airside Improvements Project is already "divisive and disruptive of established communities," and prospects for the long term are significantly worse.	Refer to response to Comment 85.115.
85.174	Noise	Sound Insulation	With respect to Section 7.3.1, Noise, it is necessary to iterate that the "sound-proofing" does not fully mitigate for the impacts of increased overflights and increased ambient noise.	Refer to response to Comment 85.28.
85.175	Air Quality	Model	With respect to odor impacts that may be associated with the proposed project, we believe the modeling approach used by Massport to be flawed and to require substantial enhancement.	The modeling of hydrocarbon emissions (used as an indicator of odor) was performed using MDEP-approved methods and is accurate.
85.176	Delay	Model	Questions why the Airport Machine Model and not the FAA-approved SIMMOD Model was used for capacity and delay analysis.	FAA recognizes and approves the Airport Machine model. In fact, the FAA helped fund Massport's acquisition of the Airport Machine for taxiway studies at Logan Airport. SIMMOD is an older, more general-purpose model that is most useful for airspace studies rather than capacity and delay analysis of runways and taxiways. The Airport Machine Model used in the analysis was developed to reflect operating conditions at Logan Airport.
85.177	Delay	Model	The CODAS information should be incorporated into the models developed (FLAPS and DELAYSIM) for the evaluation of the airside improvements at Logan. CODAS...should be considered in lieu of The Airport Machine.	Because the FAA and U.S. DOT delay statistics, including CODAS, only record historical delays, the FAA requires delay modeling when evaluating the future delay reduction benefits of airport capital improvements. This analysis indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels.
85.178	Delay	Model	It is unclear why Massport chose to develop its own model for estimating delay when FAA has developed a model to do the very same.	DELAYSIM is a unique model that simulates how Air Traffic Control uses an airport's runways over time based on actual weather patterns and expected demand conditions. The FAA does not have an equivalent model, but uses a simplified (and less precise) procedure of weighting delays based on percentage of time different weather conditions exist. Refer also to response to Comment 85.46.
85.179	Delay	Model	The models have not been verified or compared with historical information nor has it been shown that the development has been coordinated with FAA or the airlines.	Refer to first paragraph of Comment 85.46. The airlines were represented on the Airside Review Committee, an integral and active part of the Airside Project public process.
85.180	Delay	Model	Questions dates of hourly weather observation used and changes due to El Nino and La Nina.	Refer to response to Comment 85.5.

Code	Topic 1	Topic 2	Comment	Response
85.181	Delay	Model	One of the assumptions of the DELAYSIM model is that an air traffic controller first chooses 1) highest capacity configuration, 2) the configuration that most closely meets the PRAS goals. We believe this assumption is not supported by historical data ...	The DELAYSIM model uses the same logic for choosing a runway configuration as PRAS. First, the runways must be available given the current wind and weather. Second, the runways should be able to accommodate the projected demand for the hour in question (this may not be possible given the weather conditions). Finally, if multiple configurations meet these criteria, the selection attempts to maximize both short-and long-term PRAS goals without excessive controller workload. Annual goal conformance has improved since the Revised PRAS was installed in 1993, and Runway 14/32 would provide controllers with considerably more flexibility to achieve the PRAS annual goals in the future as well as enabling them to increase short-term relief. Refer also to response to Comment 85.20.
85.182	Delay	Model	No data is presented to show recent improvement due to the availability of Enhanced PRAS (EPRAS).	Refer to response to Comment 85.11.
85.183	Delay	Model	The DELAYSIM model should withdraw the PRAS goal decision-point as a runway configuration selection criteria and provide the model results using, as the leading criteria, the highest capacity configuration and air traffic controller workload weightings approved by FAA ATC.	Refer to response to Comment 85.47.
85.184	Delay	Model	For the model to assume the attainment of PRAS goals will improve significantly is unrealistic ...	Runway selection is constrained by weather conditions and demand characteristics, and it is unlikely that all eleven-runway end use goals can be attained in a given year. Annual goal conformance has improved since the revised PRAS was installed in 1993, and Runway 14/32 would provide controllers with considerably more flexibility to meet the PRAS annual goals in the future and enable them to increase short-term relief.
85.185	Delay	Model	The methodology of the DELAYSIM model as applied by Massport provides output that reflects a "best-case" though unrealistic scenario, and warps the follow-on analysis of the environmental issues.	The DELAYSIM model is based on what is believed to be a realistic attainment of PRAS with Runway 14/32. DELAYSIM represents the most refined model available for estimating long-term airfield operational use and delays. It is based on actual weather patterns, realistic demand variations, and validated airfield capacity under all foreseeable operating conditions. DELAYSIM models the FAA runway selection hierarchy of weather/wind, demand and then noise, and also includes controller workload constraints. The model was used to evaluate a set of operating scenarios representing the foreseeable range of Logan Airport's air traffic. The results of the operations and delays modeling provided inputs for sound environmental assessments.
85.186	Delay	Model	The assumptions made by the DELAYSIM model do not account for stimulative effect that would occur if these improvements are implemented.	Refer to responses to Comments 85.1, 85.16 and 85.17.
85.187	Delay	Model	Measurement of capacity and delay benefits requires that the relationship depicted in Figure 3-2 be determined for both the existing system and the proposed new one.	Figure 3-2 in the Airside Project Draft EIS/EIR is merely a conceptual diagram, but since the airfield improvements do not increase normal operating capacity of 120 operations per hour, the same relationship holds for the both existing and proposed situations.

Code	Topic 1	Topic 2	Comment	Response
85.188	Alternatives	Runway 14/32	Since FAA includes recognition of the stimulation effect in determining delay reduction, the model Massport uses should do the same.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated by passenger or airlines, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts examined in the airside operational and environmental analyses would capture any potential variation in future passenger and aircraft activity at Logan Airport.
85.189	Delay	Model	The FAA Technical Center at Atlantic City, New Jersey, should assist in simulating operations of the proposed new runway to verify the validity of the sole-source models used by Massport.	Refer to 85.46.
85.190	Delay	Model	[Concerned that] Massport's Airside Improvement Project proposal will not preclude increases in the delay experienced by airlines and their passengers. ... [and] building and operating a unidirectional Runway 14/32 is but a band-aid.	Refer to response to Comment 85.13.
85.191	Analysis Assumptions/ Methodologies	Forecasts	...[the] statement that if no actions are taken, Logan's annual runway and taxiway delays will rise... and exceed...today's modeled level.. High Fleet scenario ignores the multitude of other factors that would affect industry and passenger decisions.	The 45 million-passenger level was the highest traffic volume examined in the analysis and represents upper bounds for environmental impact analysis. As a result, undue weight was not given to the 45M High Fleet scenario in evaluating the comparative benefits of airside alternatives.
85.192	Delay	Model	The DEIS/DEIR indicates that "in 1998, it is estimated that Logan experienced approximately 121,000 hours of runway delay," ... the 121,000 hours of delay was generated by Massport's model and not by FAA. Presentation of this data, without reference, is misleading.	Refer to response to Comment 85.46. The methodology used for the Airside Project provides a consistent and systematic estimate of flight delays caused by constraints at Logan Airport. The analysis based on this methodology indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels.
85.193	Analysis Assumptions/ Methodologies	Base Year	FAA calculated and reported delay at Logan has decreased almost 19% between 1993 and 1998. This information is not in DEIS/DEIR.	Refer to response to Comment 85.4.
85.194	Delay	Model	The DEIS/DEIR indicates that Logan's delay is six times the FAA's threshold; however, this analysis is flawed since the 121,000 hours of delay are measured by a different method than FAA's measurement.	Although the methodologies for measuring delays may differ, both are designed to indicate the severity of the delay problem at Logan Airport. FAA statistics consistently rank Logan Airport as one of the nation's most delayed airports.

Code	Topic 1	Topic 2	Comment	Response
85.195	Delay	Model	DELAYSIM, the model used for the Logan Airside Planning Project, overestimates the amount of delay hours.	Refer to response to Comment 85.46. In fact, the FAA models tend to overstate delays since they use weighted averages rather than continuous weather conditions.
85.196	Delay	Model	Massport exaggerates the cost of delay to airport users (airlines) and airport passengers. ... by counting cancelled flights.	The FAA considers avoided flight disruptions, along with delay reductions, safety improvements and cost savings, as the primary benefits of aviation investments. Cancelled flights, often because of delay conditions, represent a real cost to passengers and airlines. The cost is modeled by estimating the delays that would be incurred if the flight were not cancelled.
85.197	Delay	Model	Massport also assumes that all passengers can be represented by a single "representative passenger" when economically there are different economic values for business versus pleasure travelers. ...	The cost of delay analysis presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is based on a methodology recommended by the FAA. The cost of delay to a passenger ($27 per hour) is a weighted average cost for business and leisure passengers. Refer to FAA APO Bulletin APO-97-1.
85.198	Delay	Model	The generalized use of $27 per passenger overestimates the value of delay for airline passengers at Logan.	Refer to response to Comment 85.197.
85.199	Delays	Costs	Massport ... indicated cost information would not be provided except the initial construction cost of the project.	A cost-benefit analysis was not used to select among the various alternatives. The cost of delay information was presented to provide context to the delay problem at Logan Airport.
85.200	Environmental Review Process	MEPA	If cost information is to be presented as part of the analysis process for the DEIS/DEIR, a full cost-benefit analysis should be provided.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
85.201	Analysis Assumptions/ Methodologies	Base Year	... the selection and justification of 1993 as the base year ... is inappropriate.	Refer to response to Comment 85.3.
85.202	Analysis Assumptions/ Methodologies	Planning Period	... Massport is presenting information based on five-year-old data and analyzing the results for only a ten-year period in the future.	Refer to responses to Comments 85.3 and 85.40.
85.203	Delay	Model	...analysis was provided for the base year, yet Table 4.5-1 does not indicate the total delay hours for 1993...	The model indicated 135,339 delay hours for 1993 (refer to Figure 4.6-2 and Appendix H in the Draft EIS/EIR).
85.204	Delay	Model	The statement that "1998 delays are less than those experienced in 1993" points up flaws with the forecasting of delay using the methodology and approach presented in the DEIS/DEIR.	The statement referred to FAA reported (Opsnet) delays, which declined from 19,838 in 1993 to 16,403 in 1998. This decline in FAA delays was supported by the Airside Project modeling in the Supplemental DEIS/FEIR which showed a reduction in 1998 delays (120,000 hours) compared to 1993 (185,000 hours). Although total operations were nearly equivalent (519,000 in 1993 and 514,000 in 1998), the fleet mix and demand profile were significantly different. The high delays in 1993 were principally caused by a very peaked schedule with hourly operations exceeding 120 per hour.
85.205	Delay	Model	The document ... indicates that FAA's threshold is to be exceeded by eight times. This comparison is inappropriate since the measures of delay are not the same...	Refer to response to Comment 85.194.
85.206	Delay	Costs	Again, this section of the DEIS/DEIR puts a value on the delay savings that is inappropriate and inaccurate.	Refer to response to Comment 85.197.

Code	Topic 1	Topic 2	Comment	Response
85.207	Delay	Model	... the implementation of Alternative 1 or 1A ... is providing additional capacity ... providing additional "through-put" of aircraft operations.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
85.208	Delay	Model	If as the DEIS/DEIR states, there are delay savings realized by this delay reduction, then there is also a stimulation of air travel demand ...This stimulation is not reflected in the annual hours of delay calculations.	Refer to response to Comment 85.186 & 85.188.
85.209	Analysis Assumptions/ Methodologies	Base Year	Figure 4.5-3, Distribution of Jet Aircraft Operations by Operating Direction, illustrates 1997 actual data. 1997 is not the base year.	The *Logan Airport 1998 Annual Update* included this information which had been developed in late1998. *The Supplemental DEIS/FEIR* provides updated information for the year 1998.
85.210	Noise	Model	... assumes that FAA controllers would select the a) highest capacity configuration, b) meeting of PRAS goals. This assumption has not been historically proved to be true.	Refer to response to Comment 85.181.
85.211	Delay	Model	The section "Revised Wake - Vortex Turbulence Rules" implies that the "new" wake turbulence rules require one aircraft to follow the other at the stated distances. These rules are applicable only to Air Traffic Controllers for providing required spacings between aircraft for following and crossing traffic.	Section 1.5.3.2 of the Airside Project Draft EIS/EIR discusses FAA revisions to IFR radar separations and aircraft weight classifications. These represent the closest separations that can be applied by the controllers under IFR conditions. When visual flight is possible, pilots may visually separate themselves from preceding traffic. Visual separations are typically about 85 percent of IFR separations.
85.212	Delay	Model	Page 4-41 describes 1998 annual delay as 143,000 hours, whereas Page 1-12 describes 1998 annual delay as 128,000 hours. These are modeled hours, a product of "DELAYSIM," not measured hour or "FAA" hours.	Page 1-12 of the Airside Project Draft EIS/EIR clearly states that the 121,000 hours are from DELAYSIM. These are runway-only delays. Page 4-41 of the Airside Project Draft EIS/EIR refers to total modeled delays including runway and taxiway.
85.213	Analysis Assumptions/ Methodologies	Base Year	The use of 1998 data rather than 1993 data strengthens the argument that the "Base Year" must be revised.	Refer to response to Comment 85.3.
85.214	Delay	Model	Questions the validity of the total delay hours calculated by the DELAYSIM model.	The DELAYSIM model represents the most precise model developed to date for measuring delay at Logan Airport.
85.215	Regional Transportation	Regional Airports	No discussion was included concerning development of a new airport to accommodate demand and reduce delays at Logan.	Refer to response to Comment 85.9.
85.216	Alternatives	Other Non-Construction Alternatives	No discussion was included concerning Consideration of Implementing a High-Density Rule (Slots) to control congestion at Logan.	Refer to response to Comment 85.54.
85.217	Noise	Nighttime noise	No discussion was included concerning ...Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions ... A specific measure that could be considered is a cap on nighttime operations.	Refer to response to Comment 85.26.

Code	Topic 1	Topic 2	Comment	Response
85.218	Regional Transportation	Regional Airports	No discussion was included concerning Diversion of general aviation traffic and origin/destination traffic of both regional non-jet and short-haul jet traffic to Massport's Hanscom Field.	Section 2.6 of the Supplemental DEIS/FEIR includes a discussion of Hanscom Field's role in the regional transportation system. General aviation traffic forms a very small percentage of Logan Airport operations (less than five percent) and is not a significant factor in the accumulation of delay. Hanscom Field is a designated reliever airport for Logan Airport and Massport maintains it to encourage use by general aviation. Consistent with Hanscom Field's 1974 Master Plan and the Hanscom GEIR, Massport recently approved the commencement of regional non-jet service at Hanscom Field. Also refer to Comment 85.8.
85.219	Regional Transportation	Regional Airports	[Believe Hanscom has potential to absorb O&D]	Refer to response to Comment 85.8.
85.220	Regional Transportation	Regional Airports	Does not the very conclusion of the Second Major Airport study point out that long-term considerations to meet increasing demand require that a second airport ... be an alternative to the improvements recommended?	Refer to response to Comment 85.9.
85.221	Regional Transportation	Regional Airports	... the development of another air carrier airport has not been reasonably discussed nor have the reasons for its elimination as an option.	Refer to response to Comment 85.9.
85.222	Regional Transportation	Regional Airports	The fact that Massport does not provide long-term planning forecasts ... teamed with its inability to provide as an option the development of a second airport highlights the short-sightedness of the long-term development. ... In the case of many of the close-in neighborhoods, the option for a second airport is reasonable to minimize adverse impacts on their quality of life.	Refer to responses to Comments 85.9 and 85.40.
85.223	Regional Transportation	Diversions	Questions why diversion of passengers to regional airport use, rail use and video and online conference use are indicated to be the same at a 45M forecast level and a 37.5M forecast level.	The estimated passenger diversion of up to 7.3 million includes 3.4 million to regional airports, 2.4 million to telecommunications, 1.2 million to Boston-New York high speed rail service, and 0.3 million to other regional rail projects. The regional airport diversion estimates are averages of the diversion estimates for the 37.5M and 45M passenger demand scenarios. The averages were presented in the Airside Project Draft EIS/EIR document for simplicity of presentation. The rail estimates are from existing, independent rail planning documents that examined total inter-city travel demand regardless of mode of travel and then predicted mode shifts that would result from implementing the rail project. Hence the rail estimates do not differ for the 37.5M and 45M Logan Airport passenger scenarios.
85.224	Regional Transportation	Regional Airports	... the estimated service area of the alternate airports remains the same in 2010 as it is in 1994. This is not an accurate assumption ... Massport fails to list Hanscom Airport as a potential diversion airport.	The regional airport diversion analysis presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR was based on objective service area assumptions. Each service area was defined solely by driving time criteria. In other words, each regional airport's service area consists of cities and towns for which it is the closest airport, regardless of the availability of more services and/or lower airfares at more distant, but larger airports such as Logan Airport. In reality, passengers do drive to larger, but less convenient airports because they offer greater service choices or better airfares than the local regional airport. Thus, the area from which a regional airport draws traffic is often limited by the existence of nearby, larger airports. These limitations were not considered in the regional airport, service area, assumptions that underlie the regional airport diversion analysis.
85.225	Regional Transportation	Regional Airports	Massport fails to list Hanscom Airport as a potential diversion airport.	Refer to response to Comment 85.8.

Code	Topic 1	Topic 2	Comment	Response
85.226	Regional Transportation	Regional Airports	This is a regional problem demanding of regional solutions. ... The Airside Improvement Project must be viewed in this larger regional context.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
85.227	Alternatives	Peak Period Pricing	Questions assumption to have peak hour pricing be revenue neutral and pertain only to Airfield revenue and costs at Logan.	Refer to response to Comment 85.62. Guidance with respect to a PPP program and its cost-based structure is set in U.S. DOT's decision in the PACE procedure.
85.228	Alternatives	Peak Period Pricing	Massport's previous experience with regulatory challenges in implementing a demand management technique has affected the assumptions of the model developed.	It would not be prudent to ignore prior experience in developing an illustrative pricing structure for consideration. Refer also to response to Comment 85.62.
85.229	Alternatives	Peak Period Pricing	Suggest a different approach to efficiency, away from the number of aircraft operations in specific periods to maximizing throughput of passengers.	Refer to response to Comment 85.63.
85.230	Alternatives	Peak Period Pricing	Massport's model for peak hour pricing has chosen too narrow a definition of the regulatory criteria it must meet to establish a peak hour pricing structure.	Massport disagrees. Refer to responses to Comments 85.62 and 85.228.
85.231	Alternatives	Peak Period Pricing	[Massport's model for peak hour pricing] also has chosen a higher operational threshold (115 operations) which underestimates the delay reduction capabilities of peak hour pricing.	This statement is incorrect. The PPP analysis was conservatively based on an assumed threshold of 110 operations per hour. Given Logan Airport's normal operating capacity of 120 operations per hour, a higher threshold, like 115 operations per hour, may be appropriate, if PPP is implemented.
85.232	Analysis Assumptions/ Methodologies	Fleet Mix	Massport chose varying data information, both 1993 and 1995 flight schedules for modeling peak hour pricing simulations. Massport has again chosen the input of information which will provide the output it expects.	1993 and 1995 were chosen as representative of historic high and low fleet operating conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR. 1993, the peak year for regional carrier activity at Logan Airport when three large regional airlines were competing actively, is representative of a 37.5 High Fleet scenario. Conversely, 1995, which reflects the failure of Precision Airlines and only two major regional carriers serving the Boston market, is representative of Low Fleet operating conditions.
85.233	Alternatives	Peak Period Pricing	The option of utilizing "costing" (including peak period pricing) approaches for the purpose of delay reduction should be retained.	Refer to response to Comment 85.66.
85.234	Regional Transportation	Diversion	A shift away from air travel through reliance on other means of travel or communication is essential. Vigorous measures to foster and encourage this shift should be undertaken by State government in cooperation with Amtrak and telecommunications providers.	Refer to response to Comment 85.67.
85.235	Alternatives	Preferred Alternative	No indication of how the project is to be financed is provided ...	Refer to response to Comment 85.70.
85.236	Environmental Review Process	FAA/NEPA	Table 8.8-1 does not include the benefit-cost analysis as part of the anticipated permits and approvals required by the FAA.	Refer to response to Comment 85.68.

Code	Topic 1	Topic 2	Comment	Response
85.237	Environmental Review Process	FAA/NEPA	... there is no economic analysis of the noise impacts regarding the various alternatives.	Refer to response to Comment 85.69.
85.238	Alternatives	Runway 14/32	The discussion of this (Option C) as a feasible option did not include a discussion of aborted takeoffs in the 14 direction, and whether the reduced safety overrun would be approvable under that scenario.	Runway 14 is not expected to be used for departures, and these departures would be over water and mostly by smaller aircraft which do not require as large a Runway Safety Area (RSA). For ARC B-III aircraft, the RSA is only 600 feet by 300 feet compared to the 1,000 foot by 500 foot RSA shown in Figure 3.2-4 of the Supplemental DEIS/FEIR. Option C includes a layout design in accordance with FAA standards that provide for safe takeoffs.
85.239	Alternatives	Runway 14/32	Differentiate between cross wind of 20 knots and cross wind component of 20 knots.	A direct crosswind of 20 knots would equate to a wind direction that is perpendicular (90 degrees) to the runway direction. A crosswind component is the calculated equivalent impact of winds that are at an angle of less than 90 degrees to the runway. The wind rule referenced on Page 3 through 7 of the Airside Project Draft EIS/EIR refers to crosswind and tailwind components of the wind vector.
85.240	Alternatives	Taxiway Improvements	The summary of advantages cited for the Centerfield Taxiway (page 3-29) supports the community concern that the presence of the Centerfield Taxiway will make the use of the 4/22 runway combinations more attractive and ... it would increase the tendency to stack aircraft in the northern section of the airfield.	Refer to response to Comment 85.74.
85.241	Alternatives	Runway 14/32	The preferred alternative recommendation does not state which runway option is being recommended. If ... Option C is the preferred layout. ... then it is critical to note that this option would require a modification to standard from the FAA regarding the runway safety area.	Refer to Section 8.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32 and that Option C requires a determination of an acceptable level of safety.
85.242	Alternatives	Runway 14/32	The discussion of Option C does not evaluate the potential of declared distances or displaced thresholds in lieu of requesting a modification to standard.	Declared distances may be used when standard runway safety areas cannot be provided. Massport's Option C provides a full 1,000-foot safety area at both ends of the runway on centerline with only a small percentage of the runway safety area on Runway 32 over water. This option, plus the planned addition of visual aids for pilots (*e.g.*, PAPI/REIL), will provide a reasonable and practicable level of safety.
85.243	Analysis Assumptions/ Methodologies	Fleet Mix	The aircraft mix projected to use Runway 14/32 that was used in the noise analyses should be stated, and justified.	Unidirectional Runway 14/32 would be principally used by regional non-jets and small jet aircraft capable of landing or taking off in 5,000 feet. Appendix E of the Supplemental DEIS/FEIR contains the fleet mix and runway use percentages for each scenario. Sections 6.2.1 and 6.2.5 of the Supplemental DEIS/FEIR present summaries of the INM inputs used for the in-flight noise analysis.
85.244	Analysis Assumptions/ Methodologies	Fleet Mix	The justification on Page 3-24, that only regional and commuter aircraft will use the runway is not consistent with the Airport Design Category (ARC) selected for the Runway which is C-III. C-III aircraft include the following: * Airbus A-320-1000 * BAC 111-200, -300, -400 & -475 * Boeing 727-100, & -200 * Boeing 737-100, -200, -300, -400 & -500 * Fokker F-28-3000 & -4000 * MDC DC-9-10, -15, -20, -30, -40 & -50 * MDC DC-9-80 & -82	Design Category C-III indicates the highest approach speed and widest wingspan of the aircraft intended to use the runway. Approach Category C includes a number of business jets as well as the Saab 2000 and Avro RJ100 commuter jets. Design Group III includes a host of commuter aircraft such as ATR, Avro RJ, ATP, Dash7, Dash8, Fokker 50/60, and Saab 200. Although larger jets fall into the C-III as noted in the comment, their required runway takeoff and landing distances would prevent most of these aircraft from using Runway 14/32. For operating efficiency, FAA controllers would keep the large jets on Runway 33L and the smaller aircraft on Runway 32.

Code	Topic 1	Topic 2	Comment	Response
85.245	Alternatives	Runway 14/32	It appears that Massport is presenting the proposed runway as a non-precision runway used only by commuter aircraft. However, it is obvious that long-range plans include precision instrument capabilities and operations by a variety of large jet aircraft.	A precision runway is one that provides electronic landing guidance in the vertical dimension, which can benefit all types of aircraft operations, not just commercial jets. Runway 32 has always been intended for precision approach guidance, probably using the new GPS navigation capability. Landing instrumentation is no indication of the aircraft that will use a runway. Most large jet aircraft would be unable to use Runway 14/32 because of its length. Refer also to Comment 85.244.
85.246	Alternatives	Runway 14/32	... Massport cannot, as proprietor of the airport, ensure that proposed Runway 14/32 will be unidirectional.	Refer to response to Comment 85.19.
85.247	Alternatives	Runway 14/32	Although Massport states that Runway 14/32 will be built with a non-precision approach, their discussion shows that there may be the possibility of making this a precision approach...with construction of a light pier (for Runway 32] similar to that on Runway 33L. ... the runway combinations of arrivals on Runways 33L and 32, with departures on Runway 27, would become the highest capacity combination under IFR conditions.	The primary benefit of Runway 14/32 is to reduce delays during VFR conditions when strong northwesterly winds current limit Logan Airport to a single arrival stream. During IFR conditions, landings on Runway 32 would be limited by obstacle clearance—ship masts in the harbor and buildings in Boston. No approach lighting pier is planned for Runway 32 since it could not improve the landing minimums below 400 to 500 feet. Moreover, under IFR conditions the capacity of the Runway 33L/32/27 configuration would be compromised by the need for diverging missed approach and departure paths and the crossing of both Runway 32 and Runway 33L by Runway 27 departures.
85.248	Delay	Model	The delay hours projected by Massport are the artifacts of its own model, and do not comport with the FAA's procedure for calculating delays at airports. In addition to calculating every minute of delay associated with every single flight, it fails to take into account normal flight cancellation activities by airlines. Additionally, FAA calculation and tabulation of delays at Logan over the last five years shows little change either year to year or as a trend.	Refer to response to Comments 85.46, 85.195, and 85.196.
85.249	Alternatives	Peak Period Pricing	...peak period pricing must be instituted immediately.	Refer to response to Comment 85.66.
85.250	Alternatives	Runway 14/32	"Modification of standards" for Layout Option C should be thoroughly explored.	A Determination of Acceptable Level of Safety, not a Modification of Standards, is required from FAA for Option C.
85.251	Air Quality	Impacts	... believe there are adverse air quality impacts associated with construction of Runway 14/32 and the Centerfield Taxiway.	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.
85.252	Noise	Sound Insulation	Residential "sound-proofing" does not fully mitigate the impacts... from implementation of Alternative 1 or Alternative 1A...	While sound insulation does not mitigate exterior sound levels, it is a widely accepted measure considered appropriate for general mitigation of noise impacts. Sound insulation reduces noise inside the home. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative. Measures designed to improve PRAS (i.e., the PRAS monitoring program) are also mitigation measures. Improved achievement of PRAS goals under the Preferred Alternative will further benefit the most highly exposed areas around Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
85.253	Noise	Impacts	The reduction in ground noise impacts claimed for Alternative 1 or Alternative 1A...is likely to be short-lived...	The ground noise analyses in Section 6.2.4 of the Airside Project Draft EIS/EIR lead to the opposite conclusion. For example, Table 6.2-21 of the Airside Project Draft EIS/EIR indicates that, at all seven sites examined, the reduction in exposure is greater under both the longer-term 37.5M High Fleet and 29M Low Fleet scenarios than it is under the near-term 29M Low Fleet scenario. Recent growth trends suggest the 37.5 million passenger level is now more likely to occur around 2015. (Refer to related discussion in Section 1.4.2 of the Supplemental DEIS/FEIR).
85.254	Ecosystems	Rare Species	... creation of a replacement habitat on Cape Cod [for the upland sandpiper] appears to ignore geography and is of questionable benefit.	Refer to response to Comment 85.78.
85.255	Alternatives	Peak Period Pricing	...disagree with the recommendation to defer implementation of peak period pricing.	Refer to response to Comment 85.66.
85.256	Alternatives	Runway 14/32	The commitment to maintain Runway 14/32 as a unidirectional runway is clearly reversible.	Refer to response to Comment 85.19.
85.257	General Opposition		... this project sends [the signal] that Massport continues to be committed to expansion of Logan Airport, ... concerns ... the surrounding communities.	Refer to response to Comment 85.80.
85.258	Analysis Assumptions/ Methodologies	Planning Period	The selection of the preferred alternative responds solely to the current conditions and points out Massport's continued blindness to the long-term demand and capacity issues.	Refer to response to Comment 85.82.
85.259	Alternatives	Preferred Alternative	Alternate No. 2 and Alternate No. 3 appear to be the most viable for the community.	Refer to response to Comment 85.81.
85.260	Environmental Review Process	FAA/NEPA	The DEIS/DEIR discusses the preferred alternatives effect on historic districts but does not comment on the urban quality, or the design of the built environment.	The proposed projects evaluated under each of the alternatives are located on the existing airfield. Implementation of any of the proposed projects will not physically change the urban characteristics or the design of the built environment within adjacent communities when compared to the No-Action Alternative. Off-airport noise impacts from the Preferred Alternative are discussed in Section 6.2 of the Supplemental DEIS/FEIR.
85.261	Environmental Justice	Impacts	The external costs ... that the preferred alternative would impose on the Logan communities are substantial. These costs have not been adequately assessed ...	Refer to response to Comment 85.68.
85.262	Open Space/ Parkland	Impacts	Noise impacts on historic sites ... was not adequately evaluated ...	The FAA and Massport have consulted with the Massachusetts Historical Commission (MHC). The MHC has concurred with the FAA's determination that the Preferred Alternative will have no adverse effect on significant historic properties. Refer to Section 6.3.2 of the Supplemental DEIS/FEIR for a description of historic properties, project impacts and mitigation.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "Anastasia Lyman" <alymaninc@earthlink.net>
Date: Comment on EOEA #10458 - please confrim receipt of this comment
Attach: Wednesday, April 21, 1999 4:38:33 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 86

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18 Greenough Avenue
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April 20, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Unit
Arthur Pugsley, EOEA No. 10458
1000 Cambridge Street - 20th floor
Boston, MA 02202

Dear Secretary Durand,

am writing to comment on the Massachusetts Port uthority's (MPA) Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/R) EOEA #10458.

The DEIS/R does not make a credible case for building the proposed Runway 14/32 in order to solve operational delays at Logan International Airport. Its conclusions are based on out-dated data and a system for projecting delays which is neither approved nor accepted on a national level by the FAA. The chosen system produces large numbers of hourly delays contrary to FAA and DOT figures which show quite the opposite.

The DEIS/R does not adequately addresss either the socio-economic impacts or the significant environmental impacts from the proposed project to inner city metropolitan Boston communities. At the same time, it simply dismisses the environmental justice issue by proffering the mitigation of sound insulation. The report, however, fails to consider FAA Order 5100.38A in this regard. Order 5100.38A makes any structure not up to current local building de ineligible to receive AIP funds. Since the cost

86.1

86.2

born by the owner, and since most residences newly impacted by this project's noise are in low-income and minority neighborhoods, it is safe to assume that such costs would be a hardship and possibly unlikely to occur. Therefore, there would be no mitigation, and the lack thereof would be explicitly due to economic hardship.

The computer noise model (INM) used in the EIS projects a tripling of noise over most of South Boston, the South End, Roxbury, Jamaica Plain, East Boston, Charlestown and most of Chelsea. Incredibly, such an increase is not deemed to be a "significant" environmental noise impact. Furthermore, there is no discussion in the DEIS/R about how MPA could "avoid or minimize" these impacts or how MPA can "enhance the quality of the human environment" in these close-in, densely populated, low-income and minority communities. (CEQ sec.1502.1) 86.3

As you know, Regulation 301 CMR 11.01 states that MEPA must "assist each Agency in using all feasible means to avoid Damage to the Environment." Your agency cannot do so if "all feasible means" have not been analyzed. MPA has left out of its analysis any benefits derived from increasing the use of MPA's Hanscom Field or the construction of a second major airport. 86.4

As a member of the Community Advisory Committee to MPA(CAC), I did not receive a Notice of Project Change (301 CMR 11.10 [7]). It is not in the DEIS/R. My understanding is that those who received the ENF and commented on the ENF should have received the Notice. I ask that the Notice of Project Change be denied. The Notice for Lapse of Time between the publication of the ENF and the publication of the notice of the availability of the EIS/R should have been filed in August of 1998. I believe that the lapse of time was a conscious choice of MPA affecting the environmental impact conclusions in the DEIS/R through the use of out-dated data from 1993, MPA's 'base case', as well as the use of ten year old (1981-90) weather data. These important factors, upon which MPA's conclusions are drawn, are inappropriate and unacceptable. 86.5

From April 1997 through January 1999, MPA discontinued EIS/R Airside Review Committee (ARC) meetings, giving no reason other than that the project was "on hold." After a self-imposed delay of twenty months, MPA then chose not to redo the analysis with more current relevant data, but to continue using data that was, by then, between seven and seventeen years old. For that reason also, I urge that the Notice be denied and the study returned to MPA to be redone with more current data and a more complete range of alternatives.

The DEIS/R should be a full disclosure document and it is not. Noise contour maps are illegible, making the identification of exactly which communities will be impacted by which contour (DEIS/R pages 6-24 through 6-30) impossible. The reliance on the GEIR as filler for the DEIS/R is unacceptable. The 1997 GEIR is a broad scale analysis of all proposed MPA projects. Neither document adequately addresses the cumulative impacts of ground transportation environmental pollutants along with the airside pollutants. Common sense dictates that an increase of over 20 million passengers using Logan Airport within the next ten years will most certainly have an effect on ground traffic throughout metropolitan Boston. I find it outrageous, then, that MPA can state, "The Airside Project will have no effect on vehicle traffic, transit systems or major roadway intersections." " It will have no affect on VOC or NOx emissions from motor vehicles"(DEIS/R Volume II, Letter 1, Code response 1.15 & 1.16). This EIS/R and the GEIR have no detailed ground traffic study for long-term environmental impacts. 86.6

This EIS/R is a capacity-enhancing project, with large numbers of people being significantly impacted by noise, traffic and air pollution while existing environmental impacts have yet to be adequately mitigated.

I respectfully ask that the DEIS/R be found inadequate by the Secretary of Environmental Affairs for the reasons stated above, as well as for those reasons submitted by the CAC and Attorney Peter Koff. I ask that you join the CAC and Communities Against Runway Expansion (CARE) in requesting that MPA and the FAA withdraw the project from further public consideration or processing until development of a true Regional Transportation Planning Forum can evaluate regional needs and all alternatives to the Runway 14/32 proposal. 86.7

Sincerely,

Anastasia Lyman

Letter 86
Community Advisory Committee Co-Chair
Anastasia Lyman

Code	Topic 1	Topic 2	Comment	Response
86.1	Environmental Justice	Impacts	...does not adequately address either the socio-economic impacts or the significant environmental impacts...to inner city metropolitan Boston communities.	Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8.6 of the Supplemental DEIS/FEIR for additional information.
86.2	Noise	Sound Insulation	Concerned about sound proofing eligibility on low income homeowners with existing code violations.	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport-sponsored sound insulation program. However, to address impacts in particular projects such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of this mitigation program to the extent such improvements are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes.
86.3	Noise	Impacts	The computer noise model (INM) used in the EIS projects a tripling of noise over most of South Boston, the South End, Roxbury, Jamaica Plain, East Boston, Charlestown and most of Chelsea. Incredibly, such an increase is not deemed to be a "significant" environmental noise impact.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities.

Code	Topic 1	Topic 2	Comment	Response
86.4	Regional Transportation	Regional Airports	MPA has left out of its analysis any benefits derived from increasing the use of MPA's Hanscom Field or the construction of a second major airport.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. A second major airport is not a solution to the current delay and congestion problems at Logan Airport.
86.5	Environmental Review Process	MEPA	I did not receive a Notice of Project Change [301 CMR 11.10(7)]. I ask that the Notice of Project Change be denied.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
86.6	Noise	Studies	Noise contour maps are illegible, making the identification of exactly which communities will be impacted by which contour (DEIS/R pages 6-24 through 6-30) impossible. . The reliance on the GEIR as filler for the DEIS/R is unacceptable.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
86.7	Environmental Review Process	MEPA	I respectfully ask that the DEIS/R be found inadequate....	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Dear Mr. Pugsley,

I am writing you today to express my support for the findings of the CAC consultants with regard to the Logan Airside Improvements Project EOEA #10458. I find the document to be lacking in many areas.

The delay problem will continue to grow regardless if there is a new runway because of the projected growth of passengers. Flight delays due to this projected growth will not be the only result from this growth but there will be catastrophic ground vehicular delays because the current road infastructure will not be able to accomodate these passengers. This should be a clear signal that instead of expanding at Logan there needs to be a more sound and rational approach and my belief is that approach is a multi-faceted reliever airport system (a regional solution). 87.1

This system would in fact not only take care of the projected growth but must also downsize Logan itself. For far too long, Logan has been growing and it is the surrounding communities that are suffering the pains of that growth. Environmental justice dictates that the time has come to halt any further expansion and to roll back some of the growth that has gone on unchecked for many years. 87.2

Massport & the FAA have created flawed metrics with regard to: the number of delay hours; Peak Period Pricing scheme; PRAS Goal attainment; Soundproofing mitigation; and regional airport system.

Never it is it mentioned that the base year of 1993, as regards delay, that it was a record year for snowfall, setting a record with 96" of snow. Not your typical weather-year. 87.3

Peak Period Pricing, as presented, is certainly only ~~one~~ one scheme that could be devised. Before spending $25M it would be worth a look at other schemes that could help reduce delay during peak periods. 87.4

PRAS is an advisory system of suggestions to the FAA Air Traffic Controllers who have been loath to avail themselves of its suggestions, historically. 87.5

Sound Proofing for homes is dubious mitigation at best. The 65 db LDN requirement is too low a threshold. Sound Proofing will not work if you must have your windows open, such as in the warm weather and of course it does nothing for your outdoor environment. People can not be expected to be kept bottled up in their soundproof home. 87.6

Regionalization of air transportation system makes good sense. If Logan drew its passenger base only from within the Rt 128 area that would certainly be a considerable number of people, however Logan in fact draws from a much greater area and therein lies a major fault. Logan in NOT centrally located to this great area but is in fact on one far edge of this area. The problems increase when all these people coming to Logan are squeezed together much like as in a funnel or venturi. The very movement, in whatever means, of these people toward Logan creates stresses on the environment. Pollution breeds health problems. If some ~~cobay~~ ~~cas~~ ~~cobay~~ catastrophe should happen to the funnelling infrastructure that brings people to Logan then those very people are going to experience more than a delay problem, they may even miss the flight. If on the other hand a major catastrophe should happen at Logan then the whole region suffers. It is eminently more sound to have multiple airport facilities. The logistics makes better sense. The better quality of life and environment make better sense. It is the American way to have more competitive alternatives to choose from.

87.7

In closing I would relate that although I do experience jet departure noise at 90 DB or greater when a particular runway is in use I am not now or projected to be within the 65DB LDN Contour. Remember the ads for home burglar alarms are assuring purchasers that their 85DB alarm will drive the burglar away. Well sir the noise from jet departure overflights is driving me away; away from my phone conversation; away from enjoying some TV; just away from plain fr enjoyin life.

87.8

Arthur Hartnett
CAC Tech consultant

Letter 87
Community Advisory Committee Technical Consultant Arthur Hartnet

Code	Topic 1	Topic 2	Comment	Response
87.1	Regional Transportation	Regional Airports	The delay problem will continue to grow regardless if there is a new runway...there needs to be a more sound and rational approach and my belief is that approach is a multi-faceted reliever airport system (a regional solution).	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
87.2	Environmental Justice	Impacts	Environmental justice dictates that the time has come to halt any further expansion....	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.
87.3	Analysis Assumptions/ Methodologies	Base Year	Never is it mentioned that the base year of 1993, as regards delay, that it was a record year for snowfall....	Delays are a function of wind and weather conditions throughout the year, as well as the corresponding traffic demand. For example, overnight snowstorms cause relatively few delays because the demand is low. 1993 was also a record year for airline overscheduling.

Code	Topic 1	Topic 2	Comment	Response
87.4	Alternatives	Other Non-Construction Alternatives	Before spending $25M it would be worth a look at other schemes that could help reduce delay during peak periods.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
87.5	Noise	PRAS	PRAS is an advisory system of suggestions to the FAA Air Traffic Controllers who have been loathe to avail themselves of its suggestion, historically.	During very high demand periods, the controllers have little or no flexibility for runway selection and PRAS recommends an appropriate runway configuration given the extant demand. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals. The Supplemental DEIS/FEIR demonstrates that the controllers have been improving performance with respect to PRAS recommendations. Section 8.5 of the Supplemental DEIS/FEIR contains methods for more comprehensive monitoring of PRAS. These methods will be implemented as part of the mitigation program for the Airside Project.
87.6	Noise	Sound Insulation	Sound proofing for homes is dubious mitigation at best. The 65db LDN requirement is too low a threshold...People cannot be expected to be kept bottled up in their soundproof home.	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update.* Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
87.7	Regional Transportation	Regional Airports	Regionalization of air transportation system makes good sense...It is eminently more sound to have multiple airport facilities.	The proposed Logan Airport Airside Project is necessary and provide clear benefits at current traffic levels. Massport has long recognized that service development and increased passenger traffic at the regional airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, especially high-speed rail to Logan Airport's largest market, New York. Section 2.3 of the Supplemental DEIS/FEIR evaluates T.F. Green/Providence, Manchester, and Worcester Regional airports and their potential impacts on Logan Airport. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport but will not eliminate the need for airside projects.
87.8	Noise	Impacts	...although I do experience jet departure noise at 90 DB or greater...I am not now or projected to be within the 65 DB LDN contour.	Even though maximum sound levels may reach 90 dBA at a specific location, they may not be frequent enough to cause the DNL to go above 65 dB. The whole principle behind DNL is that it is a *cumulative* measure of noise exposure that is influenced not only by the loudness of events but also by how often they occur. It is not inconsistent for a site to experience sound levels of 90 dBA but have 24-hour exposure levels less than 65 dB. See Appendix E for an additional explanation of noise metrics.

LETTER 88

ROXBURY AIRPLANE POLLUTION COMMITTEE

April 17, 1999

Mr. Robert Durand
Secretary, Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street 20th Floor
Boston, MA 02202

Sir,

The official rationale behind the Logan expansion project being submitted by Massport is unambiguous: operational delays. Yet, in a recent radio advertisement, a major airline boasted that its shuttle operations from Logan airport had an on-time performance rate of 97%. Another airline has been adding flights to its West Coast destinations from Logan. Their chief competitor is scheduling new nonstop service to Europe while some European carriers have started flights to Boston.

These facts fly in the face of the official rationale for this expansion project. Inevitably, fairness would require Massport to provide an in-depth analysis of the causes and the extent of the delays justifying the erection of a new runway at Logan airport. It seems equally fair to ask whether the invoked delays truly hinder carriers in their current operations or deter them from expanding their already considerable operations at Logan airport. 88.1

The Draft Environmental Impact Statement/Environmental Impact Report is totally silent on the already prohibitive cost borne by populations under the flight paths out of Logan airport. The significant increase in air-traffic resulting from the erection of runway 14/32 will make a very bad situation considerably worse. At times already, 2 jetplanes/minute fly over some communities and for up to 17 consecutive hours. Just as has been done with the relocation of the Sandpiper, the terrible toll exacted by Logan operations on surrounding communities, including the less privileged ones, must be quantified. Roxbury in particular has been unduly hit by unprecedented pollution from airplane activity without any compensation or mitigation. This unbearable burden is slated to reach unreasonable heigths with the new runway. Any expansion at Logan airport will then further degrade the quality of life for residents with no appreciable gain for airline passengers. 88.2

The alternative of routing these passengers through relief airports or other transportation means demands more than the cursory treatment in the Draft EIS/EIR.

Indeed, there may lie some of the best options to accommodate additional travelers to the Boston area, Massachusetts and New England.

We respectfully urge you to reject the current proposal from Massport and require the agency to undertake a comprehensive assessment of all available options to adequately accommodate the needs of passengers in the immediate as well as the more distant future. 88.3

Like San Francisco, Denver, Hong Kong, Paris, Munich, Montreal, New York, Washington D.C. and other world-class cities, Boston and its visitors deserve a multiple-airport system residents can live with. An inadequate proposal of the 1970's is an unlikely answer to the challenges of air-traffic growth in the 21st century.

Respectfully yours,

Dovi Abbey

Dovi Abbey
Roxbury Representative to the CAC
4 Humboldt Avenue
Roxbury, MA 02119

Letter 88
Community Advisory Committee Representative, Roxbury
Roxbury Airplane Pollution Committee
Dovi Abbey

Code	Topic 1	Topic 2	Comment	Response
88.1	Purpose and Need	Delay	...fairness would require Massport to provide an in-depth analysis of the causes and the extent of the delays justifying the erection of a new runway at Logan Airport.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
88.2	Environmental Justice	Impacts	The terrible toll exacted by Logan operations on surrounding communities, including the less privileged ones, must be quantified. Any expansion at Logan Airport will then further degrade the quality of life for residents with no appreciable gain for airline passengers.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.

Code	Topic 1	Topic 2	Comment	Response
88.3	Regional Transportation	Regional Airports	[Need] to undertake a comprehensive assessment of all available options to adequately accommodate the needs of passengers in the immediate as well as the more distant future.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

LETTER 89

April 21, 1999

Arthur Pugsley
Massachusetts Executive Office of Environmental Affairs
100 Cambridge Street
20th Floor
Boston, MA 02202

RE: Runway 14/32, #10458

Dear Mr. Pugsley:

As a member of the Community Advisory Committee representing Roslindale and Hyde Park, I have enclosed my comments in response to the Environmental Impact Study/Report submitted by Massport relative to Runway 14/32 at Logan International Airport.

It is my hope that your agency will carefully review and incorporate resident concerns regarding the negative public health impact of this proposal on the surrounding communities. There is widespread citizen opposition to this proposal and your analysis relative to the negative environmental impact is vital to set the framework that will allow residents who live in the surrounding communities a more broad based effort in reviewing this ill-conceived proposal.

Thank you for your immediate attention to this issue and please make my comments a part of the official comments regarding Runway 14/32.

Very truly yours,

Alex Geourntas

Alex Geourntas
Roslindale/Hyde Park Representative
Community Advisory Committee

TO: Arthur Pugsley, MEPA Unit
Mass. Executive Office of Environmental Affairs

FROM: Alex Geourntas, Roslindale/Hyde Park Representative
Community Advisory Committee to Massport

RE: ***Massport's Runway 14/32 Proposal-EIS/EIR Report***

DATE: April 12, 1999

As the Roslindale/Hyde Park representative on the Community Advisory Committee (CAC), I am writing to state my opposition to Runway 14/32 and the Environmental Impact Report/Study as submitted by Massport.

This issue has united many residents of the various communities surrounding Logan Airport. Many residents are strongly opposed to this expansion. I have attended many CAC and community meetings where Massport's presentation suggests that the new runway will have a positive impact on Logan Airport, passengers and for business interests in New England. There is no mention of its negative impact to the surrounding neighborhoods and communities that will see a definitive increase in airplane traffic and noise further compromising the quality of life of these residents.

I am surprised by Massport's refusal to recognize the environmental impact and direct consequences of the new runway upon homeowners in Boston and the North and South Shores of our state. The cumulative effect of airplane noise and exhaust is an environmental concern and the long term effects of this exposure is a public health hazard; not to mention the increased traffic and congestion that will occur in downtown Boston, in particular in East Boston and South Boston. Congestion is a problem now throughout Boston and Runway 14/32 will make a bad situation worse. Massport is no friend to area residents. It continuously ignores the impact the airport is having on the surrounding communities and Massport precludes any mention of the community impact in any of their presentations. 89.1

The building of the new runway will increase capacity at the airport that in turn will increase takeoffs and landings that in turn will increase passenger and cargo capacity, which in turn will increase the "bottom line" for Massport-the only real concern for Massport. The "delay" argument is not pursuasive since Massport Executive Director, Peter Blute admitted to manipulating the numbers to leverage the argument for a new runway. Delay data for the EIS/EIR was utilized from figures that were produced in 1996 when delays were at a high rate; however, the delays between 1996-1999 have seen yearly reductions and the figures in the report are not an adequate representation of the current situation at Logan. 89.2

Public health and the quality of life of residents and their communities must be the priority for city and state governments. Each and every resident has the right to enjoy the quiet surroundings of their environment. The airport is negatively impacting the surrounding communities. Exhaust fumes, noise, congestion and poor air quality are serious environmental and public health issues that must be addressed by the Massachusetts Executive Office of Environmental Affairs. 89.3

Air traffic on Runway 27 will triple with the new configuration of 14/32 thus increasing flights over Roslindale, Hyde Park, Jamaica Plain and West Roxbury. This is unacceptable and this item has not and probably will never be part of Massport's presentation to the communities mentioned above. At a recent community meeting in Jamaica Plain on March 22, 1999, this issue was ignored by Massport. Representatives only repeated their arguments for a new runway. Again, Massport is far more concerned with the "bottom line" than the lives of families in and around Boston. However, they do have a plan of action for the Upland Sandpiper and other wildlife at the airport! 89.4

While I believe there is no need for a new runway at Logan Airport, I also believe that the best solution for capacity and delay concerns at Logan is achievable at Hanscom Air Field. Hanscom is another issue that is not a part of the Massport presentation when mentioning a regional approach to air transportation issues. Worcester, Manchester, and T.F. Green Airports are mentioned as part of this regional approach; however, Hanscom is not mentioned and this truly is a slap in the face to the affected communities around Logan Airport. This airfield is expansive and provides the best solution to Logan's problems today and in the future.

Massport is protecting Hanscom and the surrounding communities by eliminating Hanscom as a viable alternative. Simply put, Massport is employing a "divide and conquer" strategy in Massachusetts. Massport and state government officials have protected these residents for quite some time at the expense of our communities here in Greater Boston. They have not fairly shared the burden with their fellow citizens in and around Boston. This situation is indeed reprehensible and unjustified. 89.5

Many current airport operations can be relocated to Hanscom with Massport increasing its capacity at Logan and thus reducing delays as well. General aviation aircraft, cargo operations and shuttle services to New York, I believe, can be shifted to Hanscom. Passengers who utilize the shuttle services are predominantly from communities in the 128/495 area of our state. The burden can and must be shared by all in Massachusetts not by a few as is the case now. If Massport fails to expand Hanscom Field operations, Logan Airport will be at the same juncture as we are today in 5 years or less with increased delays, congestion, noise and pollution.

Massport's arrogance is certainly well known in the Boston area and we have had enough. The time has come for Massport to finally recognize that all its research, money and influence will never stifle the opposition on this issue. Massport continues its strategy of manipulation employing an air of superiority. Opposition members remember the long, hard fight of the 1970's and most are experienced veterans who are just as committed to opposing this ill-conceived proposal. They are willing to continue the struggle for fairness and for their rights to live in a safe, healthy and peaceful environment.

I certainly hope my comments will create doubt about this flawed project and MEPA will do the right thing and support the residents' position and opposition to Runway 14/32. Rejecting the EIS/EIR will validate the concerns of area residents and force Massport to deal on a level playing field for a change. Boston and surrounding communities will not take a back seat and ignore the injustices perpetrated by Massport.

I strongly oppose this proposal and it is my hope that the concerns of so many residents of our Commonwealth resonates with MEPA staff and I urge your department to reject Massport's Environmental Impact Report and Study. 89.6

Thank you.

Letter 89
Community Advisory Committee Representative, Roslindale/Hyde Park Alex Geourntas

Code	Topic 1	Topic 2	Comment	Response
89.1	Noise	Impacts	The cumulative effect of airplane noise and exhaust is an environmental concern... Massport...continuously ignores the impact the airport is having on the surrounding communities....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
89.2	Delay	Model	The "delay" argument is not pursuasive [sic]...the figures in the report are not an adequate representation of the current situation at Logan.	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate *and long-term* benefits by lowering runway delays by 38,000 hours under 1998 conditions, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. The sooner airside efficiencies are implemented, the more benefits will accrue over time.

Code	Topic 1	Topic 2	Comment	Response
89.3	Public Health	Effects	Exhaust fumes, noise, congestion, and poor air quality are serious environmental and public health issues that must be addressed....	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. Consistent with the request made by EOEA in its Certificate, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach the 1999 passenger forecast (29 million) presented in the Airside Project Draft EIS/EIR until 2002 or 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts will not be achieved until after 2020. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
89.4	Noise	Runway Use	Air traffic on Runway 27 will triple with the new configuration...This is unacceptable....	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
89.5	Regional Transportation	Regional Airports	Massport is protecting Hanscom and the surrounding communities by eliminating Hanscom as a viable alternative.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
89.6	Environmental Review Process	MEPA	...I urge your department to reject Massport's Environmental Impact Report and Study.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

April 15, 1999

Arthur Pugsley, Associate Environmentalist
MEPA Unit
Executive Office of Environmental Affairs
20th Floor
100 Cambridge Street
Boston, MA 02202

LETTER 90

Dear Mr. Pugsley:

Re: Logan Airside Improvements Planning Project
Massport Environmental Impact Report
Case No. 11895

As the Town of Braintree's Representative to the Community Advisory Committee to Massport (CAC), I hereby register my support of Review Comments re the above-entitled project as prepared by the CAC Consultants, Robert G. Burns, Monty Gettys, Montgomery Consulting Group, Inc. and David Standley, P.E.

Because Massport has failed to provide a long-term plan and has chosen instead to settle for a short-sighted one that will adversely affect those of us who live under the flight paths, I, as the Town of Braintree's Representative to the CAC, hereby vehemently oppose the Logan 2000 Project in general and the construction of the proposed new runway 14/32 in particular.

Therefore, I urge MEPA to reject Massport's Environmental Impact Report and require said agency to redo the EIS/EIR, as I believe that data contained therein is flawed and unreliable. 90.1

Respectfully submitted,

Sandra M. Kunz
Braintree Representative to Community Advisory Committee to Massport
Certified Mail, Return Receipt Requested

Mailing Address: 89 Hollingsworth Avenue
Braintree, MA 02189

Letter 90
Community Advisory Committee Representative, Braintree
Sandra Kunz

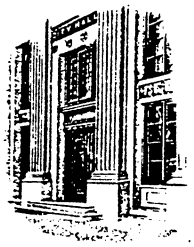
Code	Topic 1	Topic 2	Comment	Response
90.1	Environmental Review Process	MEPA	...I urge MEPA to reject Massport's Environmental Impact Report...as I believe that data contained therein is flawed and unreliable.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

City of Quincy, Massachusetts
City Hall

JAMES A. SHEETS, MAYOR

JOHN F. KEENAN
EXECUTIVE SECRETARY

BERNICE C. MADER
ADMINISTRATIVE ASSISTANT



LETTER 91

April 21, 1999
Robert A. Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge St. Room 2000
Boston MA 02202

Re: Runway 14/32 Logan Airport - EOEA 10458

Dear Secretary Durand:

Enclosed find a copy of the comments I made at the FAA/MEPA hearings of April 7, 1999. I hope that the arguments and reasoning advanced will convince you to declare Massport's current draft EIS an inadequate one.

In brief, their data are old; they used their own rather than the FAA's formula to model delays. They have data from 1998, why don't they use it?

91.1

They did not differentiate among the types of delays, delays being the basis of their support for the runway. They lumped all delays together. They did not separate out those delays in which the entire airport was shut down due to snow or fog [six extra runways will not help in those circumstances].

They did not indicate which airlines were most delayed. The national list, just published yesterday, identified which airline companies are most delayed due to their own internal organizational deficiencies. Many of the most delayed airlines are the ones who do the most business out of Logan - United, American, US Air. The least delayed airline, Southwest, is the main carrier at TF Greene and does not run out of Logan.

They did not indicate how many delays are incurred by Logan passengers who twiddle thumbs on the ground because of Massport's managerially inept systems for baggage handling as well as chronically back dated, or entirely missing, departure and arrivals screens, or unreadable or useless wayfinding signs. I defy all passengers to find the one Northwest Airlines gate at Logan unless they know where it is ahead of

ahead of time, in the far corner of the international terminal, with no sign and no reception area. Do we blame that kind of ill planning on lack of a runway too? Massport does not have its act together as an agency. Period.

Massport dismissed all consideration of other alternatives in less than a few pages; they made no sincere effort to find a real solution to the overall problem. That problem is much greater than Logan's needing another runway. Logan Airport is too small now and certainly too small for the future. They chose to completely ignore that reality. 91.2

I hope that you will find my comments helpful, not so much because they have answered all the questions that need to be addressed, but that they have spoken to the many, many more questions which need to be raised and satisfactorily answered.

Thank you for your consideration in these matters.

Sincerely,

Bernice C. Mader

Bernice C. Mader
Administrative Assistant to the Mayor

April 7, 1999

To: The Staff of the Executive Office of Environmental Affairs
The MEPA Unit
The Commonwealth of Massachusetts

From: Bernice C. Mader, City of Quincy Representative
Community Advisory Committee to Massport

Re: Massport EIR Logan Expansion/Logan 2000

OVERVIEW

I address you here as the Quincy Representative to the Community Advisory Committee as well as the President of Citizens Against Airport Noise and immediate past chair of the CAC, for nineteen years.

During this project, Massport has violated both the spirit and the regulations of the EPA, MEPA, and the FAA as well as the sense of fair play and environmental justice. The NEPA/MEPA process, when used wisely and honestly, can be a helpful learning and planning tool for diverse groups of opinion makers to reach consensus but not the way that Massport has tried to manipulate its use. 91.3

As I will later recount, Massport has used both outdated and worst case scenario data as their base case and they have employed highly irregular data-gathering methodologies. Massport's EIR generates very little new knowledge, nor does it advance forward-thinking, thoughtful public policy. 91.4

Massport never examines Logan Airport itself as it now exists. They talk extensively about delays but they never mention the real problem at the airport - its size. A newly created international airport based on only minimally acceptable federal standards would contain at least 5,000 acres and many have 10,000 acres or more. In contrast, Logan Airport consists of 2,400 acres. That is only 48% of the minimum physical size of any new airport created today. 91.5

No major physical improvements had been made to Logan from 1977 until this past year when the new parking garage opened. To allow Logan International Airport to be able to continue to operate, Massport has stretched every airport parameter to its limit and beyond. Logan Airport is too small now and certainly too small for the twenty-second century. No 5,000 foot, uni-directional commuter runway can address Logan Airport's overwhelming shortcomings. It has no more room to grow.

Parking, ground access, pedestrian access, off site park and flys, off site cargo terminals, re-located fuel lines and outrageously difficult wayfinding and signage systems are now at their extreme limits. This postage stamp-sized major commercial airport is now trying to squeeze in another runway to once more accommodate its basic lack of adequacy. The growth of the commercial passenger industry over the past two decades has outstripped Logan Airport. Logan International Airport, in the site where it is currently located, has run out of space, time and capacity.

A large number of cities both in this nation and across the world observed the trends in aviation growth and planned for them. Massport did not. Airport studies were conducted in 1988, 1990 and 1993, the last led by Bud Snyder at the Mass. Aeronautics Commission. Studies are not plans. Those studies were casually disregarded, and discarded, for a variety of reasons - mostly political. Massport clearly did not formulate a comprehensive Master Plan for Massachusetts' aviation needs of the twenty-second century. Instead, it employed a series of stop-gap measures to patch its inadequate infra-structure systems. Massport continues to try to put twenty pounds of flour into a five pound bag.

As one reads the EIR, it is clear that Massport has not fully answered the requirements of the EIR process. CEQ, sec. 1502.14 is the heart of the process. This is the examination and consideration of alternatives. From the issuance of their initial document in the summer of 1995, Massport has listed individual alternatives and bundles of alternatives, but it was as abundantly clear then as it is now, that Massport had a chosen "favorite" for which it would develop and skew supporting data. The coverage given to the listed alternative choices is complete lipservice, such as Hanscom Field, two and one half short paragraphs; five paragraphs to dismiss video teleconferencing and only three paragraphs to dismiss the north south rail link, the Portland rail link and the northeast corridor improvements combined. Completely absent from all consideration is the other wholly ignored alternative, the development of a new airport. Massport wanted the shoe to fit no matter how they had to cram that foot into the glass slipper. 91.6

Section 1502.14 (a) requires Massport " to rigorously explore and objectively evaluate all reasonable alternatives"; "to present the environmental impacts of the proposal and the alternatives in comparative form"; (b)"to devote substantial treatment to each alternative considered in detail"; (d) "agencies shall include the alternative of no action". In 1502.15, the EIS shall *precisely* describe the environment of the area itself and the area around it that "is to be affected or created by the alternatives under consideration". They "Shall discuss the relationship of the proposed actions to adopted or proposed land use plans, policies, controls, and goals and objectives of affected communities, including communities outside the jurisdiction in which the proposed project is located." 1502.14 says that "it shall include discussions of direct effects and their significance and indirect effects and their significance."

Massport has not adequately responded to these requirements. Instead of sincerely and fully examining these regulatory edicts, Massport and its management, for almost the past two years, has chosen to go out and lobby publicly for its alternative of choice - a new runway 14/32 and a new centerfield taxiway. Their study is inadequate and outdated and incomplete. It needs to be re-done.

Executive Director Blute has made dozens of presentations to the state's Congressional delegation, private companies, a variety of Chambers of Commerce and special interest organizations like Associated Industries of Massachusetts, the High Technology Council, the New England Council and many local civic organizations. These presentations all occurred during the period in which Mr. Blute had publicly assured the joint Logan Airside Review Committee (ARC) that he was "going to look at all of the alternatives and get back to the ARC." Despite Mr. Blute's public pledge in August of 1997 to "neutrally examine all of the alternatives", within a few weeks after that pledge, Mr. Blute was in Washington advocating the runway to the federal Congressional delegation as well as to the East Boston Chamber of Commerce.

The ARC is composed of the Community Advisory Committee to Massport, which consists of citizen representatives from 24 communities formally appointed by their mayors or Boards of Selectmen, along with an equal number of private businesses and airline companies appointed by the Executive Director prior to Peter Blute, Stephen Tocco. The ARC was the formal, recognized Massport-designated team of both sides. Its mission was to listen to, and to question, in each other's presence, Massport's consultant team's data for the EIR.

91.7

Over an 18 month period, when I was still chair of the ARC, and later my successor, Anastasia Lyman, almost monthly calls were placed to Peter Blute and/or his Director of Aviation Planning, Betty Desrosiers, asking them where he was in his analysis. The answer always came back that "he was examining alternatives".

We citizens came to know differently as we learned that Mr. Blute was lobbying various forces for his alternative of choice. He was making favorable presentations of Massport's choice to many local civic groups, by-passing the officially appointed ARC. Mr. Blute preferred to speak to uninitiated citizen and business groups who had neither the background, the history or the information to ask him pointed and probing questions.

During this 18 month, unexplained hiatus from the EIR process, the ARC members received no information from the Massport consultant team. Citizens were told that Massport consultants and the FAA were "gathering data" and "working on things" . We all know that they were not gathering data for had they done so, then this EIR would not be based on six year old information from a worst case scenario base year which used the worst year for delays that Massport has ever had.

When the EIR process suddenly resumed in 1998, just days after the state elections, the ARC members were not made aware of its start up or of any new data the Massport consultant team was developing. We were again circumvented from being part of the formal process. The holidays came and went, and a short week into the new year of

1999, Anastasia Lyman, the current chair, received a call from Massport, after a 20 month suspension of activity, that Massport wanted to schedule one last ARC meeting within a week to "sign off on the final draft".

ARC members were outraged and rightfully so. Some data that had been used in the EIR were now over six years old. Neither citizens, nor their consultant advisors, were due to receive their copy of the Draft until the day before the ARC meeting. The Draft weighs many pounds and measures several inches. Over and over we are told, trust the Massachusetts Port Authority. Would you?

DELAYS

When it began its public relations campaign after the state elections, Massport again based its case for the new Runway 14/32 upon the reduction of delays as being the most significant factor affecting Logan's ability to operate. For not only reasons of lost time but for what Massport said was $313 million dollars in lost revenue, Massport said that it must have a new runway as the only way to address these issues. Let us examine their arguments:

When Massport chose its base year for delays it chose the single worst year for delays that had ever occurred. That base year, 1993, was neither indicative nor typical of a normal year. In 1993, Massport incurred 19, 729 flight delays. Delays have never again approached that level. As it is, less than 4% of all flights at Logan are delayed. 91.8

If one examines the weather for 1993-1994, one would also find an unusual winter weather pattern. There were over ten significant winter snowstorms right after each other in that year. The snowfall of 96.3 inches [data obtained from U.S. Weather Service Information Bureau] set a record. The snow did not melt until mid-May.

In its delay section, Massport does not clearly delineate which portions of the delays caused by "wind and weather" were specifically attributable to snow, ice or other severe weather conditions which would have caused delays, such as the closure of runways or the airport itself, regardless of the existence of the number of runways.

When it evaluated the delay situation Massport did not use the FAA method of calculation, which counts any flight as being delayed if it is over 15 minutes late. Massport added up every minute of delay, compressed those minutes into hours and then assigned those hours a dollar value. They said that the cost per lost hour to airlines was $1,115 and $27 per plane passenger based upon a 1997 DOT study. The grand total in 1998 of the cost of delays was said to be $313 million dollars. There is no detail as to how those figures for either the planes or the passengers were arrived at except to quote the DOT 91.9

study. What methods were used by DOT and Massport to determine those numbers?

Though Massport has quantified the delays of airline passengers and airlines in terms of U.S. currency, they have imagined the delay impacts for those living on the ground as being only environmental, with no economic effects. That is a mistake.

THE "INTERRUPTION DELAY FACTOR"

If Massport builds Runway 14/32 for use by commuter planes, then we believe that that action creates more slots for the airlines to fill with larger jet operations on the other runways. That will create more rather than less noise at the airport.

Building 14/32 might temporarily reduce runway delays for about 3-5 years but it will also increase what I will call the "interruption delay" factor for those who live under the flights. In fact, my "interruption delay" model demonstrates that an enormously greater amount of money is lost to the business economy by the "interruption delay factor" than Massport's estimated losses to airlines and their passengers ever will. Let me explain.

The "interruption delay factor" represents the costs to businesses and workers who work on the ground under the noise of the flight paths. Their losses can be quantified in the following way:

Last year in 1998, there were 483,000 Logan flight operations, that is take offs and landings. Those operations rumbled over Boston's 19 neighborhoods as well as the other 18 municipalities which also experience direct impacts from Logan's existence. Using 1998 census data from the Commonwealth of Massachusetts, if one totals the number of citizens just referenced, that number is 1,465,800 people living under one or more of Logan's flight paths. If one adds those workers who commute to Boston to the number of Boston residents, the correct figure including those who drive via the S.E. Expressway, Route 93 S , the Mass Turnpike, Route 1, and those who ride the Commuter Rail systems and the various MBTA Rapid Transit lines to Boston to work, that total number approximates on an average work day, 838,000 people living under the noise from Logan's flight paths in the City of Boston alone and 1,675,800 persons living under them across all the affected communities. 91.10

Assume that 62% of those people work, then slightly over one million people toil under the flight path noise on a given day. According to the latest census information, the average annual income in Boston, [which is lower than many of its surrounding neighbors] is $37,740 or $18.14 hour. However, because I want this analysis to be of the most conservative nature, I have arbitrarily chosen the rate of $7 per hour as being the average lowest going rate for an hourly job in Boston.

The next step in the model is to assess how many people on any given day suffer the effects of Logan's noise pollution. Not all of the people who live and work in Boston are affected by airplane noise all of the time. It is not unreasonable to say that one-third of the "working" population of 1,055,750 may be affected by Logan operations at any one time. The given one-third would also not be affected every day but perhaps three days out of every seven on average and not necessarily for 12 or 18 hours a day but perhaps 6 hours.

In summary, that means that one third of a million people live under flight path noise for three + - days per week at about + - six hours per day. If we model the following circumstances, as Massport models so many things including their delay costs, this is what happens:

Suppose that during the six hours of airplane noise per day, that within each hour, there are five interruptions, averaging one minute per interruption. These interruptions might be one minute pauses for inaudibility during telephone conversations, required verbal repetitions of sales orders or merchandise picking orders, intrusions during business or staff meetings or between agents and clients or sales people and customers.

At five minutes per hour times six hours per day, that is 30 minutes of interruption delays per day. If I take that one day and multiply it by the three days of noise, then each worker will have experienced 90 minutes of interruption delays within a given week. If we then examine the total group of affected workers losing productivity, at $7 per hour, the dollar amount represented by those lost productivity hours per week equals $11,085,375 and $576,439,500 per year! That is at the lowest possible hourly rate of the $7. If I actually used the probable closer to real cost per hour figure of $18.14 per hour, then the loss would be $29,883,004 per week or a staggering $1,553,916,156 dollars per year! Massport's $313M quantification of passenger and airport delays represents only 20% of the "delay interruption penalties" incurred by those who work on the ground.

My model has only addressed the money lost. How do I even begin to quantify the hours of lost sleep, inaudible school lessons, interrupted speech, unavailable enjoyment of the environment, not to mention the negative health effects of high blood pressure, stress, hearing loss and low birth weight babies?

THE PREFERENTIAL RUNWAY ASSIGNMENT SYSTEM [PRAS] GOALS

In the early 1980s, the members of the Massport Community Advisory Committee proposed to Massport that there be an effort to distribute the noise from Logan operations more equitably among the affected communities. Citizens worked with

Massport consultants to come up with a workable model. The model took into account these main factors: the seasonal use and dis-use of certain runways, the use of any runway for more than 8 hours in a 24 hour period called "dwell", and the use of any runway for more than 24 hours within a 72 hour period, called "persistence". It also highlighted the use of over-water landings and take offs as a possible relief for suffering communities. The computer model was supposed to alert air traffic controllers in the tower when any runway had been used over 8 hours in one day, 24 hours in three days or had been on any combination of runways for a long period. If wind and weather permitted, the controllers were supposed to change the runway combination creating relief for those who had been enduring noise for days or hours on end.

Initially, for the first 3-4 years, there was some effort by tower personnel to use the system. However, as the demand at Logan for more and more flights continued to grow, tower controllers began to use more and more of the high capacity runway combinations to accommodate the increased numbers of planes and to ignore the recommendations of the PRAS computer model. For the past eight or nine years, the model has been ignored altogether in favor of tower personnel's being able to "get 'em in and get 'em out" of the airport.

Since Massport's professed arguments for the new runway 14/32 are generally weak and without merit, they had to find some ideas to bolster their new runway argument. Massport refuses to admit that 14/32 is simply a bottom line revenue issue allowing them to accept more new business. After almost a decade of ignoring the entire PRAS idea and its operation, Massport chose to resurrect PRAS's long-ignored noise sharing goals and its stated intention of trying to encourage flights to Logan to come via over the water approaches. Since runway 14/32 borders the harbor, Massport chooses to assert that all of its uni-directional commuter flights would enter and leave Logan via the harbor approach. 91.11

What Massport does not say or clearly demonstrate is where those thousands of new commuter operations will turn back over land. With all of the flights purported to be commuter or corporate sized, the airplane turns from the harbor back over land will be not be conducted at high altitudes, many miles away in the harbor. They will instead turn quickly, generating new noise over already noise-enduring communities. The PRAS part of Massport's 14/32 argument provides no relief at all. In fact, the former PRAS experiment never met more than about 26% of its goals - and that was when the number of operations was far less than now.

Massport refuses to guarantee that it will come one iota closer to meeting those 18 year old PRAS goals, which include "noise abatement" , with runway 14/32. It simply creates new opportunities for more noise.

Should Massport plans go forward, then EOEA, MEPA and FAA should impose substantial fines on Massport for not meeting the PRAS guidelines with communities receiving the monies.

A UNI-DIRECTIONAL RUNWAY 14/32

One of the strongest contentions accompanying Massport's argument for the new runway is its assertion that this runway will never be used in any way but uni-directionally, all operations coming in from, and going out over, the water. Massport swears that the other end of the new runway will never be used to launch operations directly over neighborhoods.

On three public occasions, I personally have asked Massport to quantify this promise by agreeing to create a legal instrument which attests to the uni-directional nature of 14/32 and which forbids its use in the other direction in perpetuity. I have also asked that such a legal instrument become part of the Record of Decision of the FAA in the runway matter should it be built. Massport has refused to agree to this. Given previous history, there is no reason whatsoever to believe Massport's assertion of uni-directionalism their latest version "Trust us". Look at the court case right now where they are trying to remove the previously agreed to injunction against building a new runway. 91.12

USE OF GREENE, MANCHESTER, WORCESTER & HANSCOM AS RELIEVER AIRPORTS

Massport says that it has encouraged use of these facilities as a way to ease Logan's woes. In fact, it actually has not. Greene and Manchester airports have grown because of market forces and ease of use. Cheap airfares, such as those offered by Southwest Air, have lured thousands to Greene. Easier traffic and commuting access to Greene and Manchester have appealed to the flying public. Massport has not once ever launched a public relations initiative to guide business to these competitors. In the absence of a comprehensive aviation plan, and in being criticized for the lack of one, Massport has backed into naming Greene and Manchester as relievers because it suits their purpose, not because they really planned to have them act in those functions.

Additionally, Massport decries the lost $313 million in delay costs but at the same time claims that it seriously supports sending thousands of paying customers to Rhode Island or New Hampshire. Massport is a business. Do you believe that it honestly wants to send business elsewhere on a regular basis?

As for Worcester Airport, for 15 years, CAC members have tried to get Massport interested in developing this facility which has major potential. Instead, Massport has treated Worcester like a leper, allowing its annual passenger use to fall from vigorous levels to a mere 39,000. To be blunt, Massport has not cared about Worcester because

it does not own Worcester. Worcester does not contribute to Massport's bottom line. If Massport is serious in its claims about Worcester Airport, then it will acquire Worcester and work with the Massachusetts Highway Department to build a direct connector road from the Massachusetts Turnpike to the airport.

There are those who will respond to that proposal by saying that doing that would take ten years. Under normal regulatory processes, that would probably be so. However, in the public's interest, those processes can be changed and compressed. A perfect example of this is what occurred because of the demands of the Central Artery project. In order to serve the public's interest and to save the taxpayers money, the Commonwealth wished to deposit the dirt from the Central Artery at the former Quincy/Milton landfills for the Quarry Hills Golf Course project. To do so, the entrance ramp off of the Southeast Expressway had be closed and moved so that it could accommodate the hundreds of large 18 wheeled trucks delivering the dirt every day. In a period of six weeks, the old ramp was closed, the new ramp design approved and the new ramp built and opened. Normally this would have been a three year or more process. If state government, working with the FAA, has a will to make Worcester functionally important for commercial aviation, it can do so and do so quickly. The commitment and the money just have to be provided. 91.13

As for Hanscom Field, Massport seems loathe to seriously investigate this wealthy, politically powerful alternative. We must examine what Hanscom can contribute to the solution. It has two parallel runways with instrumentation and length that are perfectly suited to commuter aircraft. In fact, it offers double the advantages of a runway 14/32 at Logan. No one should propose that large-scale jet operations emanate from Hanscom, but it does offer a perfectly suited, already existing facility for the commuter traffic that Logan is so anxious to eliminate.

A NEW AIRPORT

Even if the new runway is built, Massport has not addressed how passengers will get there to use it. There are still only the same number of roads in and out. Multi-modal techniques of getting passengers to the airport have grown but in no way have they been able to keep pace with the rise in private automobile traffic to Logan. Despite the new garage, adequate parking will continue to be a problem. Pedestrians will continue to navigate at their peril at this airport. Airport emissions will still waft into abutting neighborhoods.

In this EIR, Massport never even considered the idea of building a brand new international airport. That is a mistake. They must at least seriously consider the concept. Whether there are land parcels in Massachusetts large enough to accommodate such a facility needs to be investigated. Whether an airport can be built on any of them needs 91.14

to examined. To completely dismiss the idea out of hand is not within the intent of the MEPA guidelines for alternatives.

SUMMARY

→ Massport has not followed the NEPA/MEPA regulations and guidelines in how it has produced this report. It has done a very poor job of examining alternatives and pursuing them in any meaningful depth. The report must be done again. 91.15

→ Massport has chosen out-dated and worst case scenario delay data to bolster its case for the new runway 14/32. Its data analyses were not based upon normal FAA data-gathering methods. Less than 4% of all the flights at Logan are delayed. 91.16

→ The land upon which Logan International Airport stands is too small. It cannot handle any more runway growth. It is out of space for any type of additions. 91.17

→ Massport's administration has circumvented and dishonored its own citizen and business group, the ARC, by ignoring the ARC's stated mission and by trying to manipulate the MEPA process to its advantage rather than using the EIR process to produce good, new information and enlightened public aviation policy. 91.18

→ Massport has been greatly concerned with last year's $313 million loss which they assert has been incurred by delays to both the airlines and the passengers. In fact, their figure is only 20% of what workers and businesses on the ground have incurred as part of the "interruption delay factor". That amount of money may be as great as one billion dollars or more per year. 91.19

→ Massport has resurrected the unused-for-a-decade Preferential Runway Assignment System to bolster their weak arguments for a new runway. Should Massport's plans come to pass, then the Authority must be substantially fined for not meeting those goals with the funds going to affected communities.

→ Massport refuses to incoporate a legal document into the FAA Record of Decision that swears that runway 14/32 will be used uni-directionally in pepetuity. 91.20

→ Massport has used Greene and Manchester Airports' growth as a fallback to defend its lack of a comprehensive aviation planning document for Massachusetts for the twenty-second century. 91.21

→ Massport claims to have sincere interest in developing Worcester Airport's potential. If that is so, let them advocate for a compressed development timeframe and the funds necessary for Massport to purchase the airport, increase its infrastructure and build a linking highway to the Massachusetts Turnpike. 91.22

→ Massport must examine the potential use of Hanscom Field as the major operator for commuter operations for Massachusetts. That does not include large scale jet traffic. 91.23

→ As one of the considered alternatives, Massport must study the prospect of siting a new major international airport in Massachusetts. 91.24

When it comes to Logan Airport, Massport has used the "Field of Dreams" philosophy of aviation planning - "build it and they will come". But how will they come, and where will they park, and how will they walk, and how will the neighbors thrive and hear their children laugh, and how will all of the long-suffering citizens enjoy the "Life, liberty and pursuit of happiness to which we all are heir"?

EXHIBIT ONE - BERNICE MADER TO EOEA/MEPA - LOGAN EIR
POPULATION FIGURES BASED UPON COMM. OF MASS. CENSUS DATA 1998

BOSTON/INC. ALL NEIGHBORHOODS & OTHER COMMUNITIES AFFECTED BY LOGAN
Boston [inc. all neighborhoods East Boston, South Boston, Roxbury, South End, Back Bay, Jamaica Plain, Dorchester, Hyde Park, West Roxbury Roslindale, North End, Grove Hall, Fields Corner, Uphams Corner, Codman Square, Mattapan, Brighton and Allston.

=	628,400
Braintree	32,800
Brookline	55,700
Cambridge	101,500
Chelsea	34,900
Everett	35,700
Hingham	19,900
Hull	11,200
Malden	55,900
Medford	57,000
Melrose	27,000
Milton	25,700
Newton	82,400
Quincy	89,800
Revere	44,200
Somerville	79,000
Swampscott	13,400
Weymouth	54,100
Winthrop	17,200
Grand Total	1,465,800

EXHIBIT TWO - BERNICE MADER TO EOEA/MEPA - LOGAN EIR

MODEL FOR "INTERRUPTED DELAY" FACTOR

Boston's population of 628,400 [1998 census data]
Add 222,000 daily in-bound commuting workers
Subtract 12,000 people who live in Boston and work elsewhere
Total of 838,400 people in the City of Boston work under the noise

Add the populations from the other 18 communities, which is 837,400, to the 838,400
Total population under the flight path noise 1,675,800 [This figure is adjusted downward by 12% to account for those people who might live in affected communities and also work in Boston.]

Approximately 62%, or 1,055,750 of the 1,675,800 work under the flight paths.

Boston's average annual income [census data, 1998] $37,740 which is $18.14 per hour based upon a 40 hour work week at 52 weeks per year

Model's conservative rate per working hour is $7.00

Formula Steps:
1/3 of the 1,055,750 or 352,000 + - people receive noise for 3 + - days x 6 + - hrs./day

5 minutes of interruptions for each of the 6 hours = 30 minutes of interruptions per day

3 days of 30 minutes of interruptions = 90 minutes of interruptions

90 minutes of interruptions for 1,055,750 persons = 95,017,500 minutes of lost work

Those 95,017,500 minutes convert to 1,583,625 hours of lost work

At $7.00 per hour, that = $11,085,375 per week in lost work

$11,085,375 x 52 weeks per year = $576,439,500 per year in interruption delay costs

At $18.14 per hour, the 1,583,025 hours of lost work = $28,716,075 per week

At $28,716,075 per week x 52 weeks = $1,493,235,822 per year in interruption delay costs to those businesses and workers who work on the ground under the noise

This model has used a similar technique to the one Massport used to arrive at the $313million of losses attributed to passengers and airlines at Logan

Massport's loss figure of $313 million is only 20% of the losses to those on the ground

Letter 91
Community Advisory Committee Representative, Quincy
Bernice Mader

Code	Topic 1	Topic 2	Comment	Response
91.1	Delay	Model	...their data are old; they used their own rather than the FAA's formula to model delays. They have data from 1998, why don't they use it?	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport. The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
91.2	Regional Transportation	Regional Alternatives	Massport dismissed all consideration of other alternatives in less than a few pages....	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
91.3	Environmental Review Process	MEPA, FAA/NEPA	...Massport has violated both the spirit and the regulations of the EPA, MEPA, and the FAA....	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
91.4	Delay	Model	...Massport has used both outdated and worst case scenario data as their base case and they have employed highly irregular data-gathering methodologies.	In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
91.5	Purpose and Need	Delay	Massport never examines Logan Airport itself as it now exists. They talk extensively about delays but they never mention the real problem at the airport — its size...is only 48% of the minimum physical size of any new airport created today.	Massport is constantly examining Logan Airport's current and future needs. The *1999 ESPR* (previously GEIR) is the latest in a series of intense reviews. Logan Airport's real estate is admittedly less than the desirable size. Since the existing area cannot be expanded, Massport proposed the Airside Project and is investigating other redevelopments to maximize efficiency. Runway 14/32 will be located on fill that was prepared for this purpose 25 years ago. The runway will not increase airfield capacity, but will dramatically reduce aircraft and passenger delays during northwest wind conditions.
91.6	Regional Transportation	Regional Airports	Massport clearly did not formulate a comprehensive Master Plan for Massachusetts' aviation needs of the twenty-second century. As one reads the EIR, it is clear that Massport has not fully answered the requirements of the EIR process. The coverage given to the listed alternative choices is complete lipservice [sic]...Their study is inadequate and outdated and incomplete. It needs to be re-done.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
91.7	Environmental Review Process	Public Process	Concerned about how Massport handled the public process.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
91.8	Delay	Model	When Massport chose its base year for delays it chose the single worst year for delays that had ever occurred. That base year, 1993, was neither indicative nor typical of a normal year...The snowfall of 96.3 inches...set a record...Massport does not clearly delineate which portions of the delays caused by "wind and weather" were specifically attributable to snow, ice or other severe weather conditions....	In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. The delays analysis used ten years of weather data so the characteristics of the weather in a single year did not strongly influence the results.
91.9	Delay	Model	...Massport did not use the FAA method of calculation...the cost of delays was said to be $313 million dollars...What methods were used by DOT and Massport to determine those numbers?	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport. The cost of delay analysis presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is based on a methodology recommended by the FAA. The cost of delay to a passenger ($27 per hour) is a weighted average cost for business and leisure passengers. Refer to FAA APO Bulletin APO-97-1.
91.10	Noise	Impacts	...they have imagined the noise impacts for those living on the ground as being only environmental, with no economic effects. That is a mistake.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..."

Code	Topic 1	Topic 2	Comment	Response
91.11	Noise	Runway Use	...Massport chooses to assert that all of its uni-directional commuter flights would enter and leave Logan via the harbor approach. What Massport does not say or clearly demonstrate is where those thousands of new commuter operations will turn back over land.	The turboprop departures from Runway 14/32 are shown on Figure 6.2.4 of the Airside Project Draft EIS/EIR to cross the harbor and then the South Shore in areas that, for the most part, are currently overflown. Jets are shown on Figure 6.2.3 of the Airside Project Draft EIS/EIR to depart over the harbor, just as jets departing Runways 22L, Runway 22R, and Runway 15L do currently. The jets recross the North and South Shores in the same areas and altitudes as do the current departures from Runway 22L, Runway 22R, Runway 15L, Runway 9, and Runway 4R.
91.12	Alternatives	Runway 14/32	...there is no reason whatsoever to believe Massport's assertion of uni-directionalism....	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Appropriate supporting documentation will also be issued (*e.g.*, appropriate designations in the Airport/Facility Directory, and Notices to Airmen or NOTAMS). Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

Code	Topic 1	Topic 2	Comment	Response
91.13	Regional Transportation	Regional Airports	If Massport is serious in its claims about Worcester Airport, then it will acquire Worcester and work with the Massachusetts Highway Department to build a direct connector road from the Massachusetts Turnpike to the airport...We must examine what Hanscom can contribute to the solution.	The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's Alternative Fuels Vehicle program and on Massport's efforts to encourage the use of alternative fuel vehicles. Massport supports improved ground access to Worcester Regional, T.F. Green/Providence, Manchester and Logan airports. These projects are discussed in Section 2.9 of the Supplemental DEIS/FEIR. Since passengers do not travel between New England's regional airports, (*e.g.*, passengers do not first go to Manchester Airport before driving to Logan Airport) it is not clear why improved access between the regional airports would generate any benefit. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
91.14	Regional Transportation	Regional Airports	...Massport never even considered the idea of building a brand new international airport. That is a mistake. They must at least seriously consider the concept.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
91.15	Environmental Review Process	FAA/NEPA MEPA	Massport has not followed the NEPA/MEPA regulations and guidelines...It has done a very poor job of examining alternatives....	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
91.16	Delay	Model	Massport has chosen out-dated and worst case scenario delay data....	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 29, 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 1999 to 2020 time frame.

Code	Topic 1	Topic 2	Comment	Response
91.17	Alternatives	Runway 14/32	The land upon which Logan International Airport stands is too small. It cannot handle any more runway growth.	Logan Airport's real estate is admittedly less than the desirable size. Since the existing area cannot be expanded, Massport proposed the Airside Project and is investigating other redevelopments to maximize efficiency. Runway 14/32 will be located on fill that was prepared for this purpose 25 years ago. The runway will not increase airfield capacity, but will dramatically reduce aircraft and passenger delays during northwest wind conditions.
91.18	Environmental Review Process	Public Process	Massport's administration has circumvented and dishonored its own citizen and business group, the ARC, by ignoring the ARC's stated mission and by trying to manipulate the MEPA process to its advantage....	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
91.19	Purpose and Need	Delay	Massport has been greatly concerned with last year's $313 million loss...their figure is only 20% of what workers and businesses on the ground have incurred as part of the "interruption delay factor".	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
91.20	Alternatives	Runway 14/32	Massport refuses to incorporate a legal document into the FAA Record of Decision that swears that runway 14/32 will be used uni-directionally in perpetuity.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Appropriate supporting documentation will also be issued (*e.g.*, appropriate designations in the Airport/Facility Directory, and Notices to Airmen or NOTAMS). Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
91.21	Regional Transportation	Regional Airports	Massport has used Greene and Manchester Airports' growth as a fallback to defend its lack of a comprehensive aviation planning document for Massachusetts for the twenty-second century.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
91.22	Regional Transportation	Regional Airports	Massport claims to have sincere interest in developing Worcester Airport's potential. If that is so, let them advocate for a compressed development timeframe and the funds necessary for Massport to purchase the airport, increase its infrastructure and build a linking highway to the Massachusetts Turnpike.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. MassHighway is in the process of preparing a Draft EIS/EIR, which is expected to be filed in October 2001. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other alternative regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Section 2.2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. MassHighway is analyzing alternative routes that would improve surface access from Routes I-90 and I-290 to the Worcester Regional Airport. MassHighway filed an ENF in December 1999 and is in the process of preparing a Draft EIS/EIR, which is expected to be filed in October 2001.

Code	Topic 1	Topic 2	Comment	Response
91.23	Regional Transportation	Regional Airports	Massport must examine the potential use of Hanscom Field as the major operator for commuter operations for Massachusetts. That does not include large scale jet traffic.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
91.24	Regional Transportation	Regional Airports	As one of the considered alternatives, Massport must study the prospect of siting a new major international airport in Massachusetts.	Comment noted.

Kurt H. Walter
30A Arlington Street
Cambridge, MA 02140

LETTER 92

April 21, 1999

Mr. Robert Durand, Secretary
Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street, 20th floor
Boston, MA 02202

Dear Mr. Pugsley:

Thank you for this opportunity to comment on the Massport/Federal Aviation Administration DEIS/DEIR. As a member of the Community Advisory Committee to Logan Airport ("CAC") I have been involved in this issue since its inception. As you know, the CAC was one component of the Airside Review Committee ("ARC") formed by Massport to provide input into the process during the development stages, the other being comprised of representatives from the business community. I concur with the report filed by the Consultants to the CAC and would like to take this opportunity to emphasize some points raised in their report.

I first want to point out the lack of public participation in this process. From the first, the CAC's involvement in the ARC project was minimal. There was no interaction between the CAC and Massport other than that which occurred at the irregularly scheduled meetings when Massport and their consultants presented their latest findings. If the CAC requested additional information beyond that presented by the Massport consultants, we were told either that it was not available or that the information we requested would be in the final report or that Massport was paying for a CAC consultant and the CAC could do our own analysis. Our complaints about the lack of comparable data (e.g. use of hours of delays rather than number of operations delayed, percentage increases in regional airports rather than actual operations, etc) produced no results. The Massport consultants steadfastly refused to provide any data that the CAC could use to counter the predetermined outcome of the study, which was that construction of Runway 14/32 was necessary. The DEIS/GEIR is unnecessarily complicated

92.1

by the lack of comparable data through out the report and I suggest that MEPA deny Massport's application until all data regarding delays, traffic at Logan and regional airports, increased capacity, etc. is stated in number of operations. 92.2

From the public testimony of the members of the business component of the CAC, it appears that the business community was extensively consulted on various matters, most significantly the option of peak hour pricing. Massport's selection of alternative 2 as the preferred alternative is a business decision, not an environmental impact decision. The alternatives that include peak hour pricing clearly show a significant, timely delay reduction with minimal environmental impact. Massport's not very impartial study of the impacts of peak hour pricing on the small carriers should be discounted. Massport's claim that peak hour pricing has not been implemented because some communities will lose service is ludicrous. People don't cancel their vacation of business trips because the cost goes up ten dollars. Surely it is preferable for airline passengers to pay another ten dollars to spare the Boston area additional noise and environmental pollution. If Massport is so concerned with the loss of service to the communities served by the regional airlines, then Massport should subsidize them. 92.3

Not only did Massport ignore the requests of the CAC, Massport also has not performed its duty to inform the general public of the potential impacts of Runway 14/32 and of the existence of the MEPA process. Boston's South End neighborhood has not been graced with a visit from Massport, despite numerous requests by city councilors and state representatives. Massport has also not deigned to respond to the many requests of the Cambridge City Council for a meeting with them and the residents of Cambridge. Surely it can not be a coincidence that communities that can expect increases of to 300% were ignored, while every chamber of commerce in the eastern portion of Massachusetts has been recruited by Mr. Blute. Massport has made no attempt to publish the existence of the MEPA process in local papers. If community members did not inform them, citizens would not be aware of the potential impacts and the opportunity to comment to MEPA. MEPA should deny the DEIS/DEIR until every impacted community and their elected representatives have been visited by Massport and have been given the chance to submit their comments to MEPA. 92.4

As the report of the CAC consultants makes clear, Massport can not deliver on its promise of maintaining Runway 14/32 as a unidirectional runway in perpetuity. Peter Blute claims that he will reach an agreement with the FAA which will substantiate this claim, but after three months, where is it? Even if such an agreement could be created, it could easily be overturned by an agency that is already seeking to overturn a state court injunction. What possible agreement could Massport and the FAA create that

could be stronger than a court injunction? Massport is very careful to point out that they are not *currently* filing for the permits to create a bi-directional runway. There is, of course, nothing to stop them from doing so in the future. Massport is deliberately breaking their expansion scheme into small bits that MEPA will be forced to allow under the letter of the law. Massport is using the process designed to protect the environment against MEPA. As there is no substantiated agreement regarding uni-directional status of Runway 14/32 I urge you look beyond the current request and force Massport to calculate the impacts of a *bi-directional* Runway 14/32.. (Actually, I can't understand why MEPA is reviewing permits for construction of a runway already prohibited by Massachusetts. Isn't this process backwards? Shouldn't Massport succeed in lifting the court injunction before the DEIR/DEIS is filed?) 92.5

Massport's filing also touts the potential improved compliance with the noise goals set forth in the Preferential Runway Advisory System (PRAS). Once again, Massport and the FAA can not keep this promise. The FAA has refused to guarantee improved compliance, even after factoring out poor weather conditions. I request that you ask Massport to calculate noise impacts using *actual* runway usage, not some unobtainable goal. 92.6

Massport's noise contours are also misleading. They used only five tracks per runway to calculate noise impacts – and I doubt they used the extremes. In addition, the area impacted by Runway 27 departures has been severely understated. Runway 27 departures fly over the densely populated inner city communities of South Boston, the South End Roxbury and Jamaica Plain. As the current Runway 27 departure flight track was not in use in 1993, Massport has used the "optimal" departure tracks rather than the current actual in their DEIS/DEIR. According to radar tracks released in February 1999, a mere 38% of Runway 27 departures are adhering to the flight track used by Massport to calculate noise impact. Even worse, Massport and the FAA have given up on improving Runway 27 compliance and told the public to learn to live with it. At the very least, Massport should use the current actual flight tracks to calculate noise impact in the DEIS/DEIR. 92.7

As the Runway 27 situation has unfortunately proved, any commitments made by Massport and FAA are only as good as their subsequent compliance. The public needs the *subsequent, ongoing* involvement of MEPA and other environmental agencies to ensure that Massport and the FAA keep the commitments they have made to the communities. Any agreements regarding sound proofing, uni-directional status and adherence to PRAS goals need to be fully defined, documented and signed off by all parties, including the communities and their elected officials. The agreements should mandate subsequent review and corrective measures, including punitive monetary damages and the voiding of any 92.8

environmental permits granted in the event of non-compliance. Community members and their elected officials need to have a true voice in the ongoing review process, rather than the lip service Massport currently gives public input and community participation should be required in the drafting of the agreements. The agreements should also be included as an integral part of Massport's filing with MEPA. Agreements binding parties to their commitments are a normal part of the business world and I fail to understand why the environmental process does not require them. No rational business person would enter into a contract which included such unsubstantiated promises. If the data submitted by the CAC consultants is not sufficient to allow you to deny Massport's request, I urge MEPA to make your approval contingent upon the creation of contracts to protect the public and ensure that Massport and FAA honor the commitments they have made to the impacted communities.

Sincerely,

Kurt H. Walter

KHW/kw

Letter 92
Community Advisory Committee Representative, Cambridge
Kurt H. Walter

Code	Topic 1	Topic 2	Comment	Response
92.1	Environmental Review Process	Public Process	... I first want to point out the lack of public participation in this process...The Massport consultants steadfastly refused to provide any data that the CAC could use to counter the predetermined outcome of the study....	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
92.2	Environmental Review Process	MEPA	...I suggest that MEPA deny Massport's application until all data regarding delays, traffic at Logan and regional airports, increased capacity, etc. is stated in number of operations.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
92.3	Alternatives	Preferred Alternative	Massport's selection of alternative 2 (sic) as the preferred alternative is a business decision, not an environmental impact decision. The alternatives that include peak hour pricing clearly show a significant, timely delay reduction with minimal environmental impacts.	Alternative 1A is the preferred alternative. The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline Analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR.
92.4	Environmental Review Process	MEPA	MEPA should deny the DEIS/DEIR until every impacted community and their elected representatives have been visited by Massport and have been given the chance to submit their comments to MEPA.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
92.5	Environmental Review Process	MEPA	...I urge you look beyond the current request and force Massport to calculate the impacts of a *bi-directional* Runway 14/32.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Appropriate supporting documentation will also be issued (*e.g.*, appropriate designations in the Airport/Facility Directory, and Notices to Airmen or NOTAMS). Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
92.6	Noise	PRAS, Runway Use	I request that you ask Massport to calculate noise impacts using *actual* runway usage, not some unobtainable goal (referring to Preferential Runway Advisory System).	During very high demand periods, the controllers have little or no flexibility for runway selection and PRAS recommends an appropriate runway configuration given the extant demand. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals. The Supplemental DEIS/FEIR demonstrates that the controllers have been improving performance with respect to PRAS recommendations. Section 8.5 of the Supplemental DEIS/FEIR contains methods for more comprehensive monitoring of PRAS. These methods will be implemented as part of the mitigation program for the Airside Project.
92.7	Noise	Model	Massport's noise contours are also misleading...Massport should use the current actual flight tracks to calculate noise impact in the DEIS/DEIR.	The noise analyses in the Airside Project Draft EIS/EIR are based on radar descriptions of the current existing flight tracks, except for the departure track for Runway 27. The departure flight track for Runway 27 is changing to the flight track recommended in the Runway 27 EIS. For studies of future events, a set of tracks more representative of the recommendations is appropriately used.
92.8	Environmental Review Process	MEPA	...I urge MEPA to make your approval contingent upon the creation of contracts to protect the public and ensure that Massport and FAA honor the commitments they have made to the impacted communities.	Massport's mitigation measures are reinforced through compliance with M.G.L. Chapter 30A, Section 61 and through specific state and federal certificates approving projects that have mitigation. The status of the Section 61 Finding commitments are tracked and reported in the *Logan Airport 1999 ESPR* (previously GEIR). See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.

LETTER 93

D.A.N.A.

Dorchester Allied Neighborhood Associations

One Barna Rd
Dorchester, MA 02124
(617) 288-9035
April 22, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
ATTN: Arthur Pugsley, MEPA Unit
100 Cambridge ST, 20th Floor
Boston, MA 02202

RE: LOGAN AIRSIDE IMPROVEMENTS PLANNING PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT
EOEA #10458

Dear Secretary Durand:

Dorchester Allied Neighborhood Associations (D.A.N.A.) represents the many diverse residents and neighborhoods of Dorchester as individuals and through their crime watch and civic and neighborhood associations. I am the Dorchester Representative appointed by D.A.N.A. to the Community Advisory Committee to Massport. At the April 1999 D.A.N.A. meeting, a motion was made, duly seconded and unanimously passed to oppose any expansion of Logan International Airport. D.A.N.A. is opposed to the construction of new runways, specifically Runway 14/32 and we are opposed to the construction of additional taxiways.

The expansion of Logan International Airport must be stopped. Logan International Airport was built in a residential setting. While this may not have posed a problem 75 years ago, today the increased dependence on air transportation in a densely populated urban area makes this unacceptable. The residents of the neighborhoods of Boston, including Dorchester, and all the surrounding communities today suffer an unacceptable level of noise and air pollution. No amount of noise mitigation will solve the problem we face when our windows are open or when we go outside. No amount of noise mitigation will address the very high levels of asthma and other respiratory illness suffered by the residents of Boston.

Massport must not waste taxpayer money building runway 14/32. Instead, they must diligently pursue and maximize the use of an intermodal regional transportation system. The use of several airports located in various metropolitan areas does not solve the problems of noise and air pollution in the city, it only spreads it around. The major growth in the area is outside the Interstate 495 area. With Fort Devens located less than an hour from Boston, the construction of a New England international regional airport at Fort Devens with high speed rail links to the major metropolitan areas is the most responsible approach.

Massport has stated that for Boston to be a "world class city" that attracts tourists and conventioneers, Logan International Airport must expand. Boston is the

grand dame of American cities, with considerable historical significance made up of many unique neighborhoods. For Boston to be a "world class city" we must support the neighborhoods. Otherwise, Boston will have no neighborhoods, and she will become a giant convention center, and business and industrial park. Neither tourist nor conventioneers will be interested in coming to Boston.

Ultimately, the environmental disaster called Logan International Airport must cease to exist, returning to Boston and Winthrop the land that was theirs. Dorchester, East Boston and all the surrounding communities deserve this.

Three significant items which the DEIS/EIR does not adequately address are: 93.1
•No credible case is made for building the proposed Runway 14/32 as a means to solve operational delays at Logan International Airport. It is a thinly veiled capacity enhancing project which will negatively effect large numbers of people. 93.2
•The socio-economic and environmental effects from the proposed project on the inner city and the greater metropolitan Boston area is not adequately addressed. 93.3
•The noise contour maps are illegible, making it impossible to determine which communities are most adversely effected by which contour, it is not a full disclosure document.

On behalf of D.A.N.A. and myself, I support the Review Comments on Draft Environmental Impact Statement/Draft Environmental Impact Report for the Logan Airside Improvements Planning Project as presented by Massachusetts Port Authority dated February 1999, prepared by Robert G. Burns of Monty Gettys, Montgomery Consulting Group, In., David Standley, P.E., Consultants to the Community Advisory Committee to Massport for the Community Advisory Committee, dated March 29, 1999.

Therefore, we respectfully request that MEPA find the DEIS/EIR to be inadequate and return it to the Massachusetts Port Authority.

Sincerely,

Pamela A. Smith
Dorchester Representative
Community Advisory Committee to Massport

cc: Arthur Pugsley, MEPA Unit
Congressman J. Moakley
Congressman M. Capuano
Senator B. Joyce
Senator S. Lynch
Senator D. Wilkerson
Representative T. Finneran
Representative G. Fox
Representative E. Malia
Representative S. Owens-Hicks
Representative M. Walsh
Councilor M. Feeney
Councilor C. Yancey

Letter 93
Community Advisory Committee Representative, Dorchester
Dorchester Allied Neighborhood Association
Pamela Smith

Code	Topic 1	Topic 2	Comment	Response
93.1	Purpose and Need	Delay	No credible case is made for building the proposed Runway 14/32 as a means to solve operational delays at Logan International Airport. It is a thinly veiled capacity enhancing project which will negatively effect [sic] large numbers of people.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
93.2	Environmental Justice	Impacts	The socio-economic and environmental effects from the proposed project on the inner city and the greater metropolitan Boston area is not adequately addressed.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.
93.3	Noise	Studies	The noise contour maps are illegible....	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.

LETTER 94

Mr. Robert Durand
Secretary of Environmental Affairs
Commonwealth of Massachusetts
100 Cambridge St., - 20th floor
Boston, MA 02202
ATTN: Arthur Pugsley
MEDA Unit
File Number – 10458

Dear Secretary Durand:

As the Representative on the Community Advisory Committee from the City of Malden, I must oppose the expansion of Logan Airport. There are other alternatives and options that exist and should be implemented before a new runway and taxiway are employed. Other airports could help relieve the congestion at Logan. New Bedford Airport is begging for improvements so they can become a reliever airport. Hanscom Airport in Bedford, has existing runways which could handle any aircraft, yet Massport will not consider using it for anything other than what it is being used for now, despite the fact that it lost 1.9 million dollars last year. The fact that 54% of Logan passengers come from 128 and beyond makes Hanscom a perfect location for another usable airport. 94.1

The EIS/EIR is a flawed report that should be withdrawn. It uses 1993 as the base year, but was not released until 1999. The weather data used is from 1981-1990, and weather patterns have changed since then. This report only goes out to the year 2010, which is only 11 years away. If the proposed expansion were to go forward, its completion date would be 2005. By Massports estimates, the delay problem will be worse in 2010 than it is today, even with the expansion, yet they have no plan to deal with this problem. This is a shortsighted approach to a long-term problem. A 20-year outlook should be used, and a second major airport study should be revisited. Peak hour pricing and the expanded use of other airports, along with improved infrastructure to Worcester Airport are all options that should be implemented before any Logan improvements are considered. 94.2 94.3 94.4

-Sincerely,

John J. Mahoney
Malden CAC Representative

John Mahoney

Letter 94
Community Advisory Committee Representative, Malden
John Mahoney

Code	Topic 1	Topic 2	Comment	Response
94.1	Regional Transportation	Regional Airports	There are other alternatives and options that exist and should be implemented before a new runway and taxiway are employed.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
94.2	Analysis Assumptions/ Methodologies	Base Year	...It uses 1993 as the base year, but was not released until 1999. The weather data used is from 1981-1990, and weather patterns have changed....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. Comparative analysis of 1981 to 1990 weather with 1989 to 1998 weather identifies no significant differences in statistical properties.

Code	Topic 1	Topic 2	Comment	Response
94.3	Analysis Assumptions/ Methodologies	Planning Period	This report only goes out to the year 2010, which is only 11 years away...A 20-year outlook should be used....	Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.
94.4	Alternatives	Peak Period Pricing	Peak hour pricing and the expanded use of other airports... should be implemented before any Logan improvements are considered.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. Analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR. Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

4/20/99

Dear Mr. Pugsley,

LETTER 95

The community of Hingham has not been fairly considered in the EIS/EIR produced by MASSPORT. Therefore, I oppose the proposed runway expansion.

CURRENTLY, we experience over our neighborhood, 1 flight per minute at low altitude, for HOURS ON END. Having a conversation outside is next to impossible. We get woken up at night.

What is the impact on our CHILDREN'S HEALTH WITH THE PRESENT NUMBER OF FLIGHTS OVER OUR NEIGHBORHOOD? 95.1
Does the fact that our state park (Wompatuck) and our reservation lands offer no solitude because of MASSPORT operations?

IF THIS IS NOW, WHAT ARE WE SUPPOSED TO DO WHEN FLIGHTS OVER HINGHAM TRIPLE? Is the developing of Boston as a corporate convenience center more important to NEPA than the VERY REAL impact of MASSPORTS operations currently and in the future to our community's environmental and public health?

In the name of God and upholding the spirit of your position, I ask you to find this environmental impact statement inadequate and to recommend a regional solution to this issue. Thank you. 95.2

Sincerely,

Richard Goldhammer
CAC representative
Hingham, Massachusetts

Letter 95
Community Advisory Committee Representative, Hingham
Richard Goldhammer

Code	Topic 1	Topic 2	Comment	Response
95.1	Noise	Impacts	What is the impact on our CHILDREN'S HEALTH WITH THE PRESENT NUMBER OF FLIGHTS OVER OUR NEIGHBORHOOD?...WHAT ARE WE SUPPOSED TO DO WHEN FLIGHTS OVER HINGHAM TRIPLE?	There is no evidence to suggest that the levels of environmental noise generated by Logan Airport are a health risk to residents. This is especially true in Hingham where DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.
95.2	Enviromental Review Process	MEPA	...I ask you to find this environmental impact statement inadequate and to recommend a regional solution to this issue.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

Responses to Comments **Volume 6**

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

Joseph S. Gulino
Melrose Representative to the Logan CAC

LETTER 96

25 Apple Hill Road
Melrose, MA 02176

April 20, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley, EOEA No. 10458
100 Cambridge Street - 20th Floor
Boston, MA 02025

Dear Secretary Durand:

I am writing to ask you for your help in opposing Massports expansion plans for Logan Airport.

It is my feeling that given Massports increased air traffic projections, that this new runway does not begin to address delays at Logan Airport.

Massport is projecting an increase in flight operations from the current 500,000 per year to 750,000 per year. Yet this new runway is projected to handle only 75,000 flights per year. Where will the other 175,000 planes go, and how will existing delays improve under this scenario? By the time this new runway would be operational, any temporary relief would be marginal at best.

Massport argues that this new runway will provide relief to the communities surrounding the airport. That seems to be at odds with the opinions of the people who live in those communities.

I, too, am one who fails to see this conclusion. What I see is Massports ability to increase flight operations to a guaranteed 120 average operations per hour, from an existing average of 90 operations per hour now. This would seem to me to be an expansion plan, and not a delay reduction plan, and this would also seem to place a greater burden on the communities, not any relief.

I would argue that the burden of airport traffic should be shared by all communities that use the airport, kind of like a "pay to play" rule. By this I mean that Logan is at its capacity and by Massports estimates, 40-60% of the people who use Logan live outside of the Route 128 belt.

Logan is only 1,200 acres, and, as many Major airports go, relatively small in comparison to the newer, major 10,000 acre airports that have been built or expanded around the country.

I support Mayor Menino, Congressman Markey, Congress Capuano and other political and social leaders, as well as the the community group CARE's recommendation for a blue ribbon commission to study and strategize on our regional transportation system and to look for long term solutions to the Commonwealth's transportation needs, including the siting of a new major airport. 96.1

This would alleviate safety and environmental concerns in the immediate Metropolitan area of Boston including but not limited to reductions in air and ground transportation in the City of Boston, reductions in noise and air pollution, and an increase in quality of life issues, etc., etc..

I find it unconscionable that Massport to date has spent Millions of dollars, considers this new runway to be a delay reduction plan, and at the same time admits that they have failed to look at any long term solutions that are obviously necessary to bring our air transportation system into the 21st century.

Massport claims to be a good neighbor, and yet, as the City of Melrose representative to the CAC, I am a bit confused by this claim. I asked massport at a meeting of the Airside Review Committee (ARC), if they would come to our City to explain to our Mayor, Board of Alderman and our homeowners and taxpayers the effects of this new runway on our community. Betty Derosier, with Director Peter Blute, standing right there, said that they would. But when I called at the request of our Mayor and Board of Alderman to schedule this meeting, Massport's response was " we have reconsidered our position with respect to individual community presentations" (see attached letter). 96.2

Melrose has and continues to experience an increase in air traffic and noise, and I have come to the belief that it is expected to triple. Today, according to Massports estimates, Melrose experiences 4% of all airport traffic, which will increase to 12%. On current volume of 500,000 operations today, that is currently 20,000 flights per year increasing to 60,000 flights per year over Melrose and will increase to 90,000 flights per year when volume levels reach the expected 750,000 flights per year. Yet Massport doesn't consider Melrose to be adversely impacted. I find this outrageous and ask for your help in holding Massport accountable.

Massport's computer generated flight models do not even show a jet flying over Melrose, yet I can look up in the skies on just about any given day and I can show you many jets flying over Melrose.

Massport was very careful in documenting their public participation quota. However, it is my feeling that they shyed away from any real public participation,

as evidenced by their eagerness to push this project through in two months after a 20 month period of self imposed delay.

I share the sentiments of many that this DEIS/DEIR document is flawed in it's selection of outdated weather and flight data information, its' lack of analysis and/or inclusion of potential solutions to delay and expansion scenarios (i.e. peak period pricing and Hanscom field, etc.) and it is my opinion that it is flawed in it's conclusion that this is the answer to reducing delays and solving the Commonwealth's air transportation needs. 96.3

I urge you to join the political and social leaders, and the communities and the people who oppose this new runway and proposal, until such time as Massport updates it's data and considers and includes some long term solutions to this air transportation problem.

Boston is a World Class City, and the people and businesses of the Commonwealth deserve a World Class and Long Term solution to their air transportation needs.

Thank you very much for your help.

Very Truly Yours,

Joseph S. Gulino,
Melrose representative
to the Logan CAC

Attachment

CC: John Silva, Manager, FAA Airports Division Environmental Programs
John DeVillars, New England Regional Administrator EPA
Melrose Mayor Patrick Guerrierro
Melrose Board of Alderman
State Representative Michael Festa
State Senator Richard Tisei
Logan CAC Chair
CARE Board

Letter 96
Community Advisory Committee Representative, Melrose
Joseph S. Gulino

Code	Topic 1	Topic 2	Comment	Response
96.1	Enviromental Review Process	Blue Ribbon pANEL	I support...recommendation for a blue ribbon commission to study and strategize on our regional transportation system....	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. As summarized in the Draft EIS/EIR, a number of studies that address regional transportation planning issues have been conducted over the last ten years. These studies have concluded that the Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high speed rail are all necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Chapter 2 of the Supplemental DEIS/FEIR discusses the entire region's air transportation system, along with a discussion of alternative modes, specifically high-speed rail, and describes the regional study and its major conclusions.

Code	Topic 1	Topic 2	Comment	Response
96.2	Environmental Review Process	Public Process	Concerned about openness of public participation process.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
96.3	Delay	Model	...document is flawed in its selection of outdated weather and flight data information, its lack of analysis and/or inclusion of potential solutions to delay and expansion scenarios (i.e. peak period pricing and Hanscom field, etc.)....	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. Analysis of 1981 to 90 weather with 1989-98 weather identifies no significant differences in statistical properties. The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport is prepared to initiate a process, as described in Section 4.5.4 of the Supplemental DEIS/FEIR, to initiate the rule-making process to implement PPP at that time. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.

Deborah A. Santiano-McHatton
89 Leverett Ave
Beachmont, MA 02151

LETTER 97

April 19th,1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

RE: Draft EIR logan Airside Improvements - EOEA #10458

Dear Mr. Pugsley:

For over two years as Revere's alternate CAC, I have attended CAC meetings, reviewed the draft EIR, and attended several Massport Presentations to various neighborhoods. I feel that the proposed Logan Airside Improvements are unfair to the "close-in" neighborhoods and that the "improvements" offer no serious long term relief to the impacted neighborhoods. I also believe that the main thrust of the "improvements" is not to reduce delays, but to optimize the capacity of Logan so more flights may be accomodated.

1. Reduction of the Decision Point Minimum

We are opposed to the lowering of the decision point minimum on runway 22L. To quote from the draft EIS/EIR: "If the reported visibility at the airport is less than the published minima for the approach, the pilot must wait until the weather improves, use another runway or divert to another airport."[1] Reducing the minimum will allow more planes to land in inclement weather. This will mean more planes on runway 4/22 during bad weather and would allow an operating gain of 94 hours to Massport. At 35 planes landing an hour, Revere would have an increase of approximately 3200 operations. The Beachmont hill in Revere is 120 feet with a 50 foot building on top. Planes are flying at less than 500 feet at this point over our homes and they are less than 300 feet over the elderly housing. 97.1

In Massports presentation at the VFW in Beachmont Massport explains how the lowering of the minimum will benefit Revere by changing the decision point closer to the airport. This brings the decision point over East Boston. In Massports presentation at the Orient Heights Yacht Club the slide showing the decision point was omitted. Was this because it does not benefit the Orient Heights neighbors?

I ask that you find the Draft inadequate in this matter, especially since the subject did not appear in volume one. Most people did not even review this as they did not receive volume 3 technical appendix in which this subject is referenced. The document also does not indicate that a 50 foot building is atop Beachmont Hill and implies a false perspective.

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[1]Logan Airside Improvements Planning Project. Volume 3 p.1 "overview"

2. Runway 14/32

Runway 14/32 has been presented to the community as a way of reducing delay for Massport. It is also purported to distribute operations more evenly amongst neighboring communities. The new runway will allow Massport to operate in high Northwest winds. This does not affect operations on 4/22 which cannot be used in this weather. So there is no relief to us in high Northeast winds with 14/32 operating. With mild weather conditions 14/32 could possibly provide some relief to our community. However with Massports growth projections, our neighborhood will return to the same intolerable level in just a few years. 97.2

3. Proposed Centerfield Taxiway

The new centerfield taxiway will make runways 4/22 more attractive to use. This would offset the purpose of sharing the burden of operations with other communities. PRAS goals have not been met in the past and this "improvement" will certainly not provide relief to Revere, East Boston, or Winthrop. 97.3

4. Noise

The Draft EIR addresses noise with updating aircraft's to Stage Three. Currently 85% of operation at Logan are Stage Three and all late night operation are restricted to Stage Three. Stage three is still a very noisy aircraft, loud enough to wake you up at 3AM. Therefore Stage Three is inadequate in resolving noise pollution. It should be mandated that all aircraft be no louder than 65 decibels. 97.4

The Draft EIR does not provide any long term solution to Massports propensity to grow, nor does it address the consequences to the impacted communities, the injustice to the "close-in" communities. 97.5

I am a life-long resident of Beachmont , the most highly impacted area of Revere, living within the 70 to often well above 85 decibel noise contour from Logan. Sound -proofing is not suitable mitigation for the environmental injustice inflicted upon us. We need strict night time curfews, effective from 10PM to 7AM. An operational cap should be implemented at Logan. With limited land size, hasn't Logan really reached it's capacity? Sound-proofing should be expanded to include central air-conditioning. Trees should be planted to absorb some of the noise. Noise and air pollution monitors (such as those requested by our community and not received) should be made available to all impacted neighborhoods. 97.6

Logan as it exist today is here to stay. With its own projection for growth, and subsequent noise, our neighborhoods will be extinct in the future.

The Draft EIR fails to look seriously at a second major Airport, which would be the only real solution for impacted communities. 97.7

Respectfully,

Deborah A. Santiano-McHatton

Deborah A. Santiano-McHatton

Letter 97
Community Advisory Committee Representative, Revere Alternate Deborah A. Santiano-McHatton

Code	Topic 1	Topic 2	Comment	Response
97.1	Alternative	Reduced Approach Minima	We are opposed to the lowering of the decision point minimum on runway 22L...This will mean more planes on runway 4/22 during bad weather....	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport does not equate to a reduction in the existing levels of safety. Aircraft would follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach procedure would be initiated would be moved closer to the airport. Ideally, whenever possible, the lowest minimums are used to ensure the greatest availability of a runway during poor weather. Although normally categorically excluded from the NEPA review, the Airside Project study included modeling of changes in runway availability due to reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result. Appendix D indicates a 0.1 percent increase in equivalent jet arrivals on Runway 22 and no increase in equivalent jet departures on Runway 4 with the 37.5M High Fleet and Reduced Minimums.
97.2	Noise	Runway 14/32	...there is no relief to us in high Northeast winds with 14/32 operating. With mild weather conditions 14/32 could possibly provide some relief to our community.	In high northeast winds, Runway 4R is the primary runway. However, in milder northeast winds, Runway 14/32 would provide some relief.
97.3	Alternatives	Taxiway Improvements	The new centerfield taxiway will make runways 4/22 more attractive to use...this 'improvement' will certainly not provide relief to Revere, East Boston, or Winthrop.	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays; thereby reducing associated noise and emissions. When using Runways 22L/R for departures, the Centerfield Taxiway would provide an alternate taxi route for Runway 22L departures to bypass the queue for Runway 22R, thereby reducing taxiway congestion and associated noise and emissions. Runway 22L departures represent less than ten percent of the total departures. Under existing conditions, aircraft needing to depart on Runway 22L (typically heavy jets, such as 747s with long takeoff distance requirements) must wait in the queue on Taxiway November with aircraft departing on Runway 22R. With the Centerfield Taxiway, aircraft departing on Runway 22L could depart quickly after reaching the runway end, and the number of aircraft queuing on Taxiway November should decline. Also, the aircraft on the Taxiway November should be smaller, implying lower noise and air quality emissions. With the addition of Runway 14/32, use of Runways 22R and 22L for departures would decline.
97.4	Noise	Hushkitted Aircraft	Therefore Stage Three is inadequate in resolving noise pollution. It should be mandated that all aircraft be no louder than 65 decibels.	Stage 3 is not the final answer to aircraft noise. However, the retirement of hushkitted Stage 3 aircraft, the continued development of quieter aircraft, and the ongoing research for quieter future aircraft offer significant hope for the future. However, a noise limit of 65 dBA, which is well below the federal limits for automobiles and trucks, is not appropriate for aircraft.

Code	Topic 1	Topic 2	Comment	Response
97.5	Environmental Justice	Impacts	...[The Draft EIR does not] address the consequences to the impacted communities, the injustice to the 'close-in' communities.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
97.6	Noise	Sound Insulation	Sound-proofing is not suitable mitigation for the environmental injustice inflicted upon us.	Sound insulation does not totally mitigate aircraft noise. However, it reduces the noise inside the dwelling unit to improve the indoors environment and reduce the impact on indoor human activities, such as speech communication and sleeping. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative.
97.7	Regional Transportation	Regional Airports	The Draft EIR fails to look seriously at a second major Airport....	Comment noted.

CLF Conservation Law Foundation

LETTER 98

April 23, 1999

✓Robert Durand
Secretary of Environmental Affairs
100 Cambridge Street
20th Floor
Boston, MA 02202
Attention: MEPA Office (Arthur Pugsley)

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
Federal Aviation Administration
12 New England Executive Park
Burlington, MA 01803

Re: Logan Airside Improvements Planning Project
Draft Environmental Impact Statement/Report, EOEA #10458

Gentlemen:

Enclosed for filing please find the Comments of the Conservation Law Foundation on the Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report submitted by the Massachusetts Port Authority. CLF urges the Massachusetts Secretary of Environmental Affairs and the Administrator of the Federal Aviation Administration to find that the DEIS/R is inadequate, and to require that Massport prepare a Supplemental DEIS/R.

While an extremely valuable asset for Boston and the region, Logan Airport has serious environmental impacts, ranging from the noise impacts of planes to the motor vehicle air pollution attributable to the airport, New England's largest generator of motor vehicle trips. CLF is very skeptical of the need for either expanded runway capacity at Logan or a new regional airport, either to reduce delays or accommodate passenger growth. The sought-after benefits of such facilities can be obtained through less environmentally harmful means: namely, if Logan operated more efficiently (through "peak hour pricing" or other runway pricing reforms) and better use was made of intercity

rail service as well as other regional airports which travelers could reach by environmentally responsible modes of transportation, including rail.

Massport was tasked with analyzing in the DEIS/R whether these measures could be alternative means for addressing flight delays at Logan. Unfortunately, Massport did an inadequate job of performing this analysis. Accordingly, Massport has failed to make its case that the proposed "airside improvements," of which Runway 14/32 is the most prominent example, are the least environmentally damaging way to address the delay question which Massport is ostensibly addressing. If Massport continues to seek to build this runway, it must next, in a Supplemental DEIS/R, fairly and thoroughly assess these important alternative measures.

Massport's failure adequately to consider administrative measures like peak-hour pricing and the potential of rail and other airports as alternative ways of addressing Logan's flight delays is related to a larger and more serious problem: the absence of a regional strategy for dealing with Massport's ominous growth projections for Logan. Massport estimates that, whether or not the proposed runway is built, Logan's present level of 26.5 million passengers per year will grow to between 37.5 and 45 million passengers by 2010. A major regional planning initiative is needed right now -- before additional capacity is provided at Logan -- to address how to plan for this projected demand in the most efficient and environmentally sensitive way possible. While outside the scope of MEPA or FAA formal review, CLF urges Massport and appropriate state agencies in Massachusetts to initiate a planning process, in partnership with officials from Rhode Island and New Hampshire and with other stakeholders from around the region, to develop a workable, sustainable strategy for handling inter-city travel demand in the region. The plan would address both goals for use of rail service and other airports and specific strategies for attaining those goals.

Very truly yours,

Stephen H. Burrington
General Counsel

Bennet Heart
Senior Attorney

Seth L. Kaplan
Staff Attorney

cc: Massport

COMMENTS OF THE CONSERVATION LAW FOUNDATION ON THE LOGAN AIRSIDE IMPROVEMENTS PLANNING PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT

EOEA No. 10458

April 23, 1999

Submitted by Seth L. Kaplan, Bennet Heart, and Stephen H. Burrington

I. Introduction

The Conservation Law Foundation (CLF), a member-supported, non-profit environmental advocacy organization founded in 1966, has been involved with Logan International Airport related issues for many years. CLF's mission is to work to solve the environmental problems that threaten the people, natural resources, and communities of New England, and the plans and actions of the Massachusetts Port Authority (Massport) at Logan Airport have regularly warranted our attention. Historically, when the subject of meeting increasing demand for air travel in the region has come up, one of two options are put on the table: Logan cannot grow to accommodate projected demand, so we need to build a "second airport" (in a location with no transit/rail access) or Logan needs to grow even if it is at the expense of neighboring communities. CLF has rejected both positions. Several years ago CLF opposed plans to "bank" land for a second regional airport on the grounds that no such facility would be needed if Logan operated more efficiently and better use was made of existing regional airports and rail. CLF has also argued, in comments on Logan plans filed under the Massachusetts Environmental Policy Act (MEPA), that Massport should use "peak hour pricing" to help de-congest Logan's runways and reduce the disproportionate use of the airport by smaller planes.

Massport now comes forward, in the Draft Environmental Impact Statement/Report (DEIS/R) under consideration, with a highly controversial proposal to build an additional runway at Logan -- a proposal Massport unsuccessfully advanced thirty years ago -- and make certain other infrastructure and operational changes. The stated purpose of the runway and the other proposed infrastructure and operational changes is to address flight delays at Logan, not expand Logan's capacity. Given the magnitude of the proposal, the clear direction provided by the Secretary of Environmental Affairs' November 1995 Certificate on the Environmental Notification Form (ENF), and the over three years that Massport has had to prepare this DEIS/R, Massport should have returned with a document containing a first-rate alternatives analysis, both with respect to peak period pricing and other landing fee reforms, as well as the role of other airports and rail travel. Unfortunately, however, the DEIS/R alternatives analysis fails on both counts. First, Massport's submission fails to adequately assess the potential to reduce delays and make Logan more efficient through better administration of the existing airport -- like revamping landing fees and implementing "peak-hour pricing," a measure that would discourage small planes from clogging the airport during busy times. Second, it fails to adequately consider

98.1

the potential of other airports in the region and rail service to, in conjunction with runway pricing reform, handle enough of Logan's present and future business so as to largely alleviate the delay problem flagged by Massport. Most notably, Massport fails to consider the potential for T.F. Green Airport in Warwick, Rhode Island, and the Manchester Airport in Manchester, New Hampshire, to service more than merely their discrete geographic areas. These "regional reliever" airports already serve, and can provide far greater service in the future to, the Greater Boston metropolitan area. This is similar to the function that Newark Airport serves in the New York City area, and that Dulles and Baltimore-Washington Airports serve in metropolitan Washington, D.C. 98.2

Massport's failure to adequately consider administrative measures like peak-hour pricing and the potential of T.F. Green and Manchester airports is related to a larger and more serious problem: the absence of a regional strategy for dealing with Massport's ominous growth projections for Logan. Massport estimates that, whether or not the proposed runway is built, Logan's present level of 26.5 million passengers per year will grow to between 37.5 and 45 million passengers by 2010. A major regional planning initiative is needed right now -- before additional capacity is provided at Logan -- to address how to plan for this projected demand in the most efficient and environmentally sensitive way possible. 98.3

Essentially, Massport is proposing a short-term solution to a long-term problem. If the DEIS/R is accurate, then the "airside improvements" Massport proposes will simply reduce delay at Logan temporarily until the unrelenting surge in passengers using Logan and resulting airplane operations overwhelms even an expanded airport. Massport's failure to address the long term, however, does not mean that the DEIS/R adequately addresses the short-term question of delay and what alternatives exist to remedy that situation. The DEIS/R fails to address, in an effective, appropriate and sufficiently thorough manner, a number of important issues identified in the Secretary's Certificate on the ENF. Consequently, the EOEA Secretary pursuant to his authority under the Massachusetts Environmental Policy Act, as well as the Administrator of the Federal Aviation Administration (FAA) in her role as the federal official who will have to issue a record of decision for this process, should require that a *Supplemental* Draft Environmental Impact Statement/Report be prepared to deal with the issues which have not been adequately addressed in the DEIS/R. It would not be sufficient to address the deficiencies identified in the following comments, and the deficiencies identified by other commentors, in a Final EIS/R. The breadth and depth of the deficiencies are such that they require the preparation of a Supplemental DEIS/R which will *begin* to address the critical issues and concerns overlooked in the DEIS/R. 98.4

While the supplemental DEIS/R is being prepared, Massport can, in cooperation with the FAA, initiate a revised landing fee and peak period pricing pilot program. Working with the FAA to develop and implement such a pilot program would effectively insulate such a program from the legal challenges which undermined Massport's 1988 effort to reform Logan's landing fees to improve airport operations. The results of such a pilot program can be incorporated in the supplemental DEIS/R. Additionally, during this 98.5

same critical time period Massport will be able to better assess the emerging reality of high-speed rail in New England. The supplemental DEIS/R should reflect actual data, and enhanced projections based on such data, from the actual operation of Amtrak's Acela high speed rail service as well as revised data and projections concerning the use and role of the other regional airports. Finally, while the supplemental DEIS/R is being prepared, we urge Massport and other leading state officials to join with their counterparts in Rhode Island and New Hampshire, along with other interested parties throughout the region, to develop a workable, sustainable plan for inter-city travel in New England. The plan would address both the roles the different airports and rail services should be serving and how best to allow these airports to play those roles by, among other measures, fostering clean, non-automobile oriented ground transportation. 98.6

II. The alternatives analysis in Massport's DEIS/R is inadequate and requires that a Supplemental DEIS/R be prepared.

A. Massport fails to adequately assess the potential to address Logan's delay problems through better use of other airports and rail travel.

The Secretary of Environmental Affairs left no doubt in her Certificate that the "off-airport alternatives" to Logan expansion, namely better use of other airports in the region and rail travel, had to be thoroughly examined in the DEIR. Noting that this issue had "generated substantial and thoughtful commentary from many agencies, citizens, and organizations" and that she herself had "spoken at length" on the "need for an analysis of increased use both of other regional airports and intermodal transportation as viable alternatives to increased operations at Logan" in her Certificate on Massport's 1994 Generic EIR for Logan, the Secretary stated that "the Draft EIR should discuss these off-airport alternatives and analyze the potential each has to divert passengers and/or cargo from (and lower the operational impacts of) Logan Airport." (ENF Certificate, p. 3) Massport does discuss these issues, of course, but in an entirely inadequate manner.

Massport asserts that no matter what happens at other airports and on the rail system, the number of passengers demanding flights to or from Logan will rise to between 37.5 and 45 million by 2010. This is because Massport concludes that the best that can be hoped for from "regional alternatives" is a diversion of 7.5 million passengers, an amount about the size of the growth projection range. Massport essentially says that no matter what happens with other airports or rail, there still will be a delay problem. There are at least three problems with Massport's approach. First, it is entirely reactive rather than proactive; Massport does not concern itself with what significant steps it might take to boost this diversion number (although Massport's recent renewed interest in making better use of Worcester Airport is an encouraging development). A second closely related problem is Massport failure to assess, with or without such an enhanced Massport role, the potential of rail travel and other airports, most notably T.F. Green and Manchester airports, to handle more of the traffic currently being, or projected to be, handled by Logan. Third, Massport ignores the possibility that under different growth scenarios for other airports, Logan Airport's flight mix, so inefficiently burdened with small general aviation and

regional carriers, could be significantly altered so that Logan's flight operations per year could decrease enough to alleviate delays.

i. Massport's passive approach to regional alternatives.

Massport offers a disappointingly passive approach when it comes to the potential to serve travelers through facilities other than Logan. Massport suggests that the only role it can play regarding "alternative travel choices to provide relief to Logan" is to assist in their "promotion." (DEIS/R at 2-38.) As an independent quasi-public authority Massport has broad powers allowing it to engage in a wide range of activities. If, for example, Massport were to determine that entering into a Memorandum of Understanding with Amtrak under which Massport agreed to subsidize increased service to and from South Station to help reduce delay at Logan, there would be no legal impediment to the execution of such an agreement by Massport. Massport's varied aviation, maritime and development activities demonstrate the many roles that a public authority can play. Indeed, even if we were to accept the falsely limited notion of Massport's role as a "promoter" of regional alternatives, there is no analysis of the effect that different degrees and types of efforts in this area by Massport would have on use of such "alternative travel choices." What Massport should have done is present a wide range of alternatives in the DEIS/R in which enhancements, improvements and changes to a wide range of regional transportation facilities were proposed and analyzed and the role that Massport could play in facilitating these enhancements, improvements and changes was described. 98.7

ii. The emerging role of rail for travel within, as well as to and from, New England.

1. The coming of Acela: three hours door to door from Boston's Financial District to Midtown Manhattan.

Massport acknowledges that high speed rail in the Boston to New York corridor is imminent and will capture some of Logan's Boston to New York traffic. Massport relies on outdated 1994 Amtrak data for its projections, however. Since the preparation of the Final Environmental Impact Statement/Report and 4(f) Statement for Northeast Corridor Improvement Project Electrification in 1994 by the Federal Railroad Administration, more refined projections of ridership on the new high speed Acela service have been prepared and utilized by Amtrak. In the Supplemental DEIR, Massport should utilize Amtrak's most current ridership projections. Moreover, as noted above, requiring the preparation of a supplemental DEIS/R will give Massport the gift of time, time that will allow it to utilize an analysis of the *actual* operations of the new Acela High Speed Rail as well as updated projections of total ridership based on new data gleaned from actual operations in the supplemental EIS/R. 98.8

2. The T.F. Green connection: the DEIS/R ignores the critical rail developments in the Boston/Rte. 128 Station/Providence/T.F. Green segment of the Northeast Corridor.

The DEIS/R fails to mention the proposed construction of a major new intermodal transportation facility which will reshape even further our regional transportation system: the train station at T.F. Green Airport in Warwick, Rhode Island. A NEPA Environmental Assessment is being prepared for the station, and construction should be completed and the station operational by the end of 2001. The State of Rhode Island and the Commonwealth of Massachusetts have entered into an agreement regarding the extension of MBTA commuter rail to T.F. Green. CLF has learned from Amtrak's Vice President for Policy and Planning that Amtrak will stop Acela Express (high speed) trains at T.F. Green station if there is sufficient passenger demand and that all Acela Regional (conventional Amtrak service) trains are expected to stop there. He suggested that it is possible that Amtrak operations at T.F. Green may follow a pattern similar to its past operations at the Baltimore-Washington International Airport (BWI) station. When BWI Airport Rail Station opened for operations Amtrak scheduled stops at that station for approximately one-third of the trains on the corridor passing the airport. Today, only one Amtrak train traversing that corridor fails to stop at BWI Airport Rail Station, all other Amtrak trains (roughly 90% of Amtrak trips in that corridor) stop at BWI to pick up and discharge passengers.

The DEIS/R simply ignores these facts, which, in the very near future, will make it much easier for people in Boston and the southern suburbs of Boston in or near the Route 128 corridor to gain access to T.F. Green Airport in Rhode Island. As discussed above, the massive Northeast Corridor rail improvement and electrification project will speed rail travel on the existing Northeast Corridor, the passenger rail route connecting Massachusetts and Rhode Island. The agreement between the Commonwealth of Massachusetts and the State of Rhode Island to extend commuter rail service to the T.F. Green train station, coupled with Amtrak service, will provide frequent service between the T.F. Green Station and Massachusetts stations such as South Station and Back Bay Station in Boston and Route 128 Station, which sits at the intersection of the towns of Dedham, Westwood and Canton and where the MBTA is presently building a 2,670 space parking garage. This direct service might be augmented by proposed Rhode Island Department of Transportation rail shuttle service which would provide rapid and continual service between the Providence train station and T.F. Green. No attempt is made in the DEIS/R to discuss these rapidly approaching changes in the rail corridor between Boston and Rhode Island and to assess the impact that these changes will have on passenger behavior and choice and resulting demand, congestion, delay (or reductions in such factors) at T.F. Green and Logan. 98.9

3. Amtrak service to Portland: an impending reality and a service with great potential, especially when high speed rail service and possible air passenger service at Pease are considered.

Amtrak service on the Portland-Boston corridor is scheduled to commence in 1999. The Transportation Secretaries of Massachusetts, New Hampshire and Maine have jointly requested that Amtrak convert this line to high-speed service. This line passes very close

to Pease International Tradeport, an airport with tremendous unused runway capacity, and, evidently, there is a rail right of way from this corridor to Pease which could be used to easily ferry passengers from Amtrak trains to Pease.

While the DEIS/R does discuss the upcoming restoration of passenger rail service on the Portland-Boston corridor, there is no sophisticated quantitative analysis of the impact that such service would have on the regional transportation system and no mention of Pease in this context. The DEIS/R fails to present alternatives which would increase the use of this rail service so there is no study of whether such alternatives would reduce delay induced by small plane traffic between Maine communities and Logan. Additionally, the DEIS/R should have acknowledged the possible introduction of high-speed rail to this corridor and analyzed the impact that such a change would have on demand for service at Logan. 98.10

iii. The role of other airports in the regional transportation system.

The DEIS/R's analysis of the role that other airports in the region can play fails to address the possibility that travelers from within Route 495, and even in some cases within Route 128, will choose to use other airports besides Logan. The DEIS/R only examines the ability of airports like Manchester, T.F. Green and Worcester to "recapture" their local markets from Logan, overlooking the ability of these airports to attract passengers from metropolitan Boston and from the rest of the region. This deficiency ignores a phenomenon occurring at this very moment, as Southwest Airlines aggressively and successfully markets its Manchester and T.F. Green service to residents of metropolitan Boston. All the airports of New England, from Bradley which could serve as an alternative hub for major carriers to the smallest municipal airport which can provide a home for a two-seater General Aviation craft, should be integrated into such an analysis. Of course, growth at other airports would have to be carefully managed and should be integrated into the regional ground transportation network so travelers are using environmentally responsible modes for travel to and from these airports. A well managed regional transportation system may, for example, mean that a resident of Auburn would drive or take a bus to Worcester Airport (instead of the longer and more environmentally harmful drive to Logan) while a resident of Norwood might take a train to T.F. Green Airport in Rhode Island. Specific concerns, not addressed in the DEIS/R, about some of the key regional airports appear below.

1. Manchester Airport

As noted above, the ENF Certificate required that Massport look beyond its current role and examine "off-airport" measures that could be taken to address the delay problems that Massport cites in the DEIS/R. The failure of the DEIS/R to present alternatives which would encourage greater use of Manchester Airport as an alternative to Logan is a clear example of the failure of the DEIS/R to comply with these directives.

The DEIS/R does take note of the increased passenger load passing through

Manchester Airport, one of the fastest growing airports (in terms of passengers) in the nation. Inexplicably, however, the DEIS/R fails to consider that Manchester Airport may be drawing passengers from the Boston metropolitan area now and fails to project any measurable use of Manchester by travelers with trips originating within the Route 495 corridor. The supplemental DEIS/R needs to take a more sophisticated approach to its analysis of the role of Manchester- e.g., looking at current and future use of Manchester by business travelers going to and from hotels and businesses on and within Route 495 for example. 98.11

Beginning more than 10 years ago some of the more progressive regional and municipal governments in southern New Hampshire began to push for a re-introduction of passenger rail service into that area. Recently, the New Hampshire Department of Transportation requested that the MBTA extend its commuter rail service into New Hampshire to effect such a restoration, opening a dialogue between those agencies that is still in progress. At least one possible route for rail service into New Hampshire would allow for direct service to Manchester Airport. The supplemental EIS/R should include an analysis of the opportunity for rail service to Manchester Airport, including what Massport and its sister agencies can do to bring this about, and an analysis of the likely impact of this service on airport passenger demand. 98.12

2. T.F. Green Airport

T.F. Green Airport in Warwick, Rhode Island presents an only partly realized opportunity for our regional transportation system. It can do far more than "recapture" its local market from Logan- the role assigned it by the DEIS/R, and with proper non-automotive ground transportation links it can do so in a very environmentally responsible fashion. The failure of the DEIS/R to adequate account for the current trips by Boston area travelers who travel by air from T.F. Green in order to make use of Southwest Airlines' discounted service is a significant deficiency. The failure of the DEIS/R to factor in future use of T.F. Green by the residents of Greater Boston is an unfortunate logical extension of that first failure. Compounding these mistakes is the total failure of the DEIS/R to consider the changes in the regional rail system which will make travel to T.F. Green from Boston and along the rail corridor between Boston and Providence much easier. These changes are discussed at length above and must be factored into any analysis of the role that T.F. Green can play in the regional transportation system in general and in relief of Logan in particular. 98.13

3. Worcester Airport

The supplemental DEIS/R must contain a thorough examination of the facilities and potential of Worcester Municipal Airport. The new arrangement under which Massport will operate that airport will facilitate an active Massport role in fostering and building that airport. Alternatives for enhanced ground transportation facilities to and from Worcester Airport, including rail and shuttle bus should be developed, analyzed and presented in the supplemental DEIS/R, along with possible future passenger and operations 98.14

projections for the Worcester Airport, so the impact they will have on operations at Logan, as well as the environmental impacts of such changes, can be fully understood and considered.

4. Hanscom Field

The DEIS/R fails to fully propose, develop and analyze potential roles that the Massport operated civilian facility at Hanscom Field could play in the regional transportation system. At the very least, alternatives that provide for increased use of Hanscom for General Aviation (GA) use should be developed and analyzed. One possible model for use of Hanscom could be the role that Teterboro Airport in New Jersey plays in the New York metropolitan area. That airport does not have any significant passenger terminal facilities but has successfully shouldered the GA and helicopter load for New York City, moving this smaller air traffic out of the "stream" competing for landing and takeoff space at the three major airports operated by the Port Authority of New York and New Jersey. Measures that would discourage the airplanes responsible for the 25,000 annual GA operations that the DEIS/R forecasts for the foreseeable future from using Logan should be studied in tandem with measures that would encourage such planes to land at Hanscom or other "reliever" airports outside of Boston, ranging from the regional airports discussed above to the small GA only airports throughout the region. 98.15

iv. Massport fails to adequately assess the potential for other airports in the region and rail to receive a significant enough portion of Logan's air traffic – particularly small carriers – to improve Logan's delay problem and dispense with the new runway proposal.

Massport claims that proposed Runway 14/32 is needed to deal with the problem of northwest or southeast winds currently hampering operations by forcing Logan to use two rather than three runways, thereby reducing the operations per hour rate by 25%, from 120 to 90.[1] Massport's view is that the new runway will permit Logan to function more often at its maximum capacity of 120 operations per hour, thereby reducing delay. Massport does not even pay lip service to the important possibility of solving this same delay problem by another means: diverting a sufficient percentage of Logan's flight operations to other airports and rail so as to reduce Logan's operations per hour to 90. Under this scenario, with the exception of about 10 days a year, the northwest/southeast wind problem disappears -- *without having to build a new runway* -- because with these wind conditions Logan can handle up to 90 operations per hour. Particularly if the bulk of the diverted flights were small planes – see discussion below on peak period pricing and other runway pricing reforms – Logan's efficiency would improve, as operating small planes on the same runways/flight paths as large planes causes additional delays (small planes need to be spaced further from large planes because they can have difficulty flying in the "wake" of large planes). 98.16

[1] Massport asserts that approximately 10 days a year Logan experiences severe northwest winds that forces it to operate just one runway, which limits it to 60 flight operations per hour.

B. Massport fails to adequately assess the potential to address Logan's delay problems through peak period pricing or other runway fee reforms.

A central mandate of the ENF Certificate, which Massport voluntary agreed to undertake, was an analysis of peak period pricing and other administrative measures designed to alter the mix and timing of airplane operations in and out of Logan in order to better manage the Airport and reduce delay. That this would be a critical element of the DEIS/R inquiry makes considerable sense when Logan's flight mix is considered. Approximately 90% of Logan's passengers are accommodated on about half of the flights in and out of the airport. The other half of the flights carry the remaining 10% of the passengers. This is a highly inefficient use of limited runway space, and, it is our understanding, is atypical for major American airports. The notion of imposing a pricing mechanism that would discourage small planes in the peak hours, and/or that would lead to some trip consolidation so that the total number of small plane operations decreased, while still insuring that essential service to other cities in the region continued, has significant appeal.

Massport, unfortunately, has not presented a credible analysis of peak period pricing (and does not address any other possible runway pricing reforms). Rather than setting out to figure out what it would take in the way of peak hour pricing or other runway pricing reforms to achieve significant delay reduction benefits at Logan, Massport instead sets out to answer the question: "What effect would a very low peak hour fee ($150 per flight) have on operations and delay at Logan?" Just as discouraging is the limited analysis given this watered down version of peak period pricing. 98.17

There are only a few select sources of data on the effect that administrative delay reduction/capacity management programs like non-weight based landing fees peak period pricing will have on actual operations at an airport. Limited efforts in the New York metropolitan area can be analyzed. Previous experiments overseas, like the Sydney (Australia) effort referenced by the U.S. Environmental Protection Agency (EPA) in its comments on the NEPA scope, can be considered. The actual operation of the withdrawn Program for Airport Capacity Efficiency program (PACE) at Logan, discussed below, can be considered and re-evaluated in light of applicable federal law and regulations. None of these data are considered in the DEIS/R.

Massport's analysis applies a blunt single price formula to current operations and assumes that air carriers will react in simplistic ways- either by canceling flights or moving a few "shoulder" flights out of the peak period window. Other potential responses of carriers to such a scheme, including using larger aircraft for fewer flights, are ignored. As a result, Massport never even considers the possibility that a runway pricing system could be imposed that materially alters the flight mix at Logan so that a significant number of small flights are diverted elsewhere, canceled, or consolidated into fewer larger plane flights. Were this to happen such that total operations per hour were markedly reduced, runway pricing reform could meaningfully aid with the northwest/southeast wind delay

problem Massport describes.

i. Massport should look to its own experience for evidence of the salutary effects that revised landing fees and peak period pricing can have on airport operations.

In December 1987, Massport introduced its Program for Airport Capacity Efficiency (PACE). The purpose of PACE was to eliminate a *de facto* subsidy for small aircraft operations and reduce airport congestion. To achieve these ends, PACE included both a restructured landing fee and "peak-hour pricing", an additional fee for landing during congested rush hour periods. The new landing fee went into effect on July 1, 1988 and was used until December 22, 1988 when the U.S. Secretary of Transportation ruled that the restructured landing fee had not been calculated properly and that the exception in the program designed to protect smaller regional airports did not apply to enough such airports. This ruling was upheld (and a court decision in favor of the restructured landing fee was reversed) in New England Legal Foundation. v. Massachusetts Port Authority, 883 F.2d 157 (1st Cir. 1989). The peak-hour pricing portion of PACE was never instituted.

In February 1989 -- two months after the PACE landing fee was discontinued -- Massport issued a summary[2] of the PACE fee's remarkably favorable impact on Logan's operations:

> 1. On-time performance at Logan was significantly improved. Not only did the percentage of on-time departures increase markedly, but Logan's relative on-time performance rose steadily in comparison to the performance of other busy airports around the country. In September of 1987, when DOT started issuing "report cards" grading on-time performance at the nation's 27 busiest airports, Logan ranked 21st. In September of 1988, [Logan] had moved up to 12th; in October, [Logan was] 11th; in November [Logan] ranked 10th; and, by the end of December, when DOT ruled against PACE, [Logan] had achieved the astonishing rank of 2nd-best in the nation for on-time performance.
>
> 2. Commuter carriers carried slightly more passengers in slightly fewer flights on significantly larger airplanes. This action spread the cost of landing fees over more seats per trip, and reduced the number of flights on heavily traveled routes, thus improving the efficiency with which the commuter carriers used Logan's finite and valuable airfield capacity. Some carriers increased their fares in response to the new fees, but the fare increases did not slow the growth of ridership.
>
> 3. Thanks in part to Massport's "Essential Air Service" Exemption Program, smaller commuter markets suffered no adverse consequences from the higher landing fees

[2] PACE Update, February, 1989 by Thomas P. Champion, Assistant to the Executive Director, Massport (*hereinafter* "PACE Update").

4. General aviation (GA) traffic at Logan declined by about one-third, but did not disappear. Since the per-hour cost of operating business jets and turbo-props has always been high, the PACE landing fee had no effect on this segment of the GA population at Logan, which continued to use the airfield with its accustomed frequency. Smaller, single engine aircraft did make less frequent use of Logan, although this change did not result in the "diversion" of traffic to Hanscom Field. Since travelers who used these small aircraft tended to be traveling within a 150-mile radius of Logan, and since most of them were using private planes to move to and from markets which were also served by served by scheduled commercial service, Massport staff correctly predicted that the users of these smaller planes simply switched over to scheduled air service or to some other mode of transportation. Perhaps the most interesting GA statistic is that *more than half of the private aircraft using Logan during the PACE fee period were traveling to or from points which offered scheduled air service.* In other words, general aviation is demonstrably more a tool of convenience and luxury than of necessity.

(PACE Update; p. 3.) Both the Secretary of Transportation and the First Circuit stated in their decisions concerning PACE that a program with the substantive effects of the PACE program could be successfully implemented by Massport, if it was developed and implemented correctly.

In 1993, Massport made a well-reasoned presentation of a revised program that was designed to conform with federal law as articulated by the Secretary of Transportation and the First Circuit. This presentation described a specific peak-hour pricing proposal and showed that, if this proposal was implemented, it would reduce peak-hour flights by 10-17.5 percent. (Massachusetts Port Authority, "Logan Airport Peak Hour Pricing" (Apr. 1993) (Attachment 1); Arthur D. Little, Inc., for the Massachusetts Aeronautics Commission. "Strategic Assessment Report -- Final Report," p. 4-42 (July 1993).)

Like PACE this program moved Logan away from a traditional landing fee based solely on the weight of a plane and levied landing fees based partly on the weight of the plane and partly on an operations charge based on the type of plane with an additional peak period fee for peak period landings and take-offs. Massport withdrew this proposal prior to implementation.

It is important to recognize that peak-hour pricing affects congestion levels primarily by causing modest shifts in departure times and types of aircraft used, not by dampening passenger activity. According to Massport, a reduction in peak-hour congestion would "come mainly from a reduction in commuter [flight] activity during peak hours, especially in markets with ready commuting alternatives." (Massport, "Logan Airport Peak Hour Pricing.") Massport "does not expect that any of the commuting markets served by Logan Airport would suffer a significant reduction in access to the airport." (Id.) Roughly one-third of the reduction in peak-hour flight activity would result from a rescheduling to off-peak hours. (Id.) Peak-hour pricing is projected not only to

result in a substantial reduction in delays at Logan, but to reduce average costs per operation for flights with about 110 passengers or more. (Id.)

From passengers' point of view, the perceptible effect of peak-hour pricing would be a substantial reduction in delays. "During peak periods, Massport would expect a 5% reduction in the use of the airfield to cause at least a 20% drop in average expected flight delays." (Id.) Since Massport expected that peak-hour pricing would result in a 10-17.5 percent reduction in peak-hour flights, travelers would thus experience a 40 to 70 percent reduction in delays.

Passengers would not experience a noticeable reduction in service. Massport calculated the estimated impact on the number of peak-hour weekday seats available on flights between Logan and 49 airports in the eastern United States and Canada. Overall, only 3 percent of peak-hour seats (not all seats) in those markets would be canceled. (Massport, "Logan Airport Peak Hour Pricing Plan.")[3] Three-quarters of those markets would experience the cancellation of 3 percent or less of peak-hour seats, and 22 of them would experience the cancellation of no peak-hour seats at all. (Id.) Ticket prices for the 49 markets would increase a mere 1 percent (id.) -- a price well worth paying for the substantial reduction in delays, and the avoided taxpayer outlays and environmental impacts that building new runway capacity would entail.[4]

The benefits of peak-hour runway pricing would therefore be substantial and widely shared. Travelers would benefit from lower costs, reduced delays, and the use of larger, safer, more comfortable aircraft. Communities around Logan Airport, Hanscom Field and other existing or potential airports would avoid airport expansion undertaken to accommodate the inefficiencies of heavy reliance on small aircraft. Such communities all share a strong interest in the adoption of peak hour pricing at Logan Airport. The Commonwealth as a whole would benefit from avoiding the potentially huge capital and operating costs of accommodating a continuation or growth of existing inefficiencies. The

[3] The reduction in the number of peak-hour flights in the 49 regional markets was estimated to be 7 percent -- more than double the estimated reduction in the number of peak-hour seats, which is as it should be. It should be noted that two markets in which Massport predicted the most flights would be canceled -- Boston-Portland and Boston-Bangor, which would lose 21 percent and 15 percent of peak period weekday flights, respectively -- both experienced an explosion in the number of daily flights during the early 1990s recession: Boston-Portland daily departures grew by 121 percent in 1988-1993, and Boston-Bangor daily departures grew by 92 percent in that period. (Massport, "Logan Airport Peak Hour Pricing Plan.") With peak-hour pricing, Portland would still have twice as many flights as it did in 1988, and Bangor would have roughly one and three-quarters as many flights as it did then. (Id.) The two markets would have only 9 and 14 percent fewer peak-hour seats, respectively, than in 1993 (id.), and about the same number of daily seats.

[4] A few regional airports served by flights to and from Logan do not have runways that can accommodate jets. It is CLF's understanding, however, that all or virtually all the airports which Massport predicted would have fewer weekday peak-period flights to and from Logan can accommodate jets. One airport with a notable lack of jet capacity is the Provincetown Airport -- which Massport predicted would experience no decrease in weekday peak period flights or seats, and where the impact of peak hour pricing would be reflected solely in a fare increase of 12 percent. (Massport, "Logan Airport Peak Hour Pricing Plan.")

region and nation would benefit from more energy-efficient flight operations.

It is not surprising that the national jury of experts who heard testimony at "The Boston Conference" in 1994 included peak-hour runway pricing at Logan Airport in the recommendations it issued. The jury wrote:

> [T]he Commonwealth should adopt "congestion pricing" (charging landing fees that increase at peak travel times) to mitigate bottlenecks and delays at Logan that would impede the region's future economic growth. The Jury believes that this approach offers a relatively inexpensive and flexible demand management strategy, prolonging the use of Logan at its present location without requiring controversial runway expansion.

(Harvey M. Gantt, et al., "The Boston Conference Final Report: National Jury Recommendations," pp. 4-5 (Aug. 24, 1994).)

No justification is given in the DEIS/R for the failure to propose and study an alternative applying a more complex pricing mechanism, like that presented by Massport in 1993 or discussed by the Boston Conference, augmented by a range of peak hour fees (as contemplated by the 1993 proposal). Such an alternative should be a prominent feature of the supplemental DEIS/R. 98.18

Discussion and study of such an alternative must include an examination of varying levels of peak period fees. Additionally, such an analysis should not restrict itself to an assumption that significant delay reductions through runway pricing reform occur only when the airlines "overschedule" and attempt to have more than 120 operations per hour occur at Logan. As noted above, Massport should be directed in the supplemental DEIS/R to consider what it would take in the way of peak period pricing or other runway pricing reforms to bring Logan's operations per hour number closer to 90, thereby largely obviating the supposed need for an additional runway. A full range of possible carrier reactions should be considered, such as moving to larger planes or the consolidation of existing companies providing service to smaller airports.

ii. The Federal program to maintain air service to isolated smaller airports, a Massport version of such a program, or a joint Federal/Massport implementation of this program may reduce or eliminate Massport's "market access" concerns regarding smaller airports.

The federal Essential Air Service (EAS) program is intended to ensure that communities with relatively low commercial airplane traffic do not lose service entirely, it is deeply disturbing that the DEIS/R does not examine the mitigating effect that this program might have on Massport's concerns regarding reduction in service to certain outlying communities. The U.S. Department of Transportation ("DOT") administers the EAS program by determining the minimum level of service required at each eligible

community. DOT specifies a hub through which the community is linked to the national network, a minimum number of round trips and available seats that must be provided to that hub, certain characteristics of the aircraft to be used, and the maximum permissible number of intermediate stops to the hub. Where necessary, DOT subsidizes a carrier to ensure that the specified level of service is provided.

A review of the DOT website indicates that EAS is subsidizing air service from Logan to: Augusta/Waterville, ME; Bar Harbor, ME; Rockland, ME; Rutland, VT; and Keene, NH. Additionally, that website indicates that the following destinations from Logan have been deemed eligible for EAS subsidies: Bridgeport, CT; New Haven, CT; Bangor, ME; Portland, ME; Presque Isle/Houlton, ME; Hyannis, MA; Martha's Vineyard, MA; Nantucket, MA; Laconia, NH; Lebanon, NH/White River, VT; and Manchester/Concord, NH. More details about the federal EAS program may be found at on DOT's website at http://ostpxweb.dot.gov/aviation/rural/ruralair.htm.

There are three ways Massport can pursue an EAS subsidy for service to given community. First, it may try to initiate DOT review of a community which is not currently eligible for an EAS subsidized carrier (assuming that no carrier or only one carrier currently provides service to that community). (See 14 C.F.R. § 325.10.) Second, Massport may submit a proposal to DOT for "Enhanced Essential Air Service." Under an Enhanced "EAS" program, either a) Massport would provide 50% of the subsidy for the proposed service (and DOT would provide the other 50%) or b) DOT would pay 100% of the subsidy but review the proposal for success after 2 years. Finally, Massport could implement its own EAS program which mirrors (or closely follows - subject to DOT's approval) DOT's program. (*See* New England Legal Foundation v. Mass. Port Authority, 883 F.2d 157 (1st Cir. 1989)). If it chose to create its own EAS program without developing it jointly with FAA, Massport would have to pay the subsidy itself either by cash payment or by special adjustment to landing fees.[5]

The full analysis of revised landing fees and peak period pricing in the supplemental DEIS/R must include a thorough discussion and review of the Federal EAS program and how it would eliminate, reduce or mitigate the negative effects on air service to outlying communities. 98.19

iii. The "Case Studies" appended to the DEIS/R fail to prove that a sophisticated and properly developed and implemented reform of landing fees and/or peak period pricing scheme would harm the Cape and Islands.

The "Regional Carrier Case Study" and "Cape Cod [& Islands] Case Study" in Appendices F and G of the DEIS/R are a cursory review of the economic development strategy of that part of Massachusetts and the role that air travel plays in that strategy and a

[5] The Massport EAS program was struck down in part because it did not include as many communities as the federal version.

very simple analysis of the possible impact that the simplified peak period pricing scheme discussed in the DEIS/R might have on that service. No attempt is made in these appendices, or elsewhere in the DEIS/R, to consider other alternatives which might satisfy the transportation needs of these communities. We cannot know if high speed ferry service, enhanced bus service or rejuvenated rail service (or some combination of these or other options) could compensate for any adverse effect on air service brought about by runway pricing reforms - this analysis is simply not present in the DEIS/R. 98.20

Additionally, the analysis in these appendices fails to take into account the possibility that any landing fee reform program and/or peak period pricing scheme would include an essential air service exception to ensure there would be adequate basic service to regional airports. It also fails to consider the potential palliative effect of the federal Essential Air Service (EAS) program discussed above.

III. The capacity increasing potential of proposed Runway 14/32 should be studied and the environmental impacts of the capacity increase assessed.

Massport states that proposed Runway 14/32 would not result in any additional capacity at Logan since it would not allow Logan to exceed its current ceiling of 120 flight operations per hour in any given hour. But the new runway would allow Logan to handle 120 flights per hour *more of the time*, which, when Massport's ominous growth projections for Logan are considered, surely would result in more passengers and flights at Logan with the runway than without. According to Massport's projections, the delay hours are to mount at Logan with or without the new runway, but Massport contends that the delays will be considerably worse without the new runway. Really dreadful delays would presumably influence air carrier business decisions and passenger travel decisions such that Logan without the new runway would handle fewer flights and passengers than Logan with the new runway. The extent of this proposed increase in capacity must be studied and its environmental impacts, both airside and groundside, analyzed. 98.21

IV. Technological advances and changes which could change airport operations should be studied in the supplemental DEIS/R.

A conversation with a former Chairman of the Massport Board of Directors with over 30 years of experience in the operations and planning of airports yielded the observation that in the late 1960's and early 1970's (when Runway 14/32 was first proposed) there was a general belief that there would be a surge in the number of travelers traveling by air during the next 30 years and that this required a large scale program of building runways at existing airports to handle this increase. Of course, half of this prediction was completely accurate. Far more people travel far more miles by air today than in 1969. However, advances in technology- notably the proliferation of larger aircraft and advances in electronics (and in particular avionics) have enabled many of the airports that were in use at that time to handle the increased traffic without significant additional runway space.

It is reasonable to ask if history might repeat itself? Could advances in technology significantly reduce delay at Logan and other airports- not just in good weather but in bad as well? Is there current or anticipated technology that should be studied as an alternative to some or all of the airside improvements proposed by Massport? Massport summarily states that delays "caused by most weather conditions cannot be eliminated." (DEIS/R p. 1-3.) Are the prospects for technological advances to facilitate airport operations in adverse weather conditions really this bleak? Perhaps so, but we simply do not know based on the DEIS/R. Doing this analysis may require a more sophisticated presentation of the causes of delay at Logan. For example, how much delay is due to fog reducing visibility, how much is due to snow buildup on runways? This is precisely the type of alternative which should have been the subject of analysis in the DEIS/R and its absence is yet another reason why a supplemental DEIS/R is required. 98.22

V. The DEIS/R does not adequately address the Environmental Justice questions critical to both federal and Massachusetts environmental review

Executive Order 12,898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires each federal agency to identify and address environmental and health effects of its activities that particularly burden minority and low income communities. (Exec. Order No. 12,898, § 1-101, 59 Fed. Reg. 7,629 (1994).) A purpose of the executive order is to "reinforce" agencies' obligations under NEPA and Title VI of the Civil Rights Act of 1964. (See 62 Fed. Reg. 18,378 (1997).) The executive order, like NEPA and MEPA, is intended to force agencies to improve their decisionmaking processes. It focuses on both minority and low-income communities, whereas Title VI applies only to discrimination based on race, color, or national origin and does not directly address poverty issues. (See President Clinton, Memorandum for the Heads of all Departments and Agencies (Feb. 11, 1994).) To achieve its goals, the executive order relies on existing environmental and civil rights laws, particularly NEPA and Title VI.

In response to the executive order, the U.S. Department of Transportation has prepared an environmental justice strategy (60 Fed. Reg. 33,896 (1995)) and issued an Order on Environmental Justice. (62 Fed. Reg. 18,377 (1997).) Like the executive order, the DOT Order draws on existing laws, "primarily NEPA [and] Title VI of the Civil Rights Act of 1964." (62 Fed. Reg. 18,378 (1997).) The DOT Order "is intended to insure that a process for the assessment of environmental justice factors becomes common practice in the application of [NEPA, Title VI] and related[] statutes." (Id.) Incorporation of environmental justice principles in all DOT activities is to be accomplished, by "fully considering [those] principles throughout planning and decision-making processes in the development of programs, policies, and activities, using the principles of the National Environmental Policy Act." (Id. at 18,379.)

The DOT Order provides that NEPA and other statutes will be administered so as to identify, early in the development of an activity, the risk of discriminatory impacts so that appropriate action can be taken. (Id. at 18,380.) In implementing NEPA, "where

relevant, appropriate and practical," DOT agencies are to obtain information about the population served and/or affected by race, color, national origin, and income, along with information about steps to guard against disproportionately high adverse impacts. Id. "[D]isproportionately high and adverse impacts on minority populations and low-income populations" are to be avoided by, inter alia, proposing measures to avoid, minimize, and/or mitigate such impacts; providing offsetting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by the activities involved; considering alternatives that would avoid or minimize such impacts; and eliciting public involvement and "soliciting input from affected minority and low-income populations in considering alternatives." (Id.) An activity that will have a disproportionately adverse effect on minority or low-income populations is to be carried out "only if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effect are not practicable." (62 Fed. Reg. 18,380.) DOT's findings and analysis made in fulfillment of these requirements "must be appropriately documented, normally in the environmental impact statement or other NEPA document." (Id.)

Federal agencies are required to comply with executive orders and with their own regulations and guidelines and DOT states in its order that "[c]ompliance with Executive Order 12,898 is an ongoing responsibility." (62 Fed. Reg. 18,379 (1997); see also Delaney v. EPA, 898 F.2d 687, 693 (9th Cir. 1990) (agency must adhere to own guidelines); Steven Ostrow, Note, Enforcing Executive Orders: Judicial Review of Agency Action Under the Administrative Procedure Act, 55 Geo. Wash. L. Rev. 659 (1987).)

The absence of any substantive environmental justice analysis in the DEIS/R even remotely meeting the requirements of the executive order and the DOT Order is especially shocking considering the location of the project: in East Boston, a community where, as of 1990, 18 percent of the residents were of Hispanic origin, 13 percent were members of non-white minorities, and 18 percent were white people with incomes below the poverty level. (See U.S. Department of Commerce, Bureau of the Census, "1990 Census of Population and Housing," Summary Tape Files 1, 3.) The Asian-American and Hispanic groups in the East Boston community is believed to have grown since 1990 and the impacts of this project on those communities, as well as the minority and low-income communities in Logan's flight path, should have been considered for the purposes of both NEPA and MEPA review. 98.23

While the environmental justice issues and analysis raised by the executive order and DOT Order, and which underpin EPA's extensive comments on this subject, are derived from Federal law, policy and orders the principles, information and analysis on which EPA relies on fully applicable to the MEPA process and provide further reason to conclude that the DEIS/R is inadequate. The Secretary of Environmental Affairs has the statutory and regulatory tools and the ability to address the critical environmental justice raised by EPA and ignored by Massport. The MEPA process can play a pivotal role by ensuring that minority and low income communities do not shoulder a disproportionate share of the environmental effects of projects such as the one under consideration here.

VI. Additional environmental concerns not adequately addressed in the DEIS/R

The discussion of impacts of the proposed airside improvements on the Boston Harbor Islands is facially inadequate. The effort to use the provision in the Boston Harbor Islands National Recreational Area statute (16 U.S.C. § 460kkk) which states that Logan air traffic passing overhead is not "constructive use" of the park National Recreational Area as a general NEPA and MEPA waiver is plainly improper. These provision simply means that overflights of the Islands cannot be deemed "use" of the Islands for purposes of Section 4(f). It has no effect on the requirement of NEPA and MEPA that all alternatives be analyzed to determine their full noise and visual effects on humans camping on the Harbor Islands and in boats in the vicinity of the Islands, as well as on all animals in and around the Islands. 98.24

The discussion of the Upland Sandpipers who currently nest in the path of the proposed Centerfield Taxiway references the mitigation plan which has been developed by Massport, in consultation with the Massachusetts Heritage & Endangered Species Program. This plan may be adequate but it should be fully aired prior to its inclusion in a Final EIR/S. Moreover, no case has been made yet in any environmental review document that all efforts have been made and exhausted to avoid or reduce impact on this State listed species and that mitigation by creating new habitat far from this site which will benefit other members of this species is the appropriate course. 98.25

The air quality analysis in the DEIS/R has serious deficiencies, as demonstrated by the comments of Dr. Henry S. Cole. As Dr. Cole observes, the total absence of an analysis of the air quality effects of particulate matter with a diameter of less than 2.5 microns (PM 2.5) from aircraft, increased motor vehicle emissions and emissions outside of Route 128 or with an altitude greater than 3,000 feet are all glaring omissions. Moreover, Dr. Cole makes important observations about the potential air quality effects of the unchecked growth with is assumed in the EIS/R as well as the potential unstudied health hazards which may be present in the vicinity of Logan at this moment. A supplemental EIS/R is needed to lay out alternatives which are intended to address these concerns and to analyze the effects that all alternatives may have on air quality, both in the immediate vicinity of Logan and throughout the region. Such studies should also look at the cumulative effect of large amount of emissions occurring at peak air travel hours and determine if a peak period pricing scheme could have a positive impact on air quality by dispersing NO_x and other emissions more evenly of the course of the day. 98.26

VI. Conclusion

For the foregoing reasons, Massport has failed to make its case that it needs Runway 14/32. The alternatives analyses, both with regard to peak hour pricing/runway pricing reform and the role of other regional airports and rail, as discussed at length above, need serious additional work. Accordingly, a Supplemental Draft Environmental Impact Statement/Report is warranted. The time necessary to do a credible job on the SDEIS/R may permit Massport to analyze actual data from the forthcoming Acela high-speed rail 98.27

service and collaborate with the FAA on a peak period pricing/runway pricing reform experiment. Finally, we strongly urge that, in conjunction with the thorough alternatives analyses necessary for the runway proposal, Massport leadership and other appropriate Massachusetts state officials join with their counterparts in Rhode Island and New Hampshire, along with other interested parties throughout the region, to develop a workable, sustainable plan for inter-city travel in New England. The plan would address both what roles the different airports and rail services should be serving as well as how to achieve these results.

Letter 98
Conservation Law Foundation
Stephen H. Burrington, General Counsel

Code	Topic 1	Topic 2	Comment	Response
98.1	Alternatives	Peak Hour Pricing	... fails to adequately assess the potential to reduce delays ... by implementing "peak-hour pricing,"...	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5.4 of the Supplemental DEIS/FEIR.
98.2	Regional Transportation	Regional Airports	Massport fails to consider the potential for T.F. Green Airport ...and the Manchester Airport ...to service more than merely their discrete geographic areas.	The regional airport diversion analysis presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR was based on objective service area assumptions. Each service area was defined solely by driving time criteria. In other words, each regional airport's service area consists of cities and towns for which it is the closest airport, regardless of the availability of more extensive services and/or lower airfares at more distant, but larger airports such as Logan Airport. Thus, the service areas for T.F. Green/Providence and Manchester airports extended into portions of northern and southeastern Massachusetts; areas normally considered part of Logan Airport's primary market area.

Code	Topic 1	Topic 2	Comment	Response
98.3	Regional Transportation	Regional Airports	A major regional planning initiative is needed right now ...	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. One of the issues that the FAA directed the group to discuss is the inclusion of additional data related to regional transportation alternatives in the Supplemental DEIS/FEIR. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies form the basis of a comprehensive regional transportation strategy that includes the Airside Project at Logan Airport, expansion and growth of the regional airports, and the implementation of high-speed rail and other regional rail projects. All these measures are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. By the end of 2000, Boston residents had several alternatives to Logan Airport including Worcester Regional Airport, Manchester Airport, T.F. Green/Providence Airport, Pease International Tradeport, and Amtrak's high-speed Acela train service. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of options to Logan Airport. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its assumption of operating responsibility for the Worcester Regional Airport in January 2000 and its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of Massport's initiatives in support of regional transportation alternatives.

Code	Topic 1	Topic 2	Comment	Response
98.4	Environmental Review Process	MEPA	The breadth and depth of the deficiencies are such that they require the preparation of a Supplemental DEIS/R ...	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
98.5	Alternatives	Peak Pricing Program	Suggest immediate implementation of a pilot peak period pricing program.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5.4 of the Supplemental DEIS/FEIR.
98.6	Regional Transportation	Passenger Rail	Request emerging reality of high-speed rail be assessed.	The analysis of regional alternatives presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR relies on air to high-speed rail diversion estimates published in the Supplemental DEIS/FEIR and Section 4(f) Statement, Northeast Corridor Improvement Project, prepared by the Federal Rail Administration in October 1994. In preparing the Supplemental DEIS/FEIR, Massport contacted Amtrak for more recent estimates, but Amtrak did not have any updated ridership estimates that could be released to Massport. Amtrak's written response to Massport's request for updated ridership numbers is contained in Appendix B of the Supplemental DEIS/FEIR.
98.7	Regional Transportation	Passenger Rail	[Request that Massport] present a wide range of alternatives...in which enhancements, improvements and changes to a wide range of regional transportation facilities were proposed and analyzed and the role that Massport could play in facilitating these enhancements...	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market.
98.8	Regional Transportation	Passenger Rail	Incorporate more current Amtrak projections in analysis.	Refer to response to Comment 98.6.
98.9	Regional Transportation	Passenger Rail	Provide rail discussion/analysis that includes new T.F. Green Airport and Route 128 Stations.	Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of the Warwick train station and people mover connection to T.F. Green/Providence Airport.

Code	Topic 1	Topic 2	Comment	Response
98.10	Regional Transportation	Passenger Rail	Provide detailed quantitative analysis that the restoration of passenger rail service would have on Portland-Boston corridor including potential connection to Pease.	The restoration of Portland-Boston rail service was analyzed in the Draft EIS/EIR. According to the Portland Rail study, more than 99 percent of travel in the Portland-Boston corridor is by automobile. The same study estimated that restoration of the rail service would have no impact on the amount of travelers using air because the rail travel time is not competitive with the air mode. Additionally, the air market is estimated at only 100,000 annual passengers. This is less than one-half of a percent of Logan Airport's total passenger traffic in 1999. Refer to Section 2.4 of the Draft EIS/EIR.
98.11	Regional Transportation	Regional Airports	...needs to take a more sophisticated approach to...looking at current and future use of Manchester by business travelers going to and from hotels and businesses on and within Route 495 ...	Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of air service development at the Manchester Airport and Logan Airport passenger diversion to the Manchester Airport.
98.12	Regional Transportation	Passenger Rail	... should include an analysis of the opportunity for rail service to Manchester Airport, ...	Refer to Section 2.9 of the Supplemental DEIS/FEIR for a description of all ground access improvement projects at the regional airports that are currently in the environmental planning or construction phases.
98.13	Regional Transportation	Regional Airports	[Does not adequately] account for the current trips by Boston area travelers who travel by air from T.F. Green ... [or] ... to factor in future use of T.F. Green by the residents of Greater Boston ...	The T.F. Green/Providence and Manchester airports have experienced significant traffic growth over the last several years as a result of new low-fare, jet airline services to short-and medium-haul destinations. The emerging role of these airports in serving the region's demand is documented in Sections 2.3 and 2.4 of the Supplemental DEIS/FEIR.
98.14	Regional Transportation	Regional Airports	... must contain a thorough examination of the facilities and potential of Worcester Municipal Airport.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Airside Project Draft EIS/EIR for these improvements. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other alternative regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Section 2.2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.

Code	Topic 1	Topic 2	Comment	Response
98.15	Regional Transportation	Regional Airports	... alternatives that provide for increased use of Hanscom for General Aviation (GA) use should be developed and analyzed.	Refer to Section 2.6 of the Supplemental DEIS/FEIR for a description of Hanscom Airfield's role as a general aviation reliever airport for Logan Airport. Hanscom Airfield currently has six times the general aviation activity of Logan Airport. General aviation users of Logan Airport must pay a landing fee, while there is no landing fee charge at Hanscom Airfield for general aviation users.
98.16	Regional Transportation	Regional Airports	Massport does not even pay lip service to the important possibility of solving this same delay problem by another means: diverting a sufficient percentage of Logan's flight operations to other airports and rail so as to reduce Logan's operations per hour to 90.	Refer to response to Comment 98.2, the regional diversion analysis presented in Chapter 2 of the Draft EIS/EIR, and the PPP case studies in Appendices F and G of the Draft EIS/EIR.
98.17	Alternatives	Peak Period Pricing	... has not presented a credible analysis of peak period pricing ...	Refer to response to Comment 98.1.
98.18	Alternatives	Peak Period Pricing	No justification is given ... for the failure to propose and study an alternative applying a more complex pricing mechanism, ...	Refer to response to Comment 98.1.
98.19	Alternatives	Peak Period Pricing	The full analysis of revised landing fees and peak period pricing ... must include a thorough discussion and review of the Federal EAS [Essential Air Service] program ...	The PPP exemption analysis in the Supplemental DEIS/FEIR responds to the directives of the EOEA Secretary in his certificate on the Draft EIR. A discussion of Massport's proposed PPP Exemption Program, which covers all EAS eligible communities in New England with a Boston service designation, is discussed in Section 4.5.3 of the Supplemental DEIS/FEIR.
98.20	Alternatives	Peak Period Pricing	No attempt is made ... to consider other alternatives which might satisfy the transportation needs of these [Cape Cod] communities [if peak period pricing were implemented].	Refer to Section 4.5.3 of the Supplemental DEIS/FEIR, which includes an analysis of a PPP exemption program for small air service communities. The analysis shows that the carefully crafted exemption program maintains service to small communities without diluting the overall delay reduction benefits of the PPP option.
98.21	Alternatives	Runway 14/32	... the new runway would allow Logan to handle 120 flights per hour *more of the time,* ... The extent of this proposed increase in capacity must be studied and its environmental impacts, both airside and groundside, analyzed.	Logan Airport's normal airfield capacity is approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. Refer to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of the operational benefits of the Preferred Alternative and to Chapter 6 of the Supplemental DEIS/FEIR for a discussion of environmental impacts of Preferred Alternative.
98.22	Analysis Assumptions/ Methodologies	Delay Model	[Request] a more sophisticated presentation of the causes of delay at Logan.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion by addressing constraints at Logan Airport. Delays caused by conditions at other airports or other factors, such as mechanical failure, are not addressed since Massport cannot influence these delays. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT measures of delay and historical data, along with comparisons of Logan Airport with other United States airports.

Code	Topic 1	Topic 2	Comment	Response
98.23	Environmental Justice	Demographic Data	[Concerned about] the absence of any substantive environmental justice analysis ...	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order r, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.
98.24	Noise	Open Space/ Parkland	The discussion of impacts of the proposed airside improvements on the Boston Harbor islands is inadequate.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
98.25	Ecosystems	Rare Species	This plan may be adequate but it should be fully aired prior to its inclusion in a Final EIR/S.	The concept mitigation plan presented in the Airside Project Draft EIS/EIR has evolved through discussions between Massport, the Massachusetts Natural Heritage and Endangered Species Program (MNHESP) and the Massachusetts National Guard. Based upon this coordination, Massport has developed a MOU with Massachusetts National Guard for long-term management of the mitigation site at Camp Edwards once Massport has funded the initial grassland restoration project. Furthermore, MNHESP has issued a draft Conservation and Management Permit incorporating permit conditions. Copies of the MOU and the draft permit are contained in Appendix E of the Supplemental DEIS/FEIR.
98.26	Analysis Assumptions/ Methodologies	Air Quality Model	The air quality analysis in the DEIS/R has serious deficiencies, as demonstrated by the comments of Dr. Henry S. Cole....effects of particulate matter with a diameter of less than 2.5 microns ...	Particulate Matter (PM) emission factors for aircraft are very limited, at best, and nonexistent in most cases. Therefore, as a conservative, worst-case assumption, the air quality analysis assumed that all PM is less than ten microns in diameter. No emission factors or approximation methods are available for PM 2.5.
98.27	Environmental Review Process	MEPA	... a Supplemental Draft Environmental Impact Statement/Report is warranted.	Refer to response to Comment 98.4.

Construction and General Laborers' Union Local 22

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Danny Cimino
President
Field Representative

Louis A. Mandarini, Jr.
Business Manager
Secretary Treasurer

Dominic Ottaviano
Field Representative

April 22, 1999

LETTER 99

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge St., 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

Laborers' Local 22 is writing today in full support of Massachusetts Port Authority's Airside Improvement plan for Logan International Airport. Local 22 firmly believes that this project is necessary to reduce delays, improve the quality of life of our members and provide much needed employment opportunities.

Delays at Logan are consistently among the worst in the United States. These delays are not only inconvenient, they are costly. In 1998 delays at Logan cost airlines and their passengers nearly $310 million. These losses ultimately affect the livelihood of many working men and women as it impedes the ability of Boston and the region to compete in a global economy.

A major component of the Airside Improvement project, Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area. The new unidirectional Runway shifts 75,000 flights over the water rather than other communities. The proposed centerfield taxiway and other improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxying aircraft to adjacent neighborhoods.

99.1
99.2
99.3

With an annual economic impact of $5 billion, Logan International Airport is directly responsible for creating more than 15,000 jobs in this area, many of which are the hard working men and women of Laborers' Local 22.

It is therefore, without reservation, that Laborers' Local 22 wholeheartedly supports Airside Improvements at Logan Airport and eagerly looks forward to the project's approval.

Thank you for your attention to this matter.

Sincerely yours,

Louis A. Mandarini, Jr.
Business Manager

LAM/ls

Letter 99
Construction and General Laborers' Union Local 22
Louis A. Mandarini Jr., Business Manager

Code	Topic 1	Topic 2	Comment	Response
99.1	Noise	Runway 14/32	...Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area.	Comment noted.
99.2	Noise	Runway 14/32	The new unidirectional Runway shifts 75,0000 flights over the water rather than other communities.	Comment noted.
99.3	Alternatives	Taxiway Improvement	The proposed centerfield taxiway and other improvements would further enhance air quality....	Comment noted.

Continental

Continental Airlines, Inc.
Newark International Airport
Newark NJ 07114

LETTER 100

Please respond to:

38 New Hampshire AV
Massapequa, NY 11758

April 16, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th floor
Boston, MA 02202

SUBJECT: Logan Airside Improvements Planning Project
Boston-Logan International Airport

REFERENCE: Draft EIS/EIR

Dear Sir:

These comments are submitted by Continental Airlines and supplement and expand upon the statement made at the April 8, 1999, public hearing on the subject project held at the Holiday Inn, 225 McClellan Highway, E Boston, MA.

My name is Glenn Morse. I am Senior Director, Industry Affairs, for Continental Airlines. Prior to joining Continental Airlines 14 months ago, I served as Managing Director, Regional Operations, for the Air Transport Association. ATA is the trade association for all the major US passenger and cargo airlines. In my role with ATA, I worked closely with FAA and Massport to implement environmentally acceptable air traffic and airport improvements to reduce the historically high level of delays at Logan. As a result of this involvement, Massport asked me to co-chair the Airside Review Committee which was formed to insure active and extensive community involvement in the planning and environmental processes associated with the Logan Airside Improvements Planning Project.

The Airside Review Committee was comprised of community and business representatives and served as a technical liaison between Massport and the many diverse constituencies around Logan.

In order to further assist the community in the review process, Massport allocated funds to the Logan Community Advisory Committee (CAC) for an independent consultant to analyze and critique the technical results of this study. It is important to note that the CAC's consultant did not dispute and, in fact, accepted Massport's technical findings on the operational benefits and environmental analysis which serve as the basis for this environmental documentation. (See Attachment 1, excerpt from COMMUNITY ADVISORY COMMITTEE POSITION STATEMENT RE MASSPORT'S AIRSIDE IMPROVEMENT PROJECT PROPOSALS, April 9, 1997, to Peter Blute, Executive Director, Massport).

The purpose of this introduction is to describe briefly the extensive coordination process which Massport used to foster understanding of the various components of the proposed Logan Airside Improvement Project.

Continental Airlines supports implementation of all of the airfield improvements and the instrument approach minimums reductions contained in Massport's preferred improvement Alternative 1A. 100.1

Alternative 1A consists of:

Unidirectional Runway 14/32
Midfield taxiway
Minimums reductions for Runways 15R and 33L, 22L and 27
Extension Taxiway D
Realignment of Taxiway N
Southwest taxiway optimization

For the record, we concur with Massport's decision to exclude implementation of peak hour pricing from the preferred alternative at this time because of its limited delay reduction benefit as identified in the Draft EIR/EIS; its adverse economic impacts; and a firm belief that it does not address the primary causes of delay at Logan —wind and weather. 100.2

We support all of the taxiway improvements, most importantly the midfield taxiway, because they will enhance the safety and efficiency of aircraft movements on the airport. These efficiency gains translate to environmental benefits as stated in the Draft EIR/EIS because they reduce taxi times and consequently reduce the engine and noise emissions associated with taxiing aircraft. 100.3

We support the reduction of minimums as proposed because these operational improvements will enhance the safety of our operations, increase the reliability of our operations, and reduce the adverse environmental consequences of unnecessary missed 100.4

approaches and the delays and airborne holding that result. In some circumstances it may also give the tower the ability to change arrival runways to reduce dwell and/or persistence, and better achieve PRAS goals.

Finally, Continental supports the construction of unidirectional Runway 14/32. Everyone acknowledges that 14/32 is not a silver bullet for all of the delays that occur at Logan. However, in good weather, when the winds are from the northwest, there is typically only one arrival runway, Runway 33L. This causes extraordinary arrival delays and holding. When the winds are very strong, all of Logan's traffic must use a single runway for arrival and departure, and delays can exceed four hours. This has been a problem at Logan in the past, is a problem now, and will continue to be a problem in the future regardless of the growth in passengers or operations. 100.5

The new runway, as proposed by Massport, will eliminate most of these delays and their adverse impact on the communities around Logan. Contrary to the assertions of those opposed to the runway, Runway 14/32 does not increase "the overall capacity" of the airport: it does increase the arrival capacity of the Runway 27/33L configuration in good weather to the level achievable with the other two primary configurations of Runways 4L/R and 9, and 22L/R and 27. 100.6

The delays which occur when the airport operates on the Runway 27/33L configuration during heavy traffic periods cause adverse impacts on the communities around Logan in the following ways: 100.7

1. Late flights arrive and depart later in the evening during more noise sensitive hours and are exempt from Massport's existing noise rules.

2. Aircraft holding to land increase noise and emissions over communities around the airport.

3. Finally, and probably most important, these delays cause the tower to use the higher capacity "north/south" runway configurations more frequently. This has occurred in the past, and as the Draft EIS/EIR states – will occur more frequently in the future as traffic increases. (See Draft EIS/EIR Figure 4.5-3, "Jet Overflights by Operating Direction are more Balanced with Runway 14/32," page 4-38).

   The following discussion expands on this last point:

   In order to mitigate the delays which occur in northwest wind conditions, the FAA uses other runway combinations with greater arrival capacity. This increases noise impacts in the communities north and south of the airport affected by those runways, and ultimately prevents FAA and Massport from achieving long standing, community supported runway use goals. The attached runway use statistics for turbojet aircraft compiled by Massport for the period 1980 through 1997 clearly show this preference for a higher capacity runway configuration

starting in 1992. This was precipitated by the worsening delay situation during northwest wind conditions at Logan. FAA statistics show that delays at Logan per 1,000 operations increased progressively from 32.8 in 1991 to 34.6 in 1992 and peaked at 39.2 in 1993.

The four pertinent statistics are:

Runway 33L arrivals
Runway 27 departures
Runway 4R arrivals
Runway 9 departures

Prior to 1992, average annual use for these operations was:

Runway 33L - Approximately 30% annually and never less than 25%,
Runway 27 - Approximately 18% annually and never less than 14.1%, which occurred in 1986, when the runway was closed for approximately six weeks for rehabilitation,
Runway 4R - Approximately 31% and never more than 37.3%,
Runway 9 - Approximately 22% and never more than 26.4%.

Beginning in 1992, in order to reduce delays, the tower began to use Runway 4R for arrival (with Runway 4L) and Runways 9 and 4R for departure in lieu of Runway 33L for arrival and Runway 27 for departure. As a result, the use of Runway 27 for departure dropped to 10%, hit a significant low of 4% in 1993, and has averaged 12% since 1992. Similarly, Runway 33L arrivals dropped to 17% in 1992, and hit a low of 15% in 1993, and have averaged less than 20% since 1992. Runway 4R arrivals increased to a high of 44% in 1993, and have averaged 40% since 1992, and Runway 9 departures increased to 31% in 1992, and 33% in 1993, and have averaged over 30% annually since 1992.

The FAA continues to use the higher capacity "north/south" configurations in order to reduce delay and improve airport efficiency.

In conclusion, at current or any future traffic levels, Runway 14/32 limited to unidirectional use provides safety, capacity and environmental benefits and reduces delays when winds are out of the northwest and contributes to the achievement of existing runway use goals. 100.8

Continental believes the draft EIR/EIS adequately addresses all of the critical environmental and operational issues associated with this important airport improvement program and reaches the most beneficial conclusion for the users of Logan Airport, the communities around the airport, the City of Boston, and the State of Massachusetts. That conclusion is a recommendation to adopt Alternative 1A including the construction of unidirectional Runway 14/32 as the preferred development alternative.

Thank you for the opportunity to comment.

Sincerely,

Glenn Morse
Senior Director
Industry Affairs

Attachments (2)

cc: B. Desrosiers, Massport
T. J. Kinton, Massport

throughout the surrounding affected communities. It is not enough to formally review, decide and mitigate or compensate for aspects of a particular project. Each change must be regarded as an opportunity and a reason to reassess the totality of Logan's impacts, and to readdress them as constructively as possible. Proposed changes do not happen in a vacuum; they accumulate individually into the totality of the whole picture of impacts.

In the case at hand, Massport's stated rationale for proposing the "Airside Improvements Project" is to reduce operational delays to carriers and passengers resulting from conditions and facilities, or lack thereof, at Logan. You must see that the residential communities lying in Logan's shadow do not care about the impacts of delays upon the traveling public (which include themselves) or their air carriers, except to the extent that those delays may cause increased impacts on those communities.

Our responsibility, as the CAC, is to seek improvements in environmental conditions, both overall and in each community. It follows then that our reactions will often differ from those of the business sectors, those having been ably represented on the Airside Review Committee. The role of the CAC, whether as part of the ARC, or independently, is to study and discuss the materials presented and otherwise available data bearing on the issues, and to advise the ARC and Massport regarding community concerns.

We appreciate having been afforded some means of conducting independent reviews, and while we were excluded in the initial process and should have been involved earlier, what was done cannot be undone. The information presented and the manner of presentation has been very helpful in understanding the details of the proposals and the concerns and objectives of the project proponents. Our consultant team has been provided reasonable opportunities to further explore the analyses conducted by your staff and consultants as well.

Massport's consultants have presented information and analyses which depict the proposed project elements as being of value in reducing operational delays to aircraft operations, and their being essentially benign or even environmentally beneficial given certain critical assumptions. Our consultants have advised us that on the technical level those analyses and evaluations are rational and competently performed, and that the data upon which they are based are reasonable.

You must understand, however, that those analyses, and the measures of impact which are employed, while inarguably "state of the art", do not reflect our real world experience over the days, nights and years of "living with Logan". We use the unquantifiable but very real "misery index", a reflection of the cumulative impacts of extended periods of near-constant noise bombardment, interrupted sleep and relaxation, smell, soot and concern for safety.

Are things getting better? Individual aircraft are quieter and cleaner but there are so

RUNWAY 4R ARRIVAL USE PERCENTAGE BY MONTH AND YEAR (1980-1997)
(Turbo-Jet Arrival Operations)

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
JAN	24.0%	13.0%	10.0%	20.0%	25.2%	15.2%	12.2%	17.9%	10.7%	10.0%	20.0%	20.0%	24.0%	55.0%	37.0%	37.0%	35.0%	25.0%
FEB	12.0%	27.0%	37.0%	35.0%	33.0%	23.1%	35.4%	11.1%	22.4%	37.0%	23.0%	27.0%	31.0%	42.0%	20.0%	26.0%	30.0%	26.0%
MAR	24.0%	29.0%	34.0%	45.0%	38.0%	24.4%	32.6%	56.5%	24.3%	49.0%	22.0%	30.0%	34.0%	56.0%	55.0%	57.0%	32.0%	30.0%
APR	73.0%	10.0%	14.0%	35.0%	49.0%	27.8%	51.5%	65.4%	52.2%	33.0%	12.0%	39.0%	42.0%	50.0%	24.0%	43.0%	41.0%	41.0%
MAY	42.0%	40.0%	65.0%	35.0%	20.0%	42.1%	46.6%	44.0%	61.4%	44.0%	31.0%	30.0%	61.0%	40.0%	35.0%	44.0%	30.0%	23.0%
JUN	27.0%	17.0%	61.0%	39.0%	35.0%	29.1%	32.7%	47.0%	36.6%	52.0%	20.0%	26.0%	26.0%	22.0%	24.0%	52.0%	40.0%	40.0%
JUL	21.0%	42.0%	33.0%	25.0%	21.0%	24.1%	41.9%	40.0%	44.2%	35.0%	36.0%	26.0%	17.0%	20.0%	39.0%	34.0%	20.0%	43.0%
AUG	39.0%	49.0%	1.0%	36.0%	46.1%	42.7%	36.4%	41.0%	36.4%	31.0%	49.0%	21.0%	26.0%	51.0%	39.0%	55.0%	48.0%	52.0%
SEP	35.0%	40.0%	50.0%	23.0%	20.1%	41.1%	32.6%	38.6%	20.0%	43.0%	30.0%	32.0%	30.0%	55.0%	44.0%	52.0%	50.0%	43.0%
OCT	24.0%	38.0%	36.0%	36.0%	37.6%	24.5%	36.0%	26.5%	36.9%	31.0%	22.0%	43.0%	37.0%	40.0%	45.0%	24.0%	33.0%	50.0%
NOV	7.0%	33.0%	26.0%	22.0%	15.4%	48.7%	24.9%	33.7%	13.6%	14.0%	9.0%	45.0%	61.0%	45.0%	25.0%	35.0%	37.0%	43.0%
DEC	12.0%	19.0%	22.0%	17.0%	22.0%	19.5%	31.1%	20.3%	17.6%	16.0%	12.0%	29.0%	53.0%	39.0%	47.0%	38.0%	30.0%	29.0%
Year	26.4%	30.0%	33.0%	31.0%	33.5%	29.5%	34.3%	37.3%	30.8%	33.0%	25.0%	30.0%	37.0%	44.0%	42.0%	41.0%	38.0%	36.0%

ANNUAL AVERAGE USE APPROXIMATELY 31% PRIOR TO 1992.

USE INCREASED TO 40% ANNUALLY TO REDUCE DELAYS

RUNWAY 4R ARRIVAL USE PERCENTAGE BY MONTH AND YEAR (1980-1997)
(Turbo-Jet Arrival Operations)

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
JAN	24.0%	13.0%	10.0%	20.0%	25.2%	15.2%	12.2%	17.9%	10.7%	10.0%	20.0%	20.0%	24.0%	55.0%	37.0%	37.0%	35.0%	25.0%
FEB	12.0%	27.0%	37.0%	35.0%	33.0%	23.1%	35.4%	11.1%	22.4%	37.0%	23.0%	27.0%	31.0%	42.0%	20.0%	26.0%	30.0%	26.0%
MAR	24.0%	29.0%	34.0%	45.0%	39.0%	24.4%	32.8%	58.5%	24.5%	49.0%	22.0%	30.0%	34.0%	58.0%	53.0%	57.0%	32.0%	30.0%
APR	73.0%	16.0%	14.0%	35.0%	49.0%	27.8%	61.5%	66.4%	62.2%	33.0%	12.0%	39.0%	42.0%	58.0%	24.0%	43.0%	41.0%	41.0%
MAY	42.0%	40.0%	65.0%	35.0%	20.0%	42.1%	45.6%	44.0%	61.4%	44.0%	31.0%	30.0%	64.0%	40.0%	35.0%	44.0%	38.0%	23.0%
JUN	27.0%	17.0%	61.0%	39.0%	35.0%	29.1%	32.7%	47.0%	36.6%	52.0%	20.0%	20.0%	20.0%	22.0%	24.0%	52.0%	40.0%	40.0%
JUL	21.0%	42.0%	33.0%	25.0%	21.0%	24.1%	41.9%	40.0%	44.2%	35.0%	38.0%	26.0%	17.0%	20.0%	39.0%	34.0%	28.0%	43.0%
AUG	39.0%	49.0%	1.0%	36.0%	46.1%	42.7%	36.4%	41.0%	36.4%	31.0%	49.0%	21.0%	28.0%	51.0%	39.0%	55.0%	48.0%	52.0%
SEP	35.0%	40.0%	50.0%	23.0%	20.1%	41.1%	32.6%	38.6%	20.6%	43.0%	30.0%	32.0%	30.0%	55.0%	44.0%	52.0%	56.0%	43.0%
OCT	24.0%	38.0%	36.0%	30.0%	37.6%	24.5%	30.6%	26.5%	30.9%	31.0%	22.0%	43.0%	37.0%	40.0%	45.0%	24.0%	33.0%	50.0%
NOV	7.0%	33.0%	26.0%	22.0%	15.4%	46.7%	24.9%	33.7%	13.6%	14.0%	9.0%	45.0%	61.0%	45.0%	25.0%	35.0%	37.0%	43.0%
DEC	12.0%	19.0%	22.0%	17.0%	22.0%	19.5%	31.1%	20.3%	17.6%	16.0%	12.0%	29.0%	53.0%	39.0%	47.0%	38.0%	36.0%	29.0%
Year	26.4%	30.0%	33.0%	31.0%	33.5%	29.5%	34.3%	37.3%	30.8%	33.0%	25.0%	30.0%	37.0%	44.0%	42.0%	41.0%	38.0%	36.0%

ANNUAL AVERAGE USE APPROXIMATELY 31% prior to 1992.

USE INCREASED TO 40% ANNUALLY TO REDUCE DELAYS

RUNWAY 4R ARRIVAL USE PERCENTAGE BY MONTH AND YEAR (1980-1997)
(Turbo-Jet Arrival Operations)

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
JAN	24.0%	13.0%	16.0%	20.0%	25.2%	15.2%	12.2%	17.0%	10.7%	10.0%	20.0%	20.0%	24.0%	55.0%	37.0%	37.0%	35.0%	25.0%
FEB	12.0%	27.0%	37.0%	35.0%	33.0%	23.1%	35.4%	11.1%	22.4%	37.0%	23.0%	27.0%	31.0%	42.0%	20.0%	26.0%	30.0%	26.0%
MAR	24.0%	29.0%	34.0%	45.0%	39.0%	24.4%	32.8%	58.5%	24.5%	49.0%	22.0%	30.0%	34.0%	60.0%	53.0%	57.0%	32.0%	30.0%
APR	73.0%	16.0%	14.0%	35.0%	49.0%	27.8%	61.5%	65.4%	52.2%	33.0%	12.0%	39.0%	42.0%	60.0%	24.0%	43.0%	41.0%	41.0%
MAY	42.0%	40.0%	65.0%	35.0%	20.0%	42.1%	46.6%	44.0%	61.4%	44.0%	31.0%	30.0%	64.0%	40.0%	35.0%	44.0%	36.0%	23.0%
JUN	27.0%	17.0%	61.0%	39.0%	35.0%	29.1%	32.7%	47.0%	36.0%	52.0%	26.0%	26.0%	26.0%	22.0%	24.0%	52.0%	40.0%	40.0%
JUL	21.0%	42.0%	33.0%	25.0%	21.0%	24.1%	41.9%	40.0%	44.2%	35.0%	36.0%	26.0%	17.0%	20.0%	39.0%	34.0%	28.0%	43.0%
AUG	39.0%	49.0%	1.0%	36.0%	46.1%	42.7%	36.4%	41.0%	36.1%	31.0%	49.0%	21.0%	26.0%	51.0%	39.0%	55.0%	48.0%	52.0%
SEP	35.0%	40.0%	50.0%	23.0%	20.1%	41.1%	32.5%	30.6%	20.0%	43.0%	30.0%	32.0%	30.0%	55.0%	44.0%	52.0%	56.0%	43.0%
OCT	24.0%	38.0%	36.0%	36.0%	37.6%	24.5%	36.8%	26.5%	36.9%	31.0%	22.0%	43.0%	37.0%	40.0%	45.0%	24.0%	33.0%	50.0%
NOV	7.0%	33.0%	26.0%	22.0%	15.4%	48.7%	24.9%	33.7%	13.6%	14.0%	9.0%	48.0%	61.0%	45.0%	25.0%	35.0%	37.0%	43.0%
DEC	12.0%	19.0%	22.0%	17.0%	22.0%	19.5%	31.1%	20.3%	17.6%	16.0%	12.0%	29.0%	53.0%	39.0%	47.0%	38.0%	38.0%	29.0%
Year	26.4%	30.0%	33.0%	31.0%	33.5%	29.5%	34.3%	37.3%	30.6%	33.0%	25.0%	30.0%	37.0%	44.0%	42.0%	41.0%	38.0%	36.0%

ANNUAL AVERAGE USE APPROXIMATELY 31% PRIOR TO 1992.

USE INCREASED TO 40% ANNUALLY TO REDUCE DELAYS

RUNWAY 4R ARRIVAL USE PERCENTAGE BY MONTH AND YEAR (1980-1997)
(Turbo-Jet Arrival Operations)

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
JAN	24.0%	13.0%	16.0%	20.0%	25.2%	15.2%	12.2%	17.0%	10.7%	16.0%	20.0%	20.0%	24.0%	55.0%	37.0%	37.0%	35.0%	25.0%
FEB	12.0%	27.0%	37.0%	35.0%	33.0%	23.1%	35.4%	11.1%	22.4%	37.0%	23.0%	27.0%	31.0%	42.0%	20.0%	26.0%	30.0%	20.0%
MAR	24.0%	29.0%	34.0%	45.0%	39.0%	24.4%	32.8%	56.5%	24.5%	49.0%	22.0%	30.0%	34.0%	50.0%	53.0%	57.0%	32.0%	30.0%
APR	73.0%	16.0%	14.0%	35.0%	49.0%	27.8%	51.5%	65.4%	62.2%	33.0%	12.0%	39.0%	42.0%	50.0%	24.0%	43.0%	41.0%	41.0%
MAY	42.0%	40.0%	65.0%	35.0%	26.0%	42.1%	45.6%	44.0%	61.4%	44.0%	31.0%	30.0%	64.0%	40.0%	35.0%	44.0%	36.0%	23.0%
JUN	27.0%	17.0%	61.0%	39.0%	35.0%	29.1%	32.7%	47.0%	36.6%	52.0%	20.0%	26.0%	20.0%	22.0%	24.0%	52.0%	40.0%	40.0%
JUL	21.0%	42.0%	33.0%	25.0%	21.0%	24.1%	41.9%	40.0%	44.2%	35.0%	36.0%	26.0%	17.0%	20.0%	39.0%	34.0%	28.0%	43.0%
AUG	39.0%	49.0%	1.0%	36.0%	46.1%	42.7%	36.4%	41.0%	36.4%	31.0%	49.0%	21.0%	26.0%	51.0%	39.0%	55.0%	48.0%	52.0%
SEP	35.0%	40.0%	50.0%	23.0%	26.1%	41.1%	32.6%	38.6%	20.0%	45.0%	30.0%	32.0%	30.0%	55.0%	44.0%	52.0%	56.0%	43.0%
OCT	24.0%	38.0%	36.0%	36.0%	37.6%	24.5%	36.8%	26.5%	38.9%	31.0%	22.0%	43.0%	37.0%	40.0%	45.0%	24.0%	33.0%	50.0%
NOV	7.0%	33.0%	26.0%	22.0%	15.4%	48.7%	24.9%	33.7%	13.6%	14.0%	9.0%	45.0%	61.0%	45.0%	25.0%	35.0%	37.0%	43.0%
DEC	12.0%	19.0%	22.0%	17.0%	22.0%	19.5%	31.1%	20.3%	17.6%	16.0%	12.0%	29.0%	53.0%	39.0%	47.0%	36.0%	36.0%	29.0%
Year	26.4%	30.0%	33.0%	31.0%	33.5%	29.6%	34.3%	37.3%	30.8%	33.0%	25.0%	30.0%	37.0%	44.0%	42.0%	41.0%	36.0%	36.0%

ANNUAL AVERAGE USE

APPROXIMATELY 31% prior to 1992.

USE INCREASED TO 40% ANNUALLY TO REDUCE DELAYS

RUNWAY 4R ARRIVAL USE PERCENTAGE BY MONTH AND YEAR (1980-1997)
(Turbo-Jet Arrival Operations)

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
JAN	24.0%	13.0%	10.0%	20.0%	25.2%	15.2%	12.2%	17.0%	10.7%	10.0%	20.0%	20.0%	24.0%	55.0%	37.0%	37.0%	35.0%	25.0%
FEB	12.0%	27.0%	37.0%	35.0%	33.0%	23.1%	35.4%	11.1%	22.4%	37.0%	23.0%	27.0%	31.0%	42.0%	20.0%	26.0%	30.0%	20.0%
MAR	24.0%	29.0%	34.0%	45.0%	39.0%	24.4%	32.6%	58.5%	24.3%	49.0%	22.0%	30.0%	34.0%	50.0%	53.0%	57.0%	32.0%	30.0%
APR	73.0%	16.0%	14.0%	35.0%	49.0%	27.6%	51.5%	65.4%	52.2%	33.0%	12.0%	39.0%	42.0%	50.0%	24.0%	43.0%	41.0%	41.0%
MAY	42.0%	40.0%	65.0%	35.0%	20.0%	42.1%	46.6%	44.0%	61.4%	44.0%	31.0%	30.0%	64.0%	40.0%	35.0%	44.0%	36.0%	23.0%
JUN	27.0%	17.0%	61.0%	39.0%	35.0%	29.1%	32.7%	47.0%	36.6%	52.0%	26.0%	26.0%	20.0%	22.0%	24.0%	52.0%	40.0%	40.0%
JUL	21.0%	42.0%	33.0%	25.0%	21.0%	24.1%	41.9%	40.0%	44.2%	35.0%	38.0%	26.0%	17.0%	20.0%	39.0%	54.0%	26.0%	43.0%
AUG	39.0%	49.0%	1.0%	36.0%	40.1%	42.7%	36.4%	41.0%	36.4%	31.0%	49.0%	21.0%	26.0%	51.0%	39.0%	55.0%	46.0%	52.0%
SEP	35.0%	40.0%	50.0%	23.0%	26.1%	41.1%	32.6%	30.6%	20.6%	43.0%	30.0%	32.0%	30.0%	55.0%	44.0%	52.0%	56.0%	43.0%
OCT	24.0%	38.0%	36.0%	30.0%	37.6%	24.5%	30.0%	26.5%	38.9%	31.0%	22.0%	43.0%	37.0%	40.0%	45.0%	24.0%	33.0%	50.0%
NOV	7.0%	33.0%	26.0%	22.0%	15.4%	40.7%	24.0%	33.7%	13.6%	14.0%	9.0%	45.0%	61.0%	45.0%	25.0%	35.0%	37.0%	43.0%
DEC	12.0%	19.0%	22.0%	17.0%	22.0%	10.5%	31.1%	20.3%	17.6%	16.0%	12.0%	29.0%	53.0%	39.0%	47.0%	38.0%	36.0%	29.0%
Year	26.4%	30.0%	33.0%	31.0%	33.5%	29.5%	34.3%	37.3%	30.6%	33.0%	25.0%	30.0%	37.0%	44.0%	42.0%	41.0%	36.0%	36.0%

ANNUAL AVERAGE USE
APPROXIMATELY 31%
PRIOR TO 1992.

USE
INCREASED
TO 40%
ANNUALLY
TO REDUCE
DELAYS

Letter 100
Continental Airlines, Inc.
Glen Morse, Senior Director, Industry Affairs

Code	Topic 1	Topic 2	Comment	Response
100.1	Alternatives	Preferred Alternative	...supports implementation of all of the airfield improvements and the instrument approach minimums reductions contained in Massport's preferred improvement Alternative 1A.	Comment noted.
100.2	Alternatives	Peak Period Pricing	...we concur with Massport/s decision to exclude implementation of peak hour pricing from the preferred alternative at this time....	Comment noted.
100.3	Alternatives	Taxiway Improvements	We support all of the taxiway improvements, most importantly the midfield taxiway, because they will enhance the safety and efficiency of aircraft movements....	Comment noted.
100.4	Alternatives	Reduced Approach Minima	We support the reduction of minimums as proposed...In some circumstances it may also give the tower the ability to change arrival runways to reduce dwell and/or persistence, and better achieve PRAS goals.	Comment noted.
100.5	Alternatives	Runway Use	...Continental supports the construction of unidirectional Runway 14/32...when the winds are from the northwest, there is typically only one arrival runway, Runway 33L...This has been a problem at Logan in the past, is a problem now, and will continue to be a problem in the future regardless of the growth in passengers or operations.	Comment noted.
100.6	Alternatives	Runway 14/32	...Runway 14/32 does not increase "the overall capacity" of the airport....	Comment noted.
100.7	Purpose and Need	Delays	The delays which occur when the airport operates on the Runway 27/33L configuration during heavy traffic periods cause adverse impacts on the communities around Logan....	Northwest winds requiring the use of Runway 33L or 27/33L are a major source of Logan Airport's delays. Runway 14/32 would substantially reduce these delays and the resulting environmental impacts.
100.8	Alternatives	Runway Use	...at current or any future traffic levels, Runway 14/32 limited to unidirectional use provides safety, capacity and environmental benefits and reduces delays when winds are out of the northwest and contributes to the achievement of existing runway use goals.	Comment noted.

Delta Air Lines

LETTER 101

John Boatright
Vice President
Properties and Facilities

April 8, 1999 4/27/99

cc: B. Desrosiers
B. McMorrow
PMF
JM

Mr. Thomas J. Kinton, Jr.
Director of Aviation
Massachusetts Port Authority
One Harborside Drive, Suite 200S
East Boston, Massachusetts 02128-2909

Dear Tom:

This letter will serve as notice that Delta Air Lines is in support of the Airside Improvement Planning Projects as outlined in the Delay Reduction Program package proposed by Massport for Logan International Airport. In particular, the construction of the new uni-directional runway 14/32 would vastly improve the efficiency of the airfield during certain wind conditions and reduce the delays otherwise experienced when these conditions exist. During such times, the airport is constrained and must operate at a level far below the normal airfield capacity due to the lack of an efficient runway configuration needed to meet the operational requirements that are addressed by other runways in different wind conditions. 101.1

Along with the construction of the new runway, the other projects outlined in the Airfield Improvement Planning Projects package will provide for even greater efficiencies and benefit to the airport.

Respectfully,

cc: Mr. Danny Quillen, Delta Air Lines, Inc.
Mr. Harold Bevis, Delta Air Lines, Inc.
Mr. Dave Bushy, Delta Air Lines, Inc.
Mr. Larry Aldrich, Delta Air Lines, Inc.

Letter 101
Delta Airlines
John Boatright, Vice President, Properties and Facilities

Code	Topic 1	Topic 2	Comment	Response
101.1	Alternatives	Runway 14/32	...the construction of new uni-directional runway 14/32 would vastly improve the efficiency of the airfield during certain wind conditions and reduce the delays otherwise experienced when these conditions exist.	Comment noted.

Delta Air Lines

LETTER 102

Dave Bushy
Vice President
Flight Operations

May 7, 1999

Mr. Peter Blute
Executive Director and CEO
Massachusetts Port Authority
One Harborside Drive, Suite 200S
East Boston, MA 02128-2909

Dear Mr. Blute:

On behalf of the Delta Air Lines Flight Operations Department, I would like to express my support for the Logan Airside Improvements Project and the construction of a new uni-directional commuter runway as a key element in this major delay reduction initiative.

This new runway will play a major role in enhancing airport operations and reducing delays, particularly during strong northwest wind conditions which limit all aircraft operations to Runway 33L. These conditions result in frequent and often extensive delays that inconvenience our customers, disrupt our otherwise enviable on-time performance, and cost our company hundreds of thousands of dollars annually. My personal experiences as Chief Pilot for Delta in Boston provided me with first-hand knowledge of the need for this runway, as well as the fact that it will not increase noise to airport neighbors. 102.1

Construction of the new runway 14/32 will be a substantive investment in the future of the city of Boston and Logan Airport as a major gateway for air travel in the Northeastern United States. Delta Air Lines strongly recommends moving forward with the Airside Improvement plan.

Sincerely,

Dave Bushy

cc: Mr. Thomas Kinton, Director of Aviation—Massachusetts Port Authority
Mr. Scott Yohe, Senior Vice President—Government Affairs
Mr. Harold Bevis, Vice President—Public Affairs
Mr. John Boatright, Vice President—Properties & Facilities
Mr. Danny Quillen, General Manager—Public Affairs
Mr. Larry Aldrich, Regional Director—Properties & Facilities

Letter 102
Delta Airlines
David Bushy, Vice President, Flight Operations

Code	Topic 1	Topic 2	Comment	Response
102.1	Alternatives	Runway 14/32	This new runway will play a major role in enhancing airport operations and reducing delays, particularly during strong northwest wind conditions which limit all aircraft operations to Runway 33L.	Comment noted.

Eagle Hill
East Boston Eagle Hill Civic Association

PO Box 512
Eagle Hill
East Boston. MA
02128

LETTER 103

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

March 12, 1999

Dear Mr. Durand,

As residents, tax-payers and homeowners in East Boston, we write to urge you to oppose Massport's proposed runway 14/32. According to Massport's EIS report, the runway will reduce delays only 20% of the time AND would be effective only until the year 2003, when delays at Logan will return to present levels. The permanent environmental damage that will be caused Boston residents cannot be justified by this shortsighted proposal. The Eagle Hill Civic Association has worked for the past 15 years to increase awareness about the historical and architectural value of Victorian homes on Eagle Hill, the most densely populated area of East Boston. Because of the work we have done renovating hundreds of homes and buildings, Eagle Hill is now listed on the National Registry of Historic Places and many middle class residents are choosing to move to Eagle Hill, thus building up the City's badly needed tax base. 103.1

Because 14/32 will increase flights on existing runways 27 and 33, residents of Eagle Hill *who already shoulder an unfair portion* of airport noise, fumes and traffic will be permanently and dangerously impacted with triple the amount of planes passing over our homes. This will be a particular danger for our children, as Eagle Hill has the highest concentration of children and schools in East Boston. With 14/32, operations on runway 27 (impacting Roxbury, South Boston, the South End, Dorchester, Jamaica Plain, Roslindale, West Roxbury and Brookline) will increase from 18,000 to 56,495 annually. Operations on runway 33 (affecting East Boston, Chelsea, Charlestown, Hull, Revere, Somerville, Cambridge, Winthrop, Melrose) will increase from 6,082 to over 21,000 annually. Yet, Massport continues to downplay these impacts as "environmentally insignificant." 103.2

Massport's EIS report doesn't mention that fact that *since 1992, delays at Logan have decreased.* This information is publicly available in the Federal Aviation Administration's 1998 ACE (Airport Enhancement Capacity) Report and on the website www.asc.faa.gov. The only reason that Massport can claim that Logan has a "delay problem," is because Massport uses unrealistically high "maximum capacity" goals. Airports such as Dallas or Denver, located on relatively unpopulated land can set higher maximum capacity numbers. Airports located in densely populated urban areas must accept the reality that maximum capacity goals have to be lower than those at airports in non-urban areas, due to environmental and health impacts on local residents. The only reason Massport calls itself a "high delay" airport is because they aim for 120 planes per hour as their maximum capacity. If their goals were set at a more realistic 90 planes per hour (used in other urban airports), Logan would not have a serious delay problem. 103.3

Massport's EIS represents the interests of airlines and airport-related businesses, all of whom stand to make big profits if Logan's overall capacity is increased by runway 14/32. The EIS does not consider health impacts environmental and quality of life issues of Boston's inner city residents. The EIS does not include the negative indemnity of real estate prices for the thousands of homes under the flight paths, nor increased crime and lost tax 103.4

- revenues for the City of Boston when middle class families are forced to move elsewhere because of the excessive plane noise and fumes. Although adequate testing has not been done, I don't believe it is a coincidence that many residents of East Boston are hard of hearing. Hundreds of thousands of people in Greater Boston need your support on this issue. Please reject Massport's EIS, work to keep the present court injunction in place and encourage Massport to seek alternative methods to handle projected air travel increases.

Significantly more flights should be directed to Hanscom Airport, located just 25 minutes from Boston and presently utilized at only a third of its capacity. Hanscom has the runway capacity *right now* to handle commercial commuter planes. Massport must designate Hanscom as a commercial commuter airport instead of a "small corporate jet" airport, as it is now classified. By increasing air traffic at Hanscom, Worcester, Manchester and Providence to the maximum capacity possible, Massport will avoid future delays at Logan with minimal negative impacts on Greater Boston residents who already receive the lion's share of negative impacts from regional air travel. **We desperately need airport impact relief for the existing noise and traffic, not additional negative impacts!** 103.5

Another alternative which Massport has been unwilling to implement is Peak Hour Pricing, a demand management tool which is very successfully used in the hotel and tourism industry as well as the electric utility industry. For profit reasons, airlines prefer to increase capacity rather than manage demand. It is an injustice when greedy profit motives overrule the well-being of human beings. Massport has the opportunity to become a national leader in airport demand management and should give peak hour pricing a year-long trial implementation before proposing the construction of any new runways. 103.6

Massport claims to be a "good neighbor," yet they secretly met behind closed doors with representatives of the media and business sectors to garner their support before publicly announcing plans to build 14/32. *The Globe*, the *Herald* and most major TV networks came out in favor of the proposal even before the MEPA environmental impact report was published! Is this fair play? Is this being a good neighbor? Despite Massport's economic and political advantages, residents of East Boston and Greater Boston will fight this proposal by every means available. We hope we can count on your support.

Sincerely,

Debra L. Cave

Debra L. Cave, President
East Boston Eagle Hill Civic Association

Letter 103
East Boston Eagle Hill Association
Debra L. Cave, President

Code	Topic 1	Topic 2	Comment	Response
103.1	Purpose and Need	Delay Reduction	...the runway will reduce delays only 20% of the time AND would be effective only until the year 2003, when delays at Logan will return to present levels.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
103.2	Noise	Runway Use	...14/32 will increase flights on existing runways 27 and 33...operations on runway 27...will increase from 18,000 to 56,495 annually. Operations on runway 33...will increase from 6,082 to over 21,000 annually.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
103.3	Delay	Model	Massport's EIS report doesn't mention that fact that since 1992, delays at Logan have decreased. If their goals were set at a more realistic 90 planes per hour (used in other urban airports), Logan would not have a serious delay problem.	The Supplemental DEIS/FEIR contains a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. Airfield capacity is a function of the runways in service, the fleet mix using them, prevailing weather conditions, and FAA air traffic control procedures. Massport cannot arbitrarily define the runway capacity and regulate airline schedules. The highest capacity configuration at Logan Airport today for three runways in good weather is about 120 operations per hour.

Code	Topic 1	Topic 2	Comment	Response
103.4	Environmental Justice	Impacts	The EIS does not consider health impacts environmental and quality of life issues of Boston's inner city residents.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study*. Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.
103.5	Regional Alternatives	Regional Airports	...more flights should be directed to Hanscom Airport...By increasing air traffic at Hanscom, Worcester, Manchester and Providence to the maximum capacity possible, Massport will avoid future delays at Logan....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. With recent service developments, Manchester and T.F. Green/Providence airports, are becoming attractive alternatives for Logan Airport passengers that originate in communities north and south of Routes I-95 and I-495. By its agreement to assume operational responsibility and the eventual ownership of the Worcester Regional Airport, Massport is working to increase air services at Worcester Regional Airport and is working to increase the airport's role in accommodating air travel demand generated in communities west of I-95 and I-495. Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion.

Code	Topic 1	Topic 2	Comment	Response
103.6	Alternatives	Peak Period Pricing	Massport...should give peak hour pricing a year-long trial implementation before proposing the construction of any new runways.	The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport is prepared to initiate a process, as described in Section 4.5.4 of the Supplemental DEIS/FEIR, to initiate the rule-making process to implement PPP at that time.

LETTER 104

Mr. Robert A. Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge St. Rm. 2000, Boston, MA 02202

Eagle Hill
East Boston Eagle Hill Civic Association

PO Box 512
Eagle Hill
East Boston, MA
02128

April 8, 1999

Dear Mr. Durand,

The more we hear Massport and business sectors (most of whom do not live in Boston) promote runway 14/32, the angrier we get. Massport has misrepresented the truth and manipulated data to support the runway. **Massport's EIS is inadequate because it is based on 1993 figures** (a year that happened to be a record high for delays). According to the FAA (www.asc.faa.gov), delays at Massport are significantly lower today than in 1993. Frankly, nobody considered Massport an "extremely delayed" airport before Massport announced its plans to build runway 14/32. Over the last two months, pro-runway news stations and newspapers have regularly proclaimed that Logan is "notorious" for delays. Massport is engaging in an unfair and exaggerated propaganda war to increase anxiety about delays, something that nobody complained about before runway 14/32 was announced.

Because 1998 data shows that *Logan's delay situation is improving,* Massport chose to use 1993 statistics. Moreover, the EIS barely includes alternatives to 14/32, because Massport lacks the political WILL to implement alternatives. This violates MEPA regulations and renders the EIS invalid. We urge you to dismiss this biased document and consider the following points. **If Runway 14/32 is built,** it will not only TRIPLE the amount of environmental impacts for the worst affected communities, but **will remove incentive to immediately implement regional transportation planning. 14/32 will not solve the root causes of delays at Logan:**

104.1

#1 Small planes and corporate jets are allowed to land at Logan, delaying the take-offs and departures of large commuter carriers. Small planes and corporate jets should be sent to Hanscom Airport, which has the runway capacity and is ideally located for corporate commuters heading towards the 128 and 495 area. Yes, this will mean modest air traffic expansion for rural communities abutting Hanscom, but considering that the noise contour lines for Hanscom Airport fall on open fields and woods, no residential homes would receive noise decibel levels comparable in intensity to those suffered by hundreds of thousands of people around Logan. Expanding operations at Hanscom would mean that a relatively small number of residents would receive relatively small noise increases. Expansion at Logan means that hundreds of thousands of already impacted residents will receive very large noise increases. The justice issue is clear. Furthermore, businesses and tourism will flourish in Boston whether people land at Logan or 25 minutes to the West in Bedford. Massport didn't even *mention* this solution in its EIS.

104.2

#2 Logan has no major feeder airports. If you look at the airports that rank higher than or roughly the same as Logan in delays, you will note that ALL of them have two, three or more major feeder airports. San Francisco has SFO International, Oakland International and San Jose International all within 20-45 minutes of San Francisco. New York has Kennedy, La Guardia and Newark all within 30-45 minutes of town. If Massachusetts had a second international or national airport within an hour of Boston, imagine how quickly delays at Logan would go down!

104.3

#3 Massport sets unrealistic flight per hour goals, given its densely populated, urban surroundings. 120 planes per hour (24 hours per day!) should not be allowed. Were Massport to use the more realistic number of 90 planes per hour, Logan would have no delay problem. Abutters of Logan are in desperate need of noise relief, not noise increases. We sincerely hope that your agency will consider these issues and reject Massport's EIS. By doing so, Massport will receive a strong message that it needs to design a long-term, socially-responsible, regional air traffic plan for the 21st century. Thank you.

104.4

Debra L. Cave

Debra L. Cave, President
East Boston Eagle Hill Civic Association

Letter 104
East Boston Eagle Hill Association
Debra L. Cave, President

Code	Topic 1	Topic 2	Comment	Response
104.1	Analysis Assumptions/ Methodologies	Base Year	Massport's EIS in inadequate because it is based on 1993 figures...According to the FAA...delays at Massport are significantly lower today than in 1993...1998 data shows that Logan's delay situation is improving....	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. Analysis of 1981 to 90 weather with 1989-98 weather identifies no significant differences in statistical properties.
104.2	Regional Alternatives	Regional Airports	Small planes and corporate jets should be sent to Hanscom Airport....	Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations. In 1998, it accommodated 183,000 general aviation operations compared to 32,000 general aviation operations at Logan Airport. The Hanscom Field activity includes private, business, charter, and air-taxi operations that might otherwise use Logan Airport. While approximately 45 percent of commercial aircraft activity at Logan Airport is on small planes, Massport plays no role in the decisions of private airlines regarding air service routes or service levels. Airlines are unlikely to move a significant number of these flights to Hanscom Field, since approximately 50 percent of passengers on these flights connect to other flights operated at Logan Airport.
104.3	Regional Alternatives	Regional Airports	Logan has no major feeder airports...If Massachusetts had a second international or national airport within an hour of Boston, imagine how quickly delays at Logan would go down!	Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.
104.4	Delay	Model	Massport set unrealistic flight per hour goals...Were Massport to use the more realistic number of 90 planes per hour, Logan would have no delay problem.	Airfield capacity is a function of the runways in service, the fleet mix using them, prevailing weather conditions, and FAA air traffic control procedures. Massport cannot arbitrarily define the runway capacity nor airline schedules. The highest capacity configuration at Logan Airport today for three runways in good weather is about 120 operations per hour. Proposed airside improvements, such as Runway 14/32, are intended to fill in the capacity gap which exists under some conditions such as northwest wind and to reduce delays at those times.

LETTER 105

Mr Arthur Pugsley, Reviewer

Exedcutive Office of Environmental Affairs

100 Cambridge Street

Boston Massachusetts 02202

RE:EOEA #10458

Dear Mr Pugsley:

These comments are submitted for the East Boston Land Use Advisory Council after duly noticed meetings and votes taken according to its by-laws. The Council is an East Boston community group, organized in 1968 and in continuous session since that time. The mission of the Council, hereinafter called LUC is to provide a forum and advocacy for zoning, licensing, recreational and planning issues which generally affect the quality of community life in East Boston and these comments are submitted in accordance with that mission and purpose.

The referenced Draft EIS/EIR has been submitted in support of Massachusetts Port Authority (MPA) proposal called Logan Airside Improvements Planning Project (the Project), and, after due consideration LUC has voted, on March 25, 1999 and April 1, 1999 to request the Secretary to reject this Document and the Project proposed thereby.

Statement of Proposal

The referenced document proposes that MPA build a runway, compass points 140/320 degrees, a centerfield taxiway, and, in the Federal submission, a reduced approach height minimum to 18' all proposals being for the purpose of claimed operation delay management and improved operation safety. Document specifically states that no increase in operation capacity is facilitated by the specific "airside improvements" and that the impacts of the "airside improvements" be considered and evaluated separately from previously proposed and implemented "groundside improvements"

Analysis of Proposal

LUC submits that the proposal overstates and fails to analyze correctly the delay situation at Boston-Logan International Airport and further states an inaccurate picture of delay trends and forecasts. The proposal is further flawed by failure to present and analyze alternative delay reduction strategies that would reduce

delays without implementing the runway/ taxiway build schemes and their accompanying environmental and economic impacts on the affected communities. These failures violate the requirements of both NEPA and MEPA requiring comparative alternative analysis to "build" and further, the requirement in both Acts to not "segment" the impacts of related components of a proposal such as "Groundside" and "Airside" which are clearly related in their cumulative impacts on the affected communities.

The argument of MPA that "Groundside" (passenger handling) and "Airside"(aircraft handling) are severable, and that neither, alone or cumulatively generates traffic and capacity expansion is, on its face, tenuous and based on assumptions that deny a reasonable view that these developments are closely related and necessarily cumulative in their environmental impacts. While it is true that MPA will not control passenger and cargo operation growth at Logan, the reasoning is not that such growth cannot be controlled and managed, but rather that to exercise such control would be contrary to the fundamental economic purposes of MPA's development. The growth of operations and ensuing revenues support MPA's financial strength and to limit this growth would impair MPA's revenue stream and, thus, its bond covenants. MPA will not take measures to limit or manage operation growth, and, from a strictly economic standpoint, should not do so. Applicable law, however, including National Environmental Policy Act of 1969, Department of Transportation Act of 1966 and Massachusetts Environmental Policy Act set a much broader scope of requirements for review of the Project's supporting off-documentation. Specifically, the following items should be required to be addressed in the Project documentation:

1. Discussion of diversion of cargo operations to off-airport the off- alternatives. 105.1

2. Considering the off-airport alternatives as separate scenario for evaluation in DEIS/DEIR process. 105.2

3. Evaluation of MPA-owned Hanscom Field as a reliever airport for general aviation operations, origin/destination regional non-jet traffic, and short-haul origin/destination jet traffic. 105.3

4. Consideration of #3 and other sitings for a second major Massachusetts Airport, with particular consideration of 1996 Executive Order relative to environmental justice. 105.4

5. Analysis of existing delays at Logan owing to specifically wind/weather effects and indirectly from delay at other airports. 105.5

LUC submits that such indirect delay will not be relieved by the Airside project, and should not be included in the alleged benefit thereof.

6. Documentation of history of PRAS (preferential runway assignment) as management tool and analysis of problems with implementation thereof. 105.6

The Secretary should determine that significant planning deficiencies exist in the DEIS/DEIR and a new Draft document(not an amended version) be submitted.

The "base year" of 1999 does not adequately reflect changes since that time, and a base of 1998 extending to 2020 should be required as proportionate to severity of impacts and to implement appropriate planning horizons. For example, delays at Logan have not significantly increased 1993 according to FAA modeling standards and therefore do not justify MPA's projections for future delays. Further, weather data does not allow for significantly changed weather conditions in the period from 1981-1990 to present. 105.7

Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations directly because of the sought-for effect of delay reduction. 105.8

The projected increases in passenger demand and capacity to handle such demand from the airside/groundside expansions will be met by increased "passenger jet" operations. The overflight impacts on 15/33 communities including East Boston will be disproportionate and the noise reduction benefits of stage 3 conversion are mostly already realized since only about 15% of the fleet remains to be made stage 3 compliant.

Further, the number of extremely noisy nighttime jet operations already required to be stage 3 compliant are seen to double in the foreseeable future and therefore no further noise reduction benefit whatsoever is to be derived on these increases.

Project documents tout the noise mitigation to be achieved through additional soundproofing treatment in impacted community. This benefit, such as it might be, will be disproportionately unavailable 105.9

In the poorer impacted communities because of the greater likelihood that residences will be non-compliant with relevant building codes and economic ability to achieve code-compliance is disproportionately lacking.

Alternatives to the build proposal are required to be " rigorously explored and evaluated" and alternatives, which were eliminated from detailed study, should be explained referencing briefly reasons for eliminating these alternatives. 105.10

The economic benefits of Logan are incorrectly conflated with those of Boston itself but the loss from the Boston-area impacts are conveniently neglected.

Boston worked best in a transportation environment predominantly emphasizing rail and water transport. The siting of Logan into preexisting urban areas was attempt to to gain advantage over other further-out airports. But the advantages gained, even temporarily thereby, have been constantly attended by disproportionately severe and unjust impacts. The current proposal is a clear and unfair extension of this bad history, and must be rejected to force a more rational approach to regional transportation solutions.

East Boston Land Use Advisory Council

By

Robert F. Stralitz

CC:Hon. Paul Scappicio

Letter 105
East Boston Land Use Advisory Council
Robert F. Strelitz

Code	Topic 1	Topic 2	Comment	Response
105.1	Regional Transportation	Cargo	Discussion of diversion of cargo operations to off-airport the off-alternative [should be discussed].	Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
105.2	Regional Transportation	Regional Alternatives	Considering the off-airport alternatives as separate scenario for evaluation in DEIS/DEIR process [should be discussed].	The regional alternatives were explicitly considered in the delay reduction and environmental analyses by studying a range of future demand and activity levels. Passenger levels analyzed cover a range from 29M passengers to 45M passengers. Similarly, 510,000 to 656,000 future aircraft operation levels were analyzed. The use of variable long-term passenger and operations forecasts allow for uncertainty relating to the rate of future economic growth, the development of high-speed rail alternatives, the acceptance and usage of video-conferencing, and the role of regional airports. The delay reduction analyses indicate that the proposed airside improvements, as well as the regional alternatives, are necessary for accommodating current and future levels of demand.
105.3	Regional Transportation	Regional Airports	Evaluation of MPA-owned Hanscom Field as a reliever airport for general aviation operations, origin/destination regional non-jet traffic, and short-haul origin/ destination jet traffic [should be discussed].	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

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Code	Topic 1	Topic 2	Comment	Response
105.4	Regional Transportation	Regional Airports	Consideration of ...[Hanscom Field] and other sitings for a second major Massachusetts Airport, with particular consideration of 1996 Executive Order relative to environmental justice [should be discussed].	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.
105.5	Delay	Model	Analysis of existing delays at Logan owing to specifically wind/weather effects and indirectly from delay at other airports [should be discussed].	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion by addressing constraints at Logan Airport. Delays caused by conditions at other airports or other factors, such as mechanical failure, are not addressed since Massport cannot influence these delays. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.
105.6	Noise	PRAS	Documentation of history of PRAS...as management tool and analysis of problems with implementation thereof [should be discussed].	The Supplemental DEIS/FEIR includes a discussion of PRAS including its historic development and the performance relative to the goals over time. PRAS goal achievement has improved considerably over time, particularly since the installation of the Enhanced PRAS in 1993 and the Revised PRAS in 1996. Chapter 8 also outlines a monitoring program that will provide regular updates on PRAS performance and serve as an aid to identify problems or areas for improvement.
105.7	Analysis Assumptions/ Methodologies	Base Year	The "base year" of 1999 [1993] does not adequately reflect changes since that time, and a base of 1998 extending to 2020 should be required....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
105.8	Environmental Review Process	NEPA	Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations....	Implementation of the elements of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. Refer to the discussion in Section 4.2 in the Supplemental DEIS/FEIR.
105.9	Noise	Sound Insulation	...soundproofing treatment...will be disproportionately unavailable in the poorer impacted communities because of the greater likelihood that residences will be non-compliant with relevant building codes...	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport sponsored sound insulation program. However, to address impacts in particular projects such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of the mitigation program to the extent such improvement are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes. For the eligible residences, the FAA will fund building code improvements, to the extent necessary, to implement effective sound insulation treatment.
105.10	Environmental Review Process	MEPA	Alternatives to the build proposal are required to be "rigorously explored and evaluated" and alternatives, which were eliminated from detailed study, should be explained referencing briefly reasons for eliminating these alternatives.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to FAA scoping directives, applicable FAA environmental orders and all other NEPA requirements.

ELLIS NEIGHBORHOOD ASSOCIATION, INCORPORATED
Post Office Box 961, Back Bay Annex, Boston, MA 02117

LETTER 106

April 22, 1999

Secretary Bob Durand
Executive Office of Environmental Affairs
Environmental Impact Review
100 Cambridge Street
Boston, MA 02108

FAX 617-727-1598

Attention Arthur Pugsley

The Ellis Neighborhood Association, located in the South End, would like to comment on the Massachusetts Port Authority proposal to add a runway and reconfigure taxi ways at Logan Airport to reduce delays at the facility.

Unfortunately, the cost of the proposal is too high. It is estimated that the flights over the South End will increase from roughly 18,000 a year to over 40,000 a year, and then grow from there. This is an increase from nearly 50 flights a day to 115 flights a day, assuming the flights are spread evenly over 365 days. But these flight will largely occur during periods of "non prevailing winds", estimated at 25% of the time, which suggests as many as 444 flights a day (40,000 flights divided by 90 days). This is unacceptable. 106.1

Some of these planes are so noisy, one has to stop conversations until the plane has passed. These planes should be banned from using Logan.

Other planes fly so low they take a long time to rumble by. These planes should be directed to fly over the ocean until they reach an altitude high enough so the sound is dissipated (and then hopefully turn toward land at someplace other than over the city).

Thank you for the opportunity to comment.

Very truly yours,

Elizabeth S. Boveroux
President

Letter 106
Ellis Neighborhood Association, Inc.
Elizabeth S. Boveroux, President

Code	Topic 1	Topic 2	Comment	Response
106.1	Noise	Impacts	It is estimated that the flights over the South End will increase from roughly 18,000 a year to over 40,000 a year...This is unacceptable.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

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LETTER 107

To: Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458

From: Richard J. Egan, Chairman, EMC Corporation

Date: April 8, 1999

Subject: Massport's Plan to Improve Logan Airport

This note is sent in support of Massports plan to improve the timeliness, safety and environment of Logan Airport and it's surrounding area.

My reasons for this are best described by the attached Op-Ed piece which appeared in the March 28th edition of the Boston Herald.

Additionally, I have studied this plan and firmly believe that it will in fact improve the overall environment by decreasing the noise and jet exhaust over the adjacent inhabited areas.

I hope that your study of this matter is not diverted by the opponent's claims that other regional airports are a better solution.

While there are serious plans currently underway to provide better access to other airports they unto themselves are not the solution offered by this Massport plan whose implementation has long been delayed by a small but vocal group who will remain dissatisfied with Logan until it is shut down.

Respectfully yours,

RJE:mlh
mepa0407.doc

Enclosure

Boston Sunday Herald
MARCH 28, 1999 • $1.75

Economy demands new runway

Do you realize our region's link to global markets, tourism dollars, customers and conventioneers can be shattered by something as simple as a strong northwest wind? That key link is Logan Airport. And when northwest winds prevail, as they often do, Logan can operate only two of its runways — and sometimes only a single runway.

No surprise, then, that when it comes to time-wasting and money-wasting delays, Logan is one of the worst airports in the country. In fact, Logan's airfield is so inadequate that, according to Massport, it cost corporations more than $310 million in lost productivity last year.

Richard J. EGAN

Consider my company, EMC Corp. We are now the largest computer company headquartered in Massachusetts. Every day, several hundred EMC sales reps, engineers and executives fly in and out of Logan — as do their thousands of counterparts from other companies. Clearly, I and EMC's 3,800 Massachusetts workers have a lot invested in Logan. Logan is our gateway to the world. But we find it incredible that on a bright, clear, sunny day, with not a snowflake in sight, flights into Logan can be delayed up to three hours ... all due to weather.

As a coastal airport in New England, Logan is subject to the whims of Mother Nature. Snow, fog and poor visibility all can cause delays. While I am never happy to hear that EMC employees and customers are affected by delays at Logan, at least it is understandable when a foot of snow has fallen or fog is blanketing Boston.

The cause of the problem is simple: There have been no improvements made to Logan's airfield in over 20 years. To meet peak demand, Logan needs three runways in operation. The makeup of Logan's airfield is such that when winds blow from the Northwest, delays can total thousands of hours.

This problem will not go away on its own. Logan's delays will worsen if nothing is done, and the cost to our economy will continue to grow. The issue has been talked about for more than 20 years, and for 20 years the problem has gotten worse.

Should we wait until companies start to pack their bags in search of a more efficient transportation link? What about when large conventions pass on Boston's new convention center because getting into the city is too much of a hassle? We cannot afford to wait any longer.

I'm concerned enough about Logan and its ability to keep this state tied to the global economy that I have set up a coalition of more than 50 Massachusetts CEOs who want to help Massport make Logan better.

The Logan On Time Committee is composed of companies like Gillette, Analog Devices, Teradyne and Fidelity. All told, these corporations employ 500,000 people in this state. These are companies where thousands of workers travel for a living; companies where jobs, profits and state tax revenues depend on getting from Boston to other cities, Europe, Asia and the rest of the world quickly and reliably. Our group is working overtime to make sure Massport goes ahead with construction of a new runway.

My business depends on Logan to succeed, so I am making its success my business. The pace of EMC's business doesn't slow down when there are northwesterly winds. Neither should Logan's.

Richard J. Egan is founder and chairman of EMC Corp. of Hopkinton, a provider of enterprise computer storage systems, software and services.

107.1

Letter 107
EMC Corporation
Richard J. Egan, Chairman

Code	Topic 1	Topic 2	Comment	Response
107.1	Purpose and Need	Delays	This problem will not go away on its own. Logan's delays will worsen if nothing is done,...The pace of EMC's business doesn't slow down when there are northwesterly winds. Neither should Logan's.	Comment noted.

Excavating & Building Material
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LOCAL UNION 379

PAUL V. WALSH
SECRETARY-TREASURER
PRINCIPAL EXECUTIVE OFFICER

JOHN P. MAHONEY
BUSINESS REPRESENTATIVE

LETTER 108

April 22, 1999

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge St., 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

The International Brotherhood of Teamsters Union, Local 379, is writing today in full support of the Massachusetts Port Authority's Airside Improvement plan for Logan International Airport. Local 379 firmly believes this project is necessary to reduce delays, improve the quality of life of our members and provide much needed employment opportunities.

Delays at Logan are consistently among the worst in the U.S. These delays are not only inconvenient, they are costly. In 1998 delays at Logan cost airlines and their passengers nearly $310 million. These losses ultimately affect the livelihood of many working men and women as it impedes the ability of Boston and the region to compete in a global economy. 108.1

A major component of the Airside Improvement project, Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area. The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities. The proposed centerfield taxiway and other improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxing aircraft to adjacent neighborhoods. 108.2 108.3

With an annual economic impact of $5 billion, Logan International Airport is directly responsible for creating more than 15,000 jobs in this area, many of which are the hard working men and women of Local 379.

It is therefore, without reservation, that Local 379 wholeheartedly support's Airside Improvements at Logan Airport and looks forward to the projects approval.

Thank you for your attention to this matter.

Sincerely yours,

Paul V. Walsh
Secretary-Treasurer
Principal Executive Officer

PVW/mec

Letter 108
Excavating & Building Material Teamsters, Chauffeurs & Helpers -- Local Union 379
Paul V. Walsh, Secretary-Treasurer Principal Executive Officer

Code	Topic 1	Topic 2	Comment	Response
108.1	Purpose and Need	Delay	...firmly believes this project is necessary to reduce delays...These delays are not only inconvenient, they are costly...it impedes the ability of Boston and the regional to compete in a global economy.	Comment noted.
108.2	Noise	Cumulative mpacts	...Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area.	Comment noted.
108.3	Air Quality	Taxiway Improvements	The proposed centerfield taxiway and other improvements would further enhance air quality....	Comment noted.

David C. Weinstein
Chief of Administration
and Government Affairs

82 Devonshire Street F5A
Boston, MA 02109-3614
Phone: 617 563-6578
Fax: 617 476-7356
E-mail: david.weinstein@fmr.com

LETTER 109

April 23, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley--EOEA No. 10458
100 Cambridge Street
20th floor
Boston, MA 02205

Dear Mr. Pugsley:

Fidelity Investments is a global financial services company and the largest mutual fund firm in the United States. We have 12,600 employees in Massachusetts, including nearly 10,000 at our world headquarters in Boston. We are the largest private employer in Suffolk County and the 4th largest private employer in Middlesex County.

For a large, growing company like ours, the proximity of a convenient airport offering reliable and safe air travel is an absolute necessity. We strongly support the modernization of Logan Airport and the construction of runway 14/32 because an inefficient Logan hurts the productivity of businesses, wastes time and money and negatively impacts the local and regional economy. 109.1

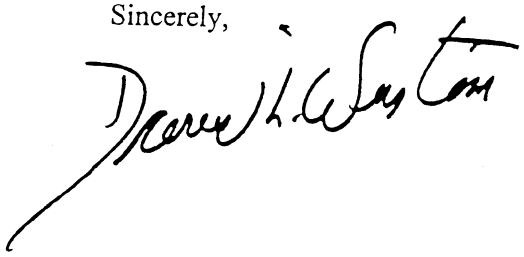
We have other major operations within New England, in New Hampshire and Rhode Island, and in five other states. A convenient, efficient airport is a critical factor in deciding where to locate and where to grow. It is no accident that our New Hampshire and Rhode Island facilities, where a combined 3,700 employees work, are within short drives of the Manchester and T.F. Green airports, respectively. We support any and all efforts to expand usage of those regional airports (and Worcester and New Bedford), not only because it helps serve our employees in other locations, but also alleviates Logan's congestion and contributes to a diversified and robust New England economy. 109.2

Logan Airport has an annual economic impact of $5 billion, providing jobs for 15,000 citizens and supporting more than 100 airport-related businesses. Put simply, Logan contributes $13.7 million to the local economy every single day. While ranking 11th in operations among U.S. airports, Logan has the 6th-worst delay problem. In 1998, Logan suffered from 120,000 delay hours at a cost of $319 million.

In 1998, Fidelity spent almost $50 million in airline tickets -- about 75 percent of which was travel through Logan. Fidelity employees traveled on more than 100,000 flights to and from Logan last year. Employees at a company like ours, with headquarters in Boston, must be able to travel easily and without undue delay to other locations in the U.S. and around the world. With 15 million customers in all 50 states, we have customers wherever airplanes can fly.

Unfortunately, we have an airport that often does not work. We must do better for our economic vitality today and for the future fiscal health of the Commonwealth. Construction of runway 14/32 should lead to greater growth, new jobs and a competitive regional economy leading into the 21st century.

Sincerely,



Letter 109
Fidelity Investments
David C. Weinstein, Chief of Administration and Government Affairs

Code	Topic 1	Topic 2	Comment	Response
109.1	Purpose and Need	Airfield Capacity	We strongly support the modernization of Logan Airport and the construction of runway 14/32 because an inefficient Logan hurts the productivity of businesses, wastes time and money and negatively impacts the local and regional economy.	Comment noted.
109.2	Regional Alternatives	Regional Airports	We support any and all efforts to expand usage...regional airports (and Worcester and New Bedford)....	Comment noted.

Fitcorp

Corporate Offices
800 Boylston Street / Prudential Center Suite 2475 / Boston, MA 02199
Phone: (617) 375-5600 Fax: (617) 375-5649

Gary T. Klencheski
President and CEO
E-mail: garyk@fitcorp.com

April 7, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
2oth Floor
Boston, MA 02205

LETTER 110

Dear Mr Pugsley:

As President and CEO of Fitcorp, a Massachusetts company with 95 employees, I am writing you to state my strong support of a series of transportation initiatives, notably the Logan Airport modernization along with improvements to our high speed rail system and greater utilization of the Worcester, Providence and Manchester airports. My company's success is contingent upon a strong economy in Boston. The five leading industries that account for more than half of the jobs in our region are dependent upon a Logan that operates efficiently.

Logan's transportation services are essential to the economic success of the entire region. Unfortunately, Logan is one of the most delay prone airports in the county, ranking sixth in 1998. No changes have been made to Logan's airfields since 1977, and since then, operations have increased by 112%. Massport's plan for a new runway designed for all arrivals and departures taking place over Boston Harbor should lead to greater growth, better jobs, and a competitive regional economy. 110.1

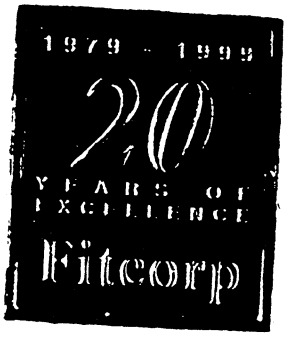
With the development of a new convention center there will be an increased demand for air traffic in Greater Boston over the next decade. Runway 14/32 at Logan will help us meet this demand. In addition, we need to increase utilization at the regional airports in Worcester, New Bedford, Providence, and Manchester and also incorporate high-speed rail into our region. 110.2

Our future economic competitiveness hinges on Logan's modernization. Thank you for your consideration.

Sincerely yours,

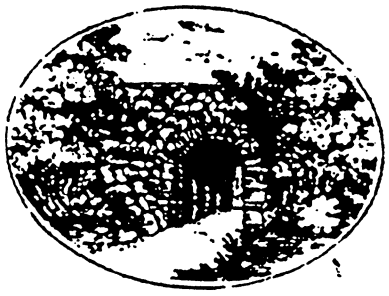
Gary T. Klencheski

Gary T. Klencheski



Letter 110
Fitcorp
Gary T. Klencheski, President and CEO

Code	Topic 1	Topic 2	Comment	Response
110.1	Purpose and Need	Delay	...Logan is one of the most delay prone airports in the country ...there will be an increased demand for air traffic in Greater Boston over the next decade. Runway 14/32 at Logan will help us meet this demand	Comment noted.
110.2	Regional Alternatives	Regional Airports	...we need to increase utilization at the regional airports in Worcester, New Bedford, Providence, and Manchester and also incorporate high-speed rail into our region.	Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. While greater use of the regional airports and high-speed rail will provide relief to Logan Airport, the proposed Airside Project provides clear benefits at current, as well as future, traffic levels. The benefits will only increase in the future, even as regional transportation developments act to reduce the rate of future growth at Logan Airport.



The Franklin Park Coalition

LETTER 111

April 21, 1999

Robert A. Durand, Secretary
Executive Office of Enviromental Affairs
100 Cambridge Street - Room 2000
Boston, Massachusette 02202

Attention: MEPA Office

Re: Massachusetts Enviromental Protection Act review of Massachusetts Port Authority's Enviromental Impact Statement concerning proposed construction of Runway 14/32 at Logan Airport.

Dear Secretary Durand:

I write on behalf of the Board of Directors and the membership of The Franklin Park Coalition to oppose the construction of Runway 14/32 because it would increase already excessive and noisy flights over Franklin Park and because we believe parts of Massport's EIS to be inaccurate.

The Franklin Park Coalition (Coalition), formed in 1974 in response to the deterioration of Franklin Park (the Park), is dedicated to the restoration and preservation of the Park and to safeguarding the design of Frederick Law Olmsted.

Franklin Park is the only park in the city of Boston large enough, at 500 acres, to create the illusion that one has left the city. This rural experience was the intent of Olmsted's design and the purpose of the Park.

Despite being over 6 miles from Logan Airport, flights from Runway 27 are so low and so loud as they pass directly over the Park as to disrupt entirely the peace and enjoyment intended for Park users.

These users include: birdwatchers, strollers, joggers, picnicers (it is one of the few Boston parks which allow cookouts), bicyclists, dog-walkers, golfers, neighborhood softball players, schoolchildren and visitors to The Franklin Park Zoo. All these activities are spoiled by the noise of Logan flights.

Currently, flights from Runway 27 number approximately 19,000 a year. Under Massport's proposal these flights would increase to approximately 56,000 a year.

Massport downplays the level of noise from Logan flights by averaging the decibel level of flights with the decibel levels between flights. This is tantamount to determining a speeding violation by averaging the speeds

111.1

a driver maintains at a red light with the speeds used on a highway. We believe this practice to be inaccurate, fraudulant and disingenuous.

The Coalition believes it is unreasonable that Massport's Logan operations continue to degrade the quality of life in Franklin Park as elsewhere in the Greater Boston area. For this reason we ask you to reject Massport's EIS and join us and others in requiring Massport to use regional airports, Peak Hour Pricing and other alternatives which will lower Logan's maximum flight capacity goals.

The Coalition believes that Franklin Park, where urban dwellers can retreat from urban life, is unique and a treasure to be safeguarded. It would be egregious to sacrifice this wonderful Park to the dubious demands of a short-term efficiency.

We thank you for this opportunity to comment and ask that this letter be entered into the official record of any proceedings concerning Massport's application to build Runway 14/32.

Very truly yours,

The Franklin Park Coalition
Martha Karchere, President
P.O. Box 2333
Jamaica Plain, MA 02130

cc: John DeVillars, EPA
Governor Paul Cellucci
Thomas F. Birmingham, Senate President
Thomas Finneran, Speaker of the House
Thomas Menino, Mayor of Boston
Boston City Council
Chelsea City Council
Winthrop Board of Selectman
C.A.R.E.
Justine Liff, Commisioner, Boston Parks and Recreation

Letter 111
The Franklin Park Coalition
Martha Karchere, President

Code	Topic 1	Topic 2	Comment	Response
111.1	Noise	Impacts	Massport downplays the level of noise from Logan flights by averaging the decibel level of flights with the decibel levels between flights. We believe this practice to be inaccurate, fraudulent and disingenuous.	The Supplemental DEIS/FEIR considers a variety of noise metrics in the assessment of noise impacts from the various alternatives. These are intended to shed additional insight on how the noise is likely to change from one alternative to another. It is suggested the reader also refer to Appendix E for a discussion of noise metrics.

LETTER 112

Friends of Belle Isle Marsh

April 22, 1999

~~Trudy Coxe~~ Robert Durand
Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
20th Floor
Boston MA 02202
Attn: MEPA Unit

Dear ~~Ms. Coxe~~ Mr. Durand:

The Friends of Belle Isle Marsh (FBIM) is a nonprofit organization dedicated to protecting Belle Isle, the 250-acre saltmarsh located within the communities of East Boston, Revere and Winthrop. Since its creation in 1985, Belle Isle Park and Reservation has served as an urban oasis, affording city dwellers a rare opportunity to observe and enjoy nature at close hand.

Despite the constant threat of encroachment by Logan Airport, the MBTA, and the numerous commercial, marine and industrial operations that surround it, Belle Isle has managed to survive as a functioning saltmarsh and habitat for wildlife not usually found in such close proximity to urban neighborhoods.

Therefore, our special perspective is not only that we must protect the many species of birds, mammals and fish that live in Belle Isle Marsh, but that we must also ensure its peaceful use and enjoyment by human beings, as well.

It is arguable that the current levels of noise and air pollution caused by operations at Logan Airport already make a negative impact on the use and enjoyment of the marsh resources; but to argue that point is not our brief, at present. Addressing the plan at issue, as described in Massport's Draft Environmental Impact Statement/Report, the Friends find that this report is seriously deficient in its treatment of impacts under Section 4(f) of the Department of Transportation Act of 1966, as amended.

Our specific objections are as follows:

(1) On page ES 30-31, under the subhead Section 4(f) Determination, Massport states:

> Indirect impacts to Section 4(f) resources from implementation of the Preferred Alternative [1A]...were also considered...According to the legislation which established the Boston Harbor Islands Recreation Area, the extension of noise contours over Boston Harbor associated with unidirectional runway 14/32 would not be considered to constitute a use, or have a significant effect on the reccreation area...The proposed airside improvements at Logan Airport will not incorporate land from a section 4(f) resource, nor with soundproofing mitigation, affect the normal activity or aesthetic value of a public park, refuge, or historic site.

Despite the fact that Belle Isle Park and Reservation is the largest public parkland bordering Logan Airport, by definition clearly falling within the guidelines of Section 4(f), and that more of its acreage is directly under aircraft landing approaches than the Harbor Islands Recreation Area, Massport completely excludes Belle Isle from the discussion. On what grounds does Massport then conclude that the proposed airside improvements will not, "...with soundproofing mitigation, affect the normal activity or aesthetic value" of Belle Isle Park and Reservation? What method could, or would, Massport propose that would effectively soundproof a 150-acre park 200 feet below jet aircraft on a landing approach? The data to support these statements is not fully disclosed in this EIR (see no. 3, below.) 112.1

(2) See also Chapter 5 of the EIR, page 5-2, in which FAA requirements are discussed. Massport states that "there are several categories of resource that would not receive impacts, or would receive insignificant impacts" because "there are no parklands...on the airfield site." This does not constitute a full disclosure nor a thorough discussion of all the possible negative impacts of the proposed airside improvements. The existence of Belle Isle Park as a contiguous public park and nature reserve is not even mentioned (let alone the many other public parks and recreation areas nearby), and the data to support such conclusions is not included in this report or its appendices. 112.2

(3) None of the many noise contour maps included in this report specifically addresses the noise effects of the proposed Alternative 1A on Section 4(f) resources. The existing noise contour maps in the EIR are not easily usable in this regard, since they do not clearly show the location of Section 4(f) resources, including Belle Isle Marsh. However, it appears that all or most of Belle Isle Marsh, and Belle Isle Park within Belle Isle Marsh, may fall at least within the 65 DNL noise contour, and much of it may fall within the 70-75 DNL noise contour, under every scenario considered, both in 2010 and the 1993 baseline. Massport should specifically address this question, preferably by using actual monitoring data rather than computer modeling, and by presenting this data in legible tables or maps. 112.3

(4) Again, Massport focuses on the Harbor Islands Recreation Area, to the exclusion of Belle Isle Marsh, when it discusses Environmental Consequences in Chapter 6. The FAA's National Environmental Policy Act regulations require any proposed airport projects to demonstrate "land use compatibility." Based only on the fact that the legislation establishing the Boston Harbor Islands Recreation Area states that Logan Airport "shall not be deemed to have a significant effect on natural, scenic, and recreation assets...", Massport can conclude that the proposed improvements are not incompatible with "recreation assets" only by excluding Belle Isle Park and Reservation from this discussion.

The Reservation, unlike the Harbor Islands Area, was established by The Commonwealth and is not governed by the restrictive language of the federal statute. Thus, Massport is not absolved from its obligation to consider the effects of the proposed airside improvements on Belle Isle Marsh under FAA environmental criteria. 112.4

(5) Finally, as part of the Section 4(f) determination, the EIR has identified a state-listed endangered species, the upland sandpiper, nesting in the area of the proposed Centerfield Taxiway (see Chapter 6, sections 6.4.4, 6.4.5.) Massport proposes a mitigation that will include habitat enhancement both onsite and offsite to ensure that there is a "net benefit" to the upland sandpiper population. However, by way of documentation, Massport offers (in Technical Appendix N) only a letter from the Massachusetts Division of Fisheries and Wildlife in response to Massport's initial inquiries. This is very far from being a fully disclosed mitigation plan. Has Massport contacted the Defense Department and reached agreement on the use of Camp Edwards as a mitigation site? Is there provision for ongoing monitoring of the upland sandpiper population, in order to measure the effectiveness of the mitigation? These are some of the elements of a well-thought out mitigation plan that should have been addressed in this EIR. 112.5

In addition to the points we have listed above, there are many other areas in which this EIR is deficient; however, the Friends feel that the strongest objection lies not in what Massport has included in this report but in what it has left out.

It defies both reason and logic for Massport to assert that a 50 percent increase in air operations at Logan over the next 10 years will have no significant impact on the natural resources surrounding the airport. The only way for Massport to sustain this position is to leave out of the EIR any meaningful data that would allow us to measure changes in noise, air and water pollution levels in Belle Isle Marsh. We urge MEPA to find this draft EIR unacceptable, and we thank you for your careful consideration of these comments.

Sincerely,

Gail Miller, Chairperson, Conservation Committee
Elizabeth Regan, Vice President
FRIENDS OF BELLE ISLE MARSH

Letter 112
Friends of Belle Island Marsh
Gail Miller, Chairperson
Conservation Committee

Code	Topic 1	Topic 2	Comment	Response
112.1	Noise	Sound Insulation	On what grounds does Massport then conclude that the proposed airside improvements will not "...with soundproofing mitigation, affect the normal activity or aesthetic value" of Belle Isle Park and Reservation?	The noise levels in the vicinity of Belle Island Park and Reservation are lower with the Preferred Alternative than with the No-Action Alternative. The difference can be seen by comparing the values of the Day-Night Sound Level (DNL) at Monitor No. 8 (Morton and Amelia in Winthrop) and Monitor No. 16 (Bradstreet and Sales in Revere) which bracket the Belle Island Marsh area. With the 29M Low Fleet scenario, the DNL at Monitor No. 8 decreases by 0.1 dB and at Monitor No. 16 by 0.4 dB. With the 37.5M Low Fleet scenario, the DNL at Monitor No. 8 decreases by 1.1 dB and at Monitor No. 16 by 1.4 dB.
112.2	Open Space/ Parkland	Impacts	..."there are no parklands...on the airfield site." The existence of Belle Isle Park as a contiguous public park and nature reserve is not even mentioned....	There are no parklands on the airfield site, as depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR. In addition, Belle Isle Park, while within the existing No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
112.3	Noise	Impacts	None of the many noise contour maps included in this report specifically addresses the noise effects of the proposed Alternative 1A on Section 4(f) resources...it appears that all or most of Belle Isle Marsh...may fall at least within the 65 DNL noise contour... Massport should specifically address this question, preferably by using actual monitoring data rather than computer modeling, and by presenting this data in legible tables or maps.	Figure 5-19 in the *1997 Massport GEIR Update* shows that the 1996 and 1997 DNL 65 dB contours include about one-half of the marsh area. These two contours appear to occupy about the same area as does the 1993 reference contour in Figures 6.2-9 through 6.2-12 of the Supplemental DEIS/FEIR which are over less clear maps. The contours for all the alternatives for 1999 and 2010 appear to be inside the 1993 contour in the Belle Island Marsh area. Therefore, the noise exposure for the Belle Island Marsh area is expected to continue to decrease in the future. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR.
112.4	Open Space/ Parkland	Impacts	The Reservation unlike the Harbor Islands Area, was established by The Commonwealth and is not governed by the restrictive language of the federal statute. Thus, Massport is not absolved from its obligation to consider the effects of the proposed airside improvements on Belle Isle Marsh under FAA environmental criteria.	Refer to response to Comment 112.2.
112.5	Ecosystems	Rare Species	...upland sandpiper population. Has Massport contacted the Defense Department and reached agreement on the use of Camp Edwards as a mitigation site? Is there provision for ongoing monitoring of the upland sandpiper population, in order to measure the effectiveness of the mitigation?	Chapter 6 of the Supplemental DEIS/FEIR documents the agreements developed between Massport and the MAANG.

LETTER 113

Greater Boston Chamber
The Hub of Business

April 23, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02205

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Re: EOEA #10458

As President and Chief Executive Officer, I appreciate the opportunity to on behalf of the Greater Boston Chamber of Commerce to present our views on Logan International Airport and other regional transportation alternatives. The Greater Boston Chamber of Commerce is a non-profit organization that represents more than 1,700 of the leading businesses in our region. The Chamber supports the vision outlined in the four volume *Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report EOEA #10458.*

113.1

We support this vision for a reason noted in the first chapter of the first section of the first volume: "The essential role that Logan plays in the regional economy is threatened by a serious problem of aircraft delay."

More broadly, we support an R^2 approach -- the construction of runway 14/32 in conjunction with the greater utilization of regional airports both inside and outside Massachusetts. Neither the runway nor the regional airports alone will serve all of our transportation needs. In conjunction with one another, however, both the runway and the regional airports can make our transportation system more efficient and improve the quality of life for those who live both near and far from major transportation nodes.

Logan's Importance

Annually, Logan has an impact of $5 billion, provides employment for more than 15,000 individuals, and supports more than one hundred airport-related businesses. Put another way, Logan contributes almost $13.7 million to the local economy every single day.

A recent survey of Chamber members reveals that two in three find convenient and frequent air service extremely important to their companies. Additionally, more than three in four expect their business usage of Logan to increase over the next five years, which means that if we do nothing today, Logan's problems will soon significantly worsen. Inaction now means that in just five years we will look back to the halcyon days of 1998, when Logan suffered from 120,000 delay hours, which the Draft EIS/EIR notes, "produced an aggregate cost of $313 million to airlines and their passengers."

The Chamber publication *Greater Boston's Leading Industries: Drivers of the Regional Economy 1999-2000* reveals that financial services, health care, high technology, knowledge creation, and tourism provide more than half of the jobs in our region. The draft EIS/EIR asserts, "Each of these sectors depends on high quality of air transportation services for their continued success." To further this success, or, in other words, to keep the Massachusetts job machine working well, we must rectify the competitive disadvantage that Logan will become in the future.

The Chamber spearheaded city-to-city trips to Atlanta in 1997 and to Seattle in 1998. These cities, as well as our other competitors around the country, are modernizing their airports. We must do the same in our great city so that, for instance, companies do not move their headquarters out of our region. Such moves would mean fewer jobs for Massachusetts.

The Need for Runway 14/32 and the Taxiway

The Federal Aviation Administration statistics listed in the Draft EIS/EIR bear out the fact that Logan should but does not serve as a competitive advantage for Boston. While ranking seventeenth in terms of passenger volume at U.S. airports, Logan suffers from the sixth worst delay problem. To help to address this discrepancy, the Greater Boston Chamber of Commerce endorses both the over-the-water runway, which would reduce delays by 25 percent annually, and the taxiway improvements, which will cut delays by some 15,000 hours per year 113.2 113.3

Economically, Boston will continue to thrive only if it has the best resources rather than the worst problems. The imminent construction of the new convention center reaffirms this axiom, but only if Logan meets two conditions. First, the airport must improve so that conventioneers will want to fly into Boston. Additionally, after having made this destination decision, conventioneers will need to have positive travel experiences by arriving in Boston and at the convention center (or their hotels) in a timely fashion.

Regional Airports and Other Transportation Alternatives

As noted, the Chamber also supports the initiative to increase the use of regional airports in Worcester, New Bedford, Providence, and Manchester. Notably, the Commonwealth is already spelling out its regional plans. 113.4

Specifically, the state seeks to have Massport operate Worcester, extend commuter rail service to T.F. Green Airport in Providence, and make roadway improvements to Manchester. Regarding Worcester, Draft EIS/EIR figure 2.4-2 shows that its airport captures only nine percent of market area passengers, the lowest share by far of any of six New England airports. This statistic suggests that an opportunity exists to grow the Worcester Airport.

On the ground, high-speed rail will bring the northeast corridor to our great city. With a stop at South Station, the Silver Line will move residents and visitors alike from Dudley to Logan with stops in the Seaport District.

But all of these transportation projects, worthy in their own right, do not relieve Logan's already heavy and soon to be heavier burden. The Draft EIS/EIR asserts that "even the diversion of up to 7 million passengers would not eliminate the need for airfield improvements designed to reduce airside delays and increase Logan's operational efficiency."

To extend the example of the convention center, business people will not fly into regional airports when Logan lies across the Harbor from the Seaport District. While some 1.2 million people per year will utilize high-speed rail, more than 35 million others will still use Logan by 2010. Finally, the Silver Line provides brilliant connections from the airport into downtown and beyond, but will only prove worthwhile if we make every effort to modernize Logan.

Conclusion

We need a modernized airport to bring people to our great city. Today, we have an airport that all too often does not work. We must do better for our own economic vitality today and for the future fiscal health of our city, state, and region.

In summary, therefore, both the modernization of Logan and the increased utilization of other transportation alternatives should lead to greater growth, better jobs, and a stronger regional economy as we confront the increasingly competitive 21st century.

Thank you for considering the views of the Greater Boston Chamber of Commerce.

Sincerely,

Paul Guzzi, President and
Chief Executive Officer

cc: Greater Boston Chamber of Commerce Logan Airport Task Force
Kevin C. Phelan, Meredith & Grew
Chair, Logan Airport Task Force
Peter J. Bassett, Bristol Property Management

George Berkowitz, Legal Sea Foods
Stanley Durlacher, Carlisle Consulting Group
Kathleen Hearn, Boston Gas Company
Michael D. Holmes, Carlin Insurance
Donald B. Holmes, KPMG Peat Marwick
Brian M. Hurley, Rackemann, Sawyer & Brewster
Michael Joyce, Deloitte & Touche
Richard Lettieri, Ropes & Gray
Paul R. McDonough, HNTB
Raymond Murphy, Palmer & Dodge
James F. O'Leary, Paul Revere Transportation Company
Robert J. Palermo, GZA
Dusty S. Rhodes, Conventures
Richard Snyder, Goldstein & Manello
Robert Soucy, Eastern Connection
Timothy L. Vaill, Boston Private Bank & Trust Company
Gail Visentin, British Airways
David Zebney, Fidelity Investments

Greater Boston Chamber of Commerce Staff
James Klocke, Director, Government Affairs & Economic Development
Mark S. Sternman, Assistant Director, Economic Development

Letter 113
Greater Boston Chamber
Paul Guzzi, President and Chief Executive Officer

Code	Topic 1	Topic 2	Comment	Response
113.1	Purpose and Need	Delay	The Chamber supports the vision outlined in the four volume *Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report EOEA #10458.* We support this vision for a reason noted in the first chapter of the first section of the first volume: "The essential role that Logan plays in the regional economy is threatened by a serious problem of aircraft delay."	Comment noted.
113.2	Alternatives	Runway 14/32	...endorses...the over-the-water runway, which would reduce delays by 25 percent annually....	Comment noted.
113.3	Alternatives	Taxiway Improvements	...[endorses] the taxiway improvements, which will cut delays by some 15,000 hours per year.	Comment noted.
113.4	Regional Transportation	Regional Airports	...supports the initiative to increase the use of regional airports in Worcester, New Bedford, Providence, and Manchester.	Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. While greater use of the regional airports and high-speed rail will provide relief to Logan Airport, the proposed Airside Project provides clear benefits at current, as well as future, traffic levels. The benefits will only increase in the future, even as regional transportation developments act to reduce the rate of future growth at Logan Airport.

LETTER 114

Dear Chamber Member:

The Greater Boston Chamber of Commerce supports a series of transportation initiatives, notably the Logan Modernization project (including runway 14/32) and a greater emphasis on regional alternatives (such as high speed rail and an increased utilization of Worcester, Providence, and Manchester airports). We need your help to publicize business perspectives on these vital issues, particularly with respect to Logan. Our future economic competitiveness hinges on Logan's modernization. The five leading industries that account for more than half of the jobs in our region depend on a Logan that works well.

Greater Boston Chamber
The Hub of Business

Actions

- The public comment period on the environmental permitting will run until April 23. Using the talking points below, please send letters (and blind copy me) on Logan by that date to both:

  Secretary of Environmental Affairs
  Attention MEPA Office
  Mr. Arthur Pugsley - EOEA No. 10458
  100 Cambridge Street
  20th Floor
  Boston, MA 02205

  John C. Silva
  Manager, Environmental Programs
  Airports Division, ANE-600
  New England Region
  12 New England Executive Park
  Burlington, MA 01803

- Please consider testifying at one or both of the joint federal/state hearings to comment on Logan that will take place on April 7 and April 8. If you can testify or would like to provide more assistance with this effort, please call Mark Stemman at 617/557-7345 for more information about how these hearings work.

Talking Points for Your Comments *Please incorporate specifics on how Logan impacts your organization.*

- **Logan means jobs.** Annually, Logan has an economic impact of $5 billion, provides employment for more than 15,000 individuals, and supports more than one hundred airport-related businesses. Put another way, Logan contributes almost $13.7 million to the local economy every single day.
- **Logan's delay problems are bad and getting worse.** While ranking eleventh in terms of operations of U.S. airports, Logan suffers from the sixth worst delay problem. In 1998, Logan suffered from 120,000 delay hours at a cost of $319 million.
- **Regional transportation measures do not provide enough relief for the delay problem.** We endorse the initiative to increase the use of regional airports in Worcester, New Bedford, Providence, and Manchester. We support high-speed rail to bring the northeast corridor to our great state. But these measures will not handle all of the increased demand for air traffic in Greater Boston by 2010.

We have an airport that all too often does not work. We must do better for our own economic vitality today and for the future fiscal health of our state. The construction of runway 14/32 should lead to greater growth, better jobs, and a competitive regional economy as we continue to face increased competition in the 21st century. We look forward to working with you on this vital issue.

Sincerely,

Paul Guzzi

Paul Guzzi, President and
Chief Executive Officer

STATEMENT OF PAUL GUZZI
April 7, 1999

Good evening. For the record, my name is Paul Guzzi. I serve as President and Chief Executive Officer of the Greater Boston Chamber of Commerce, a non-profit organization that represents more than 1,700 of the leading businesses in our region.

Thank you for allowing me to share a few thoughts on Logan International Airport and other regional airports. I want to commend the federal and state governments for holding this joint public hearing.

First, whether and how we can modernize Logan will determine the future economic well being of our region. Annually, Logan has an impact of $5 billion, provides employment for more than 15,000 individuals, and supports more than one hundred airport-related businesses. Put another way, Logan contributes almost $13.7 million to the local economy every single day.

The Chamber, the Commonwealth, and the federal government all try to grow the job-creating segments of our economy. In this region, the Chamber has characterized these economic engines -- financial services, health care, high technology, knowledge creation, and tourism -- as the five leading industries. These industries provide more than half of the jobs in our region. To increase jobs, we must rectify the competitive disadvantage that Logan has become today and will increasingly become in the future.

Second, worsening delay problems at Logan will dramatically impact Boston businesses. While ranking seventeenth in passenger volume, Logan suffers from the sixth worst delay problem in the nation. In 1998, Logan suffered from 120,000 delay hours at a cost to us all of more than $300 million per year.

A recent survey of Chamber members reveals that three in four expect their business usage of Logan to increase over the next five years, which means that inaction today will lead to Logan's problems significantly worsening in the future. The Chamber survey also shows that more than fifty percent experience more delays at Logan than at other airports, whereas only 7.4 percent faced fewer delays in Boston.

Third, we support other regional transportation projects to take some of the burden off Logan. We endorse Logan modernization because even the realization of these projects will not provide sufficient relief for the delay problem. Specifically, the Chamber endorses both the over-the-water runway and the initiative to increase the use of regional airports in Worcester, New Bedford, Providence, and Manchester. As a forthcoming Chamber white paper will demonstrate, we also support high-speed rail to bring the northeast corridor to our great city. 114.1 114.2 114.3

These worthy transportation projects do not relieve Logan's already heavy and soon to be heavier burden. While some 1.2 million people per year will utilize high-speed rail, more than 35 million others will still use Logan by 2010. We need a modernized airport to bring people to our great city.

We have an airport that all too often does not work. We must do better for our own economic vitality today and for the future fiscal health of our city, state, and region. Runway 14/32 will lead to fewer delays, greater growth, better jobs, and a more competitive region as we enter into the increasingly global economy of the 21st century. 114.4

Letter 114
Greater Boston Chamber
Paul Guzzi, President and Chief Executive Officer

Code	Topic 1	Topic 2	Comment	Response
114.1	Regional Transportation	Regional Airports	...we support other regional transportation projects to take some of the burden off Logan. ...to increase the use of regional airports...	Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR.
114.2	Alternatives	Runway 14/32	...endorses...the over-the-water runway....	Comment noted.
114.3	Regional Transportation	Passenger Rail	...support high-speed rail to bring the northeast corridor to our great city.	Comment noted.
114.4	Purpose and Need	Delay	We need a modernized airport to bring people to our great city. Runway 14/32 will lead to fewer delays, greater growth, better jobs, and a more competitive region as we enter into the increasingly global economy of the 21st century.	Comment noted.

LETTER 115

GREATER GARDNER CHAMBER OF COMMERCE

1898 • 1998
A CENTURY OF SERVICE

March 29, 1999

Mr. Arthur Pugsley
Executive Office of Environmental Affairs
MEPA Office
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Pugsley,

The Greater Gardner Chamber of Commerce, representing over 650 area businesses and over 12,000 employees throughout the Greater Gardner area, strongly supports MASSPORT's proposal for the development of a dedicated commuter runway at Logan International Airport.

Runway 1432 will be a dedicated runway for small-passenger commuter air traffic, generally 10, 20 and 30 passenger commuter planes. The development of this dedicated runway will provide for the maximization of existing longer commercial runways for larger airliners using Logan International.

Currently, Logan International Airport is ranked the 6th worse in the country for delays. The development of Runway 1432 will provide a great deal of relief and help alleviate the delay problems at Logan. The Greater Gardner Chamber of Commerce recognizes the need to alleviate the delay problems as a critical economic development initiative in the Commonwealth. 115.1

The Greater Gardner Chamber of Commerce stands strong in its commitment to continue the economic prosperity of the Commonwealth of Massachusetts and certainly Central Massachusetts, and supports the development of Runway 1432 as an important part of this economic development strategy.

If the Greater Gardner Chamber of Commerce can be of assistance in this matter, please contact me directly at (978) 632-1780, extension 11.

Sincerely,

Michael F. Ellis
President & CEO

Letter 115
Greater Gardner Chamber of Commerce
Michael F. Ellis, President and CEO

Code	Topic 1	Topic 2	Comment	Response
115.1	Purpose and Need	Delay	The development of Runway 14/32 will provide a great deal of relief and help alleviate the delay problems at Logan.	Comment noted.

FULD & COMPANY INC.
Corporate Research and Analysis

LETTER 116

April 20, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley--EOEA No. 10458
100 Cambridge Street - 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

I am a frequent flyer, and therefore a "frequently delayed flier" when I'm trying to get back home to Boston. I'm writing to register my support for the proposed runway at Logan that would serve commuter aircraft. Massport's position on the runway makes sense to me – I believe that more efficient commuter flight operations would decrease delays *and* decrease the total noise level for surrounding communities. 116.1

The alternative suggestion that commuter operations be moved to Hanscom is not sensible. Most commuter flights serve connecting passengers who come into Logan on a large jet via a full service airline. 116.2

Please note that I live in Brookline, and that I am a member of the Brookline Transportation Board.

Sincerely yours,
FULD & COMPANY INC.

Michael A. Sandman
Senior Vice President

Letter 116
Fuld & Company
Michael A. Sandman, Senior Vice President

Code	Topic 1	Topic 2	Comment	Response
116.1	Purpose and Need	Delay	I'm writing to register my support for the proposed runway at Logan that would serve commuter aircraft...I believe that more efficient commuter flight operations would decrease delays and decrease the total noise level for surrounding communities.	Comment noted.
116.2	Regional Transportation	Regional Airports	The alternative suggestion that commuter operations be moved to Hanscom is not sensible. Most commuter flights serve connecting passengers who come into Logan on a large jet via a full service airline.	Comment noted.

LETTER 117

Green WORKS
160 Second Street
Cambridge, MA 02142
617.441.0958
www.greenworksusa.com

April 22, 1999

Re: EOEA No. 10458

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202
ATTN: Arthur Pugsley, MEPA Office

Dear Secretary Durand:

I write to urge that you find the Draft EIS presented by Massport in support of its proposed Runway 14/32 "airside improvement" project unacceptable.

The environmental and human impacts of further expansion of Logan Airport—whether through construction of Runway 14/32 or some other scheme yet to emerge from Massport's drawing boards–are simply too high. Nor has Massport made its case that Logan expansion is either a necessary or a desirable solution to our region's long-term transportation needs.

As detailed in the attached documents and elsewhere as well, environmental evidence against Massport's proposal is overwhelming.

Massport's proposal fails on any number of measures: It goes against the most fundamental environmental objective of all, which is to reduce impacts from current levels that are already too high, not merely manage (or allegedly manage) their trend ever upward; it flouts basic precepts of environmental justice that impacts should be distributed fairly across racial and socio-economic lines: it has been pushed forward without sufficient process for citizen involvement or acknowledgement of their concerns; and it seems to beg or sidestep as many questions and issues as it answers.

Specifically:

Massport has been neither forthright nor forthcoming about the true implications and impacts of its present expansion plan; the DEIS, therefore, is not a full disclosure document, as required by federal guidelines. With respect to environmental and human impacts:

Massport fails to consider that 14/32 is a growth-enabler likely to promote (not reduce) increased emissions. In evaluating air quality impacts of proposed runway 14/32, the DEIS adopts an approach that makes no apparent connection between a new runway and Logan's overall ability to handle the increased passenger loads projected by Massport. It's a strange and surprising position given Massport's oft-repeated

claims that delays at Logan will become intolerable to the traveling public without 14/32.

Feedback mechanism. It is probable that construction of a new runway will in fact create new opportunities for growth in airport operations, and consequently, in aircraft and motor vehicle emissions. *Viewed this way, Massport's assertion that air quality impacts from 14/32 are beneficial or negligible is just downright wrong.* 117.1

Massport pays scant attention to Logan's role in MA's ozone problem. Eastern Massachusetts is a serious non-attainment zone for ozone, and Logan ranks as a major source of precursors like oxides of nitrogen (NOx) and hydrocarbons that are key ingredients in ozone production. Yet the DEIS explores the issue superficially, despite its own projection that Logan growth will cause significant increases in NOx emissions in coming years. Nor does the DEIS address how Logan-related increases will affect Massachusetts' ability to meet tougher ozone standards slated to take effect next year. 117.2

Ground-level ozone. Ground-level ozone is associated with respiratory impairment and illness, especially in children and people with chronic respiratory conditions. *The issue raises concern with respect to residents across eastern Massachusetts, because the ozone impacts of precursor emissions are often greatest some miles from their original source, in this case Logan airport.*

Massport gives short shrift to air pollutants known to have serious health consequences. The DEIS glosses over or ignores key areas of concern with respect to air quality, including hazardous air pollutants, fine particulates, and noise. The medical literature clearly shows that all present serious cause for concern, especially for persons living near Logan airport.

Hazardous air emissions. The DEIS fails to properly consider certain hazardous air pollutants (HAPs) like benzene and formaldehyde that are known or probable carcinogens, through its misleading use of overly-broad categories. Airports are a major source of such HAPS in urban areas. 117.3

Fine particulates. Massport's own projections show significant increases in emissions of particulates with diameters less than 10 microns. That is undesirable in and of itself, but worse, the DEIS fails to adequately treat the special concerns associated with particulates of less than 2.5 microns. An increasing body of literature documents the adverse health effects associated with particulate air pollution, including symptoms of respiratory disease such as shortness of breath, cough, and asthma attacks. *Of special concern is the possibility that air quality levels in neighborhoods nearest Logan may be unacceptable already with respect to fine particles.* 117.4

Noise. The DEIS and Massport's treatment of noise as largely a nuisance factor to be dealt with only within the confines of narrowly-drawn and ill-defined contours is unacceptable. In fact, the scientific literature shows that noise can be a major health risk. *And, as the testimonials in this report and citizen comments at numerous hearings and meetings make clear, Massport's presumption that soundproofing is a satisfactory "answer" to noise means that whole neighborhoods must live hermetically-sealed lives, in which residents are denied use or enjoyment of their own outdoor property, and are left even unable to open their windows* 117.5

Massport understates or omits significant emissions, including motor vehicle traffic. The DEIS omits certain sources of emissions and appears to substantially understate others:

Motor vehicle traffic and emissions. Massport projects many millions of additional passengers using Logan in the years ahead. How will they get there, and what will be the emissions associated with growth in ground transportation to and from Logan? *The DEIS appears to sharply understate these motor vehicle emissions, by assuming—inexplicably—that motor vehicle traffic growth will lag well behind passenger growth; the direct opposite of what has actually proven true in recent years.* Also, the DEIS takes no account of emissions from motor vehicle traffic beyond Route 128 117.6

Aircraft emissions above 3,000 feet. The DEIS analysis does not include aircraft emissions at altitudes of above 3,000'. 117.7

There are some broader, more philosophical points, too, that provide equally compelling evidence against the DEIS and Massport's proposal. Massport appears to have deliberately framed this DEIS and its public arguments in support of a new runway as narrowly as possible, as if this were purely an exercise in airfield design, undertaken in a vacuum, or perhaps some remote desert.

In reality, of course, Logan sits at the center of one of nation's most densely populated regions. *In that context, Massport must be expected to show the same concern for the needs of, and attention to the impacts on, its human neighbors on the ground as it devotes to the passengers on its runways or the aircraft in the sky.*

Yet:

Massport's proposal flouts the tenets of environmental justice, Massport's proposal clearly flouts President Clinton's Executive Order No. 12898, making environmental justice a key criterion. Massport's proposal would further burden racially and income-diverse communities like East Boston, Roxbury, and Chelsea—communities that already face disproportionate and unfair environmental impacts from a number of sources (including, significantly, Logan). 117.8

Massport has ignored residents' concerns about potential existing impacts. Many residents of communities around Logan like East Boston, Chelsea, Winthrop, and others have offered serious and thoughtful concerns about potential health effects associated with existing levels of Logan usage. The DEIS fails to address these issues—yet sadly, similar concerns elsewhere have too often proved well-founded. A 1993 EPA study of Chicago's Midway airport, for example, found that certain emissions associated with aircraft operations at that much smaller facility contributed significantly to cancer cases in surrounding neighborhoods. *To answer residents' concerns and as a guide to transportation policy making, Massport should be required to thoroughly assess potential health effects associated with existing levels of Logan operations on Massachusetts residents.* 117.9

Massport lacks a long-term transportation plan that could de-emphasize Logan, and shift our region away from ever-increasing reliance on air travel. In preparing its DEIS, Massport was required to explore all reasonable alternatives. Instead, Massport appears to have looked seriously at only its traditionally preferred alternative: Expand Logan. And, equally, the DEIS reflects the fact that Massport has chosen to needlessly embrace the false notion that reliance on air travel must inevitably always trend upward.

Massport instead must be required to operate within the context of a true long-term transportation plan for our region, one that: (1) makes maximum best use of other airports in our region like T.F. Green and Manchester; but (2) shifts us away from ever-increasing reliance on air travel, and toward transportation alternatives like high-speed rail that have far lower environmental and human impacts. 117.10 117.11

In closing, one final observation: As someone with over two decades experience as an environmental and community organizer, I have never seen the diverse people of Boston and surrounding cities and towns so united as in their shared opposition to 14/32. As one East Boston resident says within the testimonials attached to these comments: "Enough is just enough."

To me, comments like those, made over and over by so many citizens at meetings and hearings these past few months, speak more eloquently and convincingly than anything else to all that is wrong with Massport's proposal to expand Logan.

Sincerely,

JOHN T. O'CONNOR

Green WORKS
160 Second Street
Cambridge, MA 02142
617.441.0958
www.greenworksusa.com

EXPANDING IMPACTS:

Environmental and human costs of Logan expansion.

John T. O'Connor
President, Greenworks, Inc.
Cambridge, MA

Green WORKS
160 Second Street
Cambridge, MA 02142
617.441.0958
www.greenworksusa.com

Dear Peter Blute
Here's your copy
sincerely
John O'Connor
Mary + Ellen Welch

April 22, 1999

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Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202
ATTN: Arthur Pugsley, MEPA Office

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claims that delays at Logan will become intolerable to the traveling public without 14/32.

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Noise. The DEIS and Massport's treatment of noise as largely a nuisance factor to be dealt with only within the confines of narrowly-drawn and ill-defined contours is unacceptable. In fact, the scientific literature shows that noise can be a major health risk. *And, as the testimonials in this report and citizen comments at numerous hearings and meetings make clear, Massport's presumption that soundproofing is a satisfactory "answer" to noise means that whole neighborhoods must live hermetically-sealed lives, in which residents are denied use or enjoyment of their own outdoor property, and are left even unable to open their windows*

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Sincerely,

JOHN T. O'CONNOR

OPEN CITIZEN LETTER
TO
GOVERNOR PAUL CELLUCCI &
MASSPORT CHAIRMAN PETER BLUTE

Dear Sirs:

We the citizens of Massachusetts impacted by the proposed changes to **Logan International Airport** demand the following of Massport:

1. A binding and legal agreement which halts any existing plans to expand **Logan Airport** in any way, shape or form. Including but not limited to the completion of the proposed Runway 14/32 and the centerfield taxiway. Instead, we demand a regional transportation plan that addresses New England's long-term transportation needs with less reliance on **Logan.** 117.12 117.13

2. An outside evaluation of **Logan Airport** which assesses performance and makes recommendations for improvements within the existing infrastructure. 117.14

3. Establishment of a citizen's advisory board to serve as a liaison between **Massport** and the effected communities. This board will develop a comprehensive and inclusionary process of mitigation to eliminate the arbitrary, ill-devised process that currently exists. 117.15

4. Appropriation of funds to conduct an Environmental Impact Study which includes an in-depth, long-term study of **Logan Airport's** impact on all surrounding cities and towns within heavily travelled flight paths. 117.16

5. Creation of a Good Neighbor Agreement between residents and **Massport** that requires **Massport** to provide a forum for good faith negotiations. 117.17

Authors and contributors:

John T. O'Connor
President, Greenworks, Inc.

Henry S. Cole, Ph.D.
Henry S. Cole and Associates

Marco Kaltofen, P.E.
Boston Chemical Data Corp.

Peter Alachi, M.S., Biology

Veronica Eady

Testimonials:

Dovi Abbey
Davida Andelman
Tom Briand
Pauline Collins
Gregory Curci
Barbara & Art Flavin
The Horn family
Lolly Lincoln
Robert Massa
Martha Merson
Ian McGlocklin
Brian Monk
Ignacio Ochoa
David Prusky
Richard Salini
Madeleine Steczyski
Rebecca Swope
Mary Thawley
Laurie Webster
Alan Wright

Special thanks to Peter Alachi, MS, and Veronica Eady of Alternatives for Community & Environment (ACE) for their kind permission to include their work here; and to the dozens of Logan neighbors and Massachusetts citizens who helped make this report possible.

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TAB 2: "The Impact of Logan Airport Expansion on Air Quality and Public Health" (Cole)

TAB 3: "Citizen Testimonials Explaining Logan's Impact on Their Lives and Families." (Various)

TAB 4: Appendix A: "Airside Improvement Project; A Draft Environmental Impact Analysis." (Alachi)

TAB 5: Appendix B: "Environmental Justice Concerns" (Eady)

TAB 6: Appendix C: "Summary of Emissions in Airport Expansion Area" (Kaltofen)

Green WORKS
160 Second Street
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April 22, 1999

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Sincerely,

John O'Connor

JOHN T. O'CONNOR

Henry S. Cole & Associates, Inc.
Science and Solutions for the Environment

Suite 800, 2300 M Street, NW, Washington, DC, 20037,
Phone: (202) 973-2827 Fax: (202) 973-2887

Henry S. Cole, Ph. D., President

THE IMPACT OF LOGAN AIRPORT EXPANSION ON AIR QUALITY AND PUBLIC HEALTH

By

Henry S. Cole, Ph. D.
Henry S. Cole & Associates, Inc.
Washington, D.C.

EXECUTIVE SUMMARY

Introduction. Massport proposes to build a new runway for Logan Airport. Its Environmental Impact Statement (EIS) argues that the new runway is needed to reduce delay. However, the EIS also projects a major expansion period for the next decade. Massport forecasts that passenger load will increase from an estimated 29 million in 1999 to from 37.5 million to 45 million passengers by the year 2010. This represents a growth rate from 29 to 55 percent. *Surely, the runway is an important first step to achieving Massport's projections.*

This report finds that the EIS (1) fails to acknowledge the runway's impact on growth and (2) neglects to fully examine the consequences of its projected expansion - consequences that will effect the surrounding communities and the region as a whole. This report focuses on the impacts of Logan expansion on air quality; however, the full set of consequences also include congestion of roadways, noise levels, water quality, and the very livability of greater-Boston area communities.

Logan Airport even at its current size has a major impact on the region.

- Airport has been ranked as the Nation's 12th largest airport with a current annual use rate of approximately 29 million passengers in 1999.

- Logan handles about two-thirds of the passenger load in New England. This airport is also the largest generator of motor vehicle traffic in New England. Traffic jams on the roadways leading to Logan are already legendary.

- The air and auto traffic associated with Logan Airport imposes a variety of environmental stress factors -- including noise and air pollution -- on people living in one of the most densely populated regions of Massachusetts and the nation. (See Fig. 1).

- Logan airport is a major source of air pollutant emissions. VOC's and NOx are particularly important because they contribute to the region's serious non-attainment status for ground-level ozone. (See Section 4). For example, Logan Airport emits more than 7 tons per day of oxides of nitrogen (NOx) which is approximately 7 percent of the anthropogenic NOx emissions in Suffolk County.

The impact of expansion on air quality. Major findings are as follows:

- **Increased emissions of NOx and Particulates.** The Environmental Impact Statement (EIS) for Airside Improvements Planning (February 1999) forecasts that growth in Logan use over the next decade will cause significant increases in emissions of oxides of nitrogen (NOx) and particulate matter (PM10). Ironically, new quieter jets have higher NOx emissions.

- **Increased NOx and its impact on Ozone.** Increased NOx is especially significant. NOx is an essential ingredient for the formation of photochemical smog including ground-level ozone. Massachusetts has been designated by EPA as a "serious" non-attainment zone for ozone. Ozone is known to cause and aggravate respiratory disease in humans. Children are especially vulnerable. Ozone is a regional problem -- Logan NOx emissions affect smog tens of miles from the source. The EIS fails to address the NOx / ozone question in a meaningful manner, for example, Massport has not included emissions caps in its preferred alternative. 117.18

- **Additional impacts of increased NOx.** Increased NOx emissions has additional consequences. It contributes to acid rain which has damaged both waterways and forests in the northeast. Scientists have also determined that NOx emissions to air are a major source of nitrate deposition to coastal waters and estuaries; this results in over-fertilization, oxygen depletion, and severe damage to estuarine ecosystems and fisheries.

- **Hazardous Air Pollutants**. Airports a significant source of hazardous air pollutants (HAPs). An EPA study of Chicago's Midway (much smaller than Logan), found that HAP emissions from aircraft contributes an estimated 10.5 percent of the cancer cases related to air pollution in the 16 square mile area surrounding the airport. Motor vehicle traffic (much of which is attributable to the airport) was the dominant source of cancer risk. A number of these "HAP's" (e.g., benzene, formaldehyde) are known or probable human carcinogens -- they can cause cancer. The EIS fails to assess or project emissions trends for this particularly dangerous component of VOC and fine particulate emissions. 117.19

- **Fine Particulates.** The report presents evidence suggesting that neighborhoods located near Logan Airport may be experiencing dangerous levels of PM2.5, the smallest class of particulates and those having the most devastating impact on public health. Since the EIS projects increased particulate emissions, PM2.5 emissions and ambient levels in the surrounding region can be expected to rise with continued expansion of the airport.

- **Motor Vehicles and Emissions**. Projections of motor vehicle emissions used in the EIS incorporate Massport predictions of future growth in the volume of traffic approaching and using the airport. Massport projects an additional 12,000 cars per week-day over the next decade to accommodate passenger growth. However, Massport data showing the relationship between passenger use and traffic volume over the past five years suggests that Massport is "low balling" the growth in traffic volume needed to accommodate its forecasts. This report shows that a better estimate may be on the order of 30,000 to 50,000 additional vehicles. Using these figures would lead to higher future CO, VOC, NOx emissions than those projected in the EIS. 117.20

- The "emissions gap" problem is heightened by the EIS's neglect of emissions outside of I-95 /128 and aircraft emissions at altitudes greater than 3000 feet. 117.21

Summary. In summary, this report finds that Massport's EIS fails to acknowledge that a new runway will act to stimulate new growth and allow for expansion and is deficient in its assessment of the environmental impacts of Logan expansion. 117.22

In simple terms, neither the EIS, the runway proposal, nor Massport's vision for Logan Airport future is respectful of real world limits -- limits that involve the people who live in area and that involve the environment. Massachusetts has been designated as a "serious" non-attainment zone for ozone. The airport already imposes a burden of fine particulates and hazardous air emissions on the surrounding area, the most densely populated in New England. Massport has failed to demonstrate that increased emissions associated with its projected expansion will not adversely affect public health and the environment. The evidence presented above indicates that the growth projection embraced by Massport will have a serious impact on community health.

Recommendations.

- The State of Massachusetts should reject the current EIS as deficient. Massport and state authorities should replace the current Logan expansion plan with a regional transportation based on energy-efficient inter-city rail and improvement of the many other New England airports. 117.23

- The state should initiate a true stakeholder involvement process to initiate the planning process for a regional transportation plan. Representatives of airport communities, environmentalists, rail and mass transit representatives and their experts should be involved in the process. 117.24

- Massachusetts Department of Environmental Protection should ensure that EIS fully address significant environmental problems. 117.25

1.0 Introduction. Logan Airport has been ranked as the Nation's 12th largest airport with a current annual use rate of approximately 29 million passengers.[1] Logan is also the largest generator of motor vehicle traffic in New England.[2] The air and auto traffic associated with Logan Airport imposes a variety of environmental stress factors -- including noise and air pollution -- on people living in one of the most densely populated regions of Massachusetts and the Nation. (See Fig. 1).

This report focuses on the air pollution impacts of increased use of Logan Airport. The Environmental Impact Statement (EIS) for Airside Improvements Planning (February 1999) forecasts that growth in Logan use over the next decade will cause emissions of oxides of nitrogen (NOx) and particulate matter (PM10) to increase substantially. According to the EIS, emissions of volatile organic compounds (VOC's) and carbon monoxide (CO) will increase if the higher growth rate (to 45 million passengers in the year 2010) are realized.

The EIS clearly shows that the greater the expansion, the more emissions. Emissions will increase because the shear increase in aircraft operations and vehicular traffic projected will overwhelm whatever temporary benefits may result from a new runway and other improvements. Moreover, many of the air pollution impacts associated with increased use will occur in some of the most densely populated regions in the state. (See Fig. 1).

Subsequent sections of this report demonstrate that the EIS for Logan Airside Improvements fails to (a) fully acknowledge the consequences of its "airside improvement plan" on air quality and (b) to adequately examine the health and environmentally-related impacts of the increased emissions that are predicted in the document.

2.0 New Runway - Impact on Emissions. One of the most glaring deficiencies in the EIS is that it fails to consider the impact that the a new runway will have on growth-related emission trends. The EIS takes the position that the new runway and other "airside improvements" are simply modifications that improve efficiency. Massport makes the case that at some given level of passenger use (e.g., 29 million), the new runway will reduce aircraft congestion, idling and planes in holding patterns, improvements that should work to mitigate emissions.

However, Massport's analysis fails to consider that adding a new runway is likely to create a feedback mechanism that will in turn affect the airport's rate of growth. Although, the new runway may initially improve efficiency, it will also provide an opportunity for expanded use.[3] The new runway, is analogous to the highway dilemma. Traffic planners add lanes to relieve congestion, yet fail to predict that they ultimately lead to more bigger traffic jams in the future. 117.26

The EIS report, by failing to use an iterative growth model, presents a flawed assessment of the true impact of the airside improvements over time. Without considering feedback to growth, Massport cannot back its assertion that "the overall impacts associated with the

Airside Project Alternatives are beneficial or will remain imperceptible" from an air quality standpoint.[4]

In fact, common sense dictates that the 29% to 55 % increase in passenger use forecast by Massport for the next decade would not be feasible without the new runway. The new runway is a capacity enhancement that will promote rather than manage growth. And as Section 3.3 shows, expansion has a strong impact on the growth of emissions.

3.0 Current and Projected Emissions for Logan Airport.

3.1 Current emissions. Table 1 is a summary of 1997 air emissions as estimated in the Boston-Logan International Airport, 1997 Annual Update.[5] This table shows estimated emission rates for carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compounds broken down by sources associated with the airport. (Particulate matter was not included in the GEIR update.)

This table shows that aircraft emissions are the largest single sources of emissions at the airport and contribute more than 80 % of NOx emissions, more than 61 % of VOC emissions, and about 42% of the CO emissions associated with the airport.

3.1.1 Logan Airport as a major emitter in the greater-Boston Area. Logan airport is a major source of air pollutant emissions. VOC's and NOx are particularly important because they contribute to the region's serious non-attainment status for ground-level ozone. (See Section 4).

Logan Airport emits more than 7 tons per day of NOx which is approximately 7 percent of the anthropogenic NOx emissions in Suffolk County.[6]

Logan emits more than 3 tons per day of VOC's which represents approximately 4 percent of the anthropogenic VOC emissions from Suffolk County.[7]

Logan Airport has NOx emissions comparable to emissions from the state's largest industrial and power generating plants.[8]

3.2 Certain emissions not included in EIS inventory. A problem with the EIS analysis is that certain emissions associated with the use of Logan Airport are not considered in the assessment of environmental impact. Thus, the EIS understates the full impact of an expanding Logan Airport.

Specifically, the analysis does not include aircraft emissions that occur at altitudes greater than 3000 feet. As shown in Sections 4 - 5 emissions of NOx and other pollutants aloft can have a number of adverse environmental impacts.[9] These impacts would be diminished with a shift to energy efficient passenger trains. 117.27

- The emission inventory does not include emissions from motor vehicles driving to and from Logan Airport that lie beyond I-95/Route 128.

- The EIS (Feb. 1999) does not include in its emissions inventory or projections certain critical pollutants; these include specific hazardous air pollutants (HAP's) and PM2.5 (the smallest particulates with diameters less than 2.5 microns). As shown in Sections - 6 and 7, these types of air emissions, omitted in the Airside Improvement EIS, are especially significant from a health standpoint.

3.3 Logan Expansion / Emission Trends.

3.3.1 Use Projections. Massport's EIS projects that use of Logan Airport will increase dramatically in the coming decade. Massport envisions two expansion scenarios for the airport:

- Less expansion: passenger use grows from 29 million in 1999 to 37.5 million in 2010.

- More expansion: passenger use grows to 45 million in 2010.

The projected increase in passengers over the next decade is shown on Figure 2.

3.3.2 Emissions Trends. Figures 3-a through 3-d show Massport (EIS) projections of Logan emissions assuming that the airside improvements including the construction of a new runway take place in 1999.[10]

- The Massport projections clearly show a significant increase in emissions for all of the pollutants (NOx, VOC's, CO and PM10) from 1999 to 2010 with Massport's upper projection of *45 million passengers*. The projected increase for NOx is 46 %.

- For the *37.5 million passenger* 2010 projection, NOx (26% increase) and PM10 (6 % increase). For CO and VOC projected emissions decline slightly.

The projected increase in NOx emissions is associated with projected growth in aircraft operations (and ground-level sources) at Logan and to a shift towards new engines with higher NOx emissions.

3.3.3 New Aircraft Engines: Less noise, more NOx. One of the principal measures being touted as a way to reduce noise will ironically work to increase NOx emissions. As Massport acknowledges (EIS 6-73), increased NOx emissions are "an *unavoidable consequence* of phasing in quieter, more fuel efficient engines." While it states that manufacturers are researching ways to reduce NOx emissions, Massport isn't making any promises.

4.0 The Airport, Smog and Ozone. One of the most glaring deficiencies of the EIS is its failure to address the potential impact of emission trends, the associated airport expansion will affect the region's serious ground-level ozone problem.

4.1 Background on photochemical smog and ozone. Box 1 describes how emissions of hydrocarbons and NOx react in the presence of sunlight to form a host of secondary pollutants known collectively as "photochemical smog." The Clean Air Act regulates photochemical smog in terms of the concentration of ground-level ozone. Box 2 summarizes the health and environmental effects of ground-level ozone.

Note that ozone is a regional and not merely local problem; emissions from the airport and aircraft entering the region to use the airport will affect neighborhoods tens of miles from Logan. (See Box 1).

BOX 1. FORMATION OF PHOTOCHEMICAL SMOG / GROUND-LEVEL OZONE.

Photochemistry. Many stationary sources (e.g., factories, power plants) and mobile sources (aircraft, motor vehicles) emit hydrocarbons (e.g., fuels that volatilize) and oxides of nitrogen (NOx). These pollutants, when exposed to sunlight, undergo a very complicated chemistry. The products of the chemistry include irritating gases (e.g., N02 and ozone) and fine particulates that contribute to summertime haze -- the tell-tale sign that the atmosphere is photochemically active.

- Photo-chemical smog, including ground-level ozone, is primarily a warm-season phenomena. The atmosphere reactions are hastened by sunlight and warmer temperatures.

- The distribution of smog is complicated by the fact that freshly emitted NOx can scavenge ozone and reduce its concentration in potent source regions. However, as an urban airmass moves downwind the ozone levels tend to increase -- with highest levels often occurring in suburbs, exhurbs or in rural areas tens of miles from ubran sources.

Ozone - a regional problem. The levels of ozone and other smog constituents are the cumulative product of a myriad of stationary and mobile sources. In fact, highest levels of ozone are often found tens of miles downwind of the most potent urban source regions; this occurs because the precursor pollutants continue to react and form ozone as they move downwind from concentrated source regions.

BOX 2. HEALTH AND ENVIRONMENTAL EFFECTS OF GROUND-LEVEL OZONE

Ozone acts as a powerful respiratory irritant at levels found in Massachusetts during the summer. Exposure to ozone may lead to shortness of breath, wheezing and coughing, and chest pain.

Long-term, repeated exposure to elevated levels of ozone may lead to large reduction in lung function, inflammation of lung lining and increased respiratory discomfort.

According to EPA several groups of people who are at particular risk from high ozone levels:

- people with pre-existing respiratory disease (e.g. asthma, chronic bronchitis, emphysema)
- individuals who exercise outdoors
- people who have a particular sensitivity to ozone.

Children. According to the American Lung Association, children are particularly vulnerable to elevated ozone.

- They spend more time engaged in vigorous outdoor activity and have higher breathing rates
- They have narrower airways than do adults and can experience serious obstructions.
- Air pollution including ozone, can result in more frequent respiratory infections in childhood and increased risk of reduced lung function later in life.

Source: American Lung Association, 1996, Health Effects of Outdoor Air Pollution.

Farms, Ecosystems, Materials. Ozone harms crops and natural vegetation more than any other air pollutant.* The crop loss in the U.S. from ozone has been estimated at several billion dollars.** Ozone also causes widespread damage to a variety of materials including paints, and rubber.

Sources: *US EPA, Air Quality Criteria for Ozone and other Photochemical Oxidants, Vol. 3.
**US EPA, Air Quality and Emissions Trends, 1993, p. 9.

4.2 Logan and Ozone. The EIS's paucity of analysis of the connection between Logan Airport on ozone is especially significant given that:

- Aircraft, airports, and the motor vehicle traffic they attract are major sources of hydrocarbons and oxides of nitrogen (NOx), both are essential ingredients (precursors) for the formation of photochemical smog.

- All of Massachusetts has been designated by U.S. as being non-attainment areas for ozone. More than 5.5 million people live in the Boston-Lawrence-Worster area is (Eastern Massachusetts) characterized by EPA as a "serious" non-attainment zone.[11]

- MADEP evidence shows that a larger number of areas and people are incorporated in the area in which the new more protective ozone standard (state standard) is exceeded. Thus, additional precursor reductions may be needed to fully protect public health.

- Elevated ground-level ozone concentrations cause respiratory impairment and illness -- especially in children and people with chronic respiratory conditions such as asthma and bronchitis (See Box 2).

- Massport projects a 26% to 46 % increase in Logan Airport NOx smog precursors by the year 2010. (See Section 2.0)

- The EIS contains evidence indicating that the particular class of volatile organic compounds that contribute to smog and ozone formation will increase due to airport expansion. The EIS (Tables also shows a 6% to 29 % increase in modeled concentrations for those hydrocarbons which are photochemically active (described as ozone indicator VOC's in the EIS).

The Massachusetts Department of Environmental Protection (MADEP) has raised concerns about Logan Airport's projected increases in ozone precursors given the state's region's serious non-attainment status for ozone. A MADEP environmental review stated the following

> " ...In 1995, Massachusetts capped NOx emissions at 35% of the 1990 levels from sources greater than 15 MW or 250 mmBtu/hr heat input. A comparison of Logan NOx emissions projected for 1999 indicates that Logan's NOx emissions are comparable to some to the larger sources included in the Massachusetts NOx Allowance Program. In fact, Logan would rank sixth after the largest utility units in a list of 38 applicable units." [12]

In its December 1997 Certificate on the Generic Environmental Impact Report, MADEP recommended the development of air emissions caps and/or an emissions offset program.[13]

4.3 Massport's side-steps the ozone issue. Massport's February 1999 Environmental Impact Statement says almost nothing about the impact of Logan emissions on ozone. With a single paragraph it waves away all regulatory concerns:

> "Based on the results of the emission inventories and the dispersion modeling, the following findings on the effects of the Airside Project alternatives are evident: (1) there are no predicted violations of any State and Federal standards or guidelines under any future scenarios or alternatives; and (2) the overall impacts associated with the Airside Project Alternatives are beneficial or will remain imperceptible." (p. 6-84)

The modeling technique used in the EIS does not incorporate atmospheric chemistry and makes no estimates of the impact of precursor emissions on ozone. The indirect measure used, "ozone indicator VOC's" (projected to increase in the future) is not directly comparable to the ozone standard. Thus, the EIS is deficient with regard to Logan Airport expansion on ozone concentrations; on its health impacts; or on its impact on attainment efforts. In addition, the model (see EIS p. 5-56) is limited to the immediate vicinity of the airport. In contrast, the maximum impact of precursor emissions on ozone is likely to be located many miles or tens of miles downwind from a source. That is why EPA recommends the use of urban airshed and regional models that incorporate both chemistry and transport. 117.28

The report also fails to assess how the increases in NOx projected for Logan Airport will affect the state's ability to meet the new and stricter 8-hour average standard of 0.08 ppm. The new standard, not mentioned in the EIS, will go into effect in the year 2000. Air monitoring data collected by the Massachusetts Department of Environmental Protection indicates that using the new standard places a much higher portion of the state's monitoring locations, counties and people in exceedance areas.

Massport has dismissed MADEP's recommendation for emission caps. It argues that such caps would not be enforceable "since the largest single source of air emissions, aircraft, are beyond Massport's control and most other sources such as tenant vehicles and activities are subject to only indirect influence by Massport." (Ref: Boston-Logan International Airport, 1997 Annual Update (EOEA #3247/5146), August 1998 -- Response to comment: C18.)

Although Massport has taken some steps to curtail non-aircraft emissions (e.g., a limited alternative fuel vehicle program), it has essentially embraced a future that embraces future growth that it acknowledges will result in significant increases in ozone precursors and other emissions.

5.0 The additional impacts of increased NOx emissions. Despite its projections for substantial increases in NOx emissions over the next decade, the EIS fails to address a number a critical issues associated with NOx. These are described below. 117.29

- NOx is an important precursor to acid rain. Acid rain affects both terrestrial and aquatic ecosystems, e.g., acidification of waters, reduction in fish populations, damage to forests and wildlife, and damage to soils, materials, monuments and buildings.[14]

- NOx emissions to the atmosphere are an important source of nitrate deposition to coastal waters. Nitrate deposition contributes to the over-fertilization or nitrification of bays and estuaries; this in turn contributes to algae blooms that can choke off aquatic life by limiting both light and oxygen.[15]

- NOx emissions may also form secondary particulate matter,[16] which can impact the respiratory system (see Section 6).

6.0 Particulate emissions. As stated in Section 3, all of the Massport projections show significant increases in PM10 emissions (particulates with diameters less than 10 microns) between 1999 and 2010. However, the EIS all but neglects to discuss the significance of increased particulate emissions. Particularly important are the smallest particulates, those with diameters less than 2.5 microns (PM2.5). Scientific studies over the past decade indicate that this smallest class of particles are largely responsible for the most serious health effects and for haze which restricts visibility. These fine particulates penetrate deep into the lungs and adverse effects include lung cancer, asthma attacks, chronic obstructive pulmonary disease and restricted activity due to illness.[17] PM2.5 has especially severe effects on children with asthma.[18] EPA has recognized the importance of PM2.5 by adopting new particulate standards based on this measurement.

The EIS projects that PM10 emissions will increase by as much as 29 % over the next decade. The EIS (p. 6-77) acknowledges that aircraft are the dominant source of particulate emissions, representing roughly 90 percent of the Logan total and that "emissions of particulate matter are expected to increase in future years in connection with the forecasted increase in aircraft operations at Logan." However, the EIS falls short in a number of ways:

- The EIS fails to present evidence on the particle size distribution of particles emitted from aircraft. While the PM2.5 ambient air standard is not yet being enforced, the EIS should show estimated projections for emissions of these particles since they have the most devastating impact on health.

117.30

- The EIS should also consider how this particle size distribution is modified as it moves through the urban atmosphere. Mathematical models of particle size distribution in urban air predict that the mass of particles in the range of 0.1 - 1.0 microns should be equal to the mass of particles in the 1.0 - 10 micron range.[19] If this is the case, than a major portion of mass of PM10 should be comprised of particles in the PM2.5 range. This is important because modeled and measured PM10 annual concentrations in neighborhoods close to the airport are in the 20-24 ug/m^3 although within the PM10 standard exceeds the PM2.5 standard of 15 ug/m^3. Thus, it is possible that residents of

the Logan vicinity are breathing air that is unhealthy with regard to the smallest class of particles. The EIS needs to examine this possibility.

- The EIS is also deficient in that it's discussion of particulates neglects particulates formed from NOx and other primary emissions. As noted previously, NOx emissions are also forecast to rise with increasing aircraft operations.

7.0 Hazardous air emissions. The EIS fails to consider the environmental impact of non-criteria contaminants, including Hazardous Air Pollutants (HAPs), including benzene an established human carcinogen. One cannot make an adequate assessment of the health impact of these chemicals by lumping them into a single category such as volatile organic compounds or hydrocarbons. Airports are a major source of benzene emissions in urban areas and continued expansion may lead to increased emissions of these hazardous air pollutants (the EIS shows an increase in total VOC emissions for the 45 million scenario from 1999 to 2010).

An 1993 EPA-sponsored study evaluated cancer risks attributable to all air pollution sources in southwestern Chicago. The study found that aircraft flying in and out of Midway Airport represent a substantial source of particulate matter as well as hazardous air pollutants such as benzene, 1,3-butadiene, and formaldehyde. The study found that despite Midway's small size (handling only about 10 percent of Logan's passenger volume) it emitted far greater quantities of hazardous air pollutants than industrial sources within the 16-square mile study area.[20]

- The 1993 EPA study found that 10.5 per cent of the cancer cases associated with HAPs were attributed aircraft emissions. This number does not include additional contributions associated with airport vehicles and motor vehicle traffic associated with the airport. The study found that cars, buses, and trucks in the study area (not all attributable to the airport) were the most important contributors of cancer-causing air emissions (25 percent of cancer cases associated with HAPs).

- The authors of the study state: "it is no surprise that emissions from aircraft engines may have significant impact on people living in the study area, especially to people living at receptors [locations] adjacent to the airport." [Emphasis added].

The Logan EIS presents no information on hazardous air pollutants and their potential impact on cancer rates in surrounding communities. However, Logan is a much bigger airport than Midway and may be reasonably expected to have larger hazardous air pollutant emissions. 117.31

8.0 Traffic Congestion and Air Emissions. The EIS does not sufficiently address the impact of its projected expansion rates on airport traffic. It needs to present an analysis aimed at assessing the impact of increased congestion with worst as well as best case assumptions on measures to mitigate auto traffic (public transit use, HOV lanes etc.). The shear optimism in EIS's forecast is shown in Table 4-4 of the Annual Update for 1997. 117.32

This table shows a 29 percent growth in passengers using the airport between 1999 and 2010 (assuming 37.5 million passengers in 2010). For the same period the Update shows only a 12.3 percent increase in the rate of average annual weekday traffic (AWDT) using the airport.

The problem is that Massport's projections are at odds with the historical relationships between AWDT and passenger levels. Over the past five years, the rate of growth of AWDT has been nearly twice as high as the rate of growth of passengers. The EIS fails to explain how it will manage to reverse the historical relationship. Even with a 1:1 ratio of AWDT to passenger growth, average daily traffic volume would reach nearly 130,000 cars by 2010 for the 37.5 million passengers and nearly 156,000 for the 45 million passenger scenario. Whereas Massport projects an addition of about 12,000 cars per day over the next decade, recent history suggests that the airport and roadways will have to accommodate from 30,000 to 50,000 cars or higher. This indicates that Massport's projected air emissions from motor vehicles may be significantly underestimated.

9.0 Balanced Regional Transportation Plan. The EIS preferred alternative is clearly a capacity enhancement that will help Massport achieve the growth rates that it projects as inevitable. The EIS fails to develop a regional transportation plan as a serious alternative to a new runway and continued expansion. Thus, the EIS cannot be considered to be complete. 117.33

Logan currently handles about two-thirds of the passenger enplanements in New England. The impact of this airport on the environment, public health, and quality of life is concentrated on the most densely populated area of New England. Expansion can only mean greater intrusion in the future. The EIS should develop a preferred regional transportation plan alternative that would focus on expanding the use of energy efficient inter-city rail would promote a regionally balanced spread of airport use. This plan would be specifically designed to reduce noise and pollution levels in the neighborhoods surrounding Logan Airport in the next decade.

ENDNOTES:

[1] In a 1993 NRDC survey, Logan was ranked number 12 in terms of numbers of passengers.

[2] Conservation Law Foundation, Letter to Trudy Coxe, Nov. 24, 1997.

[3] Consultants to the Community Advisory Committee (CAC), Review Comments on Draft Environmental Impact Report, DEIS/DEIR, for the Logan Airside Improvements Planning Project, Feb. 1999. According to this document: the construction of the runway may not increase peak hour capacity, but will provide controllers with the opportunity to increase throughput by using higher-capacity configurations more of the time. While the stated purpose of the new runway is to reduce weather-related delays, the new runway would also increase the all-weather capacity of the airport. Notably, Massport's has not included in its preferred alternative an option for "peak hour pricing" which acts to manage rather than to invite new capacity.

[4] EIS, Feb. 1999, p. 6-84.

[5] Boston-Logan International Airport, 1997 Annual Update (EOEA#324/5146), August 1998.

[6] Suffolk Co. NOx emissions: Massachusetts DEP, 1977, Revised base year emission inventories. Airport is the Low 29 M, scenario for 1999 in the EIS (1999).

[7] Suffolk Co. VOC emissions: Massachusetts DEP, 1977, Revised base year emission inventories. Airport is the Low 29 M, scenario for 1999 in the EIS (1999).

[8] Lipman, S. G., Department of Environmental Protection's consolidated comments on Logan Airport, Nov. 24, 1997.

[9] The NOx emission estimates contained in GEIR and EIS tend to underestimate the full extent of NOx emissions because the conventional practices is to include only those aircraft emissions which are emitted at ground-level and in the first 3,000 feet of take-offs and landings. However, NOx emitted at higher levels can contribute to a number of environmental problems including regional and long-range transport associated with multi-day ozone episodes, acid rain, and nitrate deposition.

[10] The EIS projects two emissions scenarios for each passenger growth projection -- "high" and "low." The low projection assumes more jets and larger aircraft, but has a lower number of flight operation, relative to the "high" operations scenarios. In the following section we used the "high" operations scenario to track emissions levels.

[11] Ozone, Carbon Monoxide, Particulate Matter, Sulfur Dioxide, Lead Areas Designated Nonattainment, US. EPA, Office of Air Quality Planning and Standards, August 4, 1998.

[12] Lipman, S. G., Department of Environmental Protection's consolidated comments on Logan Airport, Nov. 24, 1997.

[13] Coxe, Trudy, Certificate of the Secretary of Environmental Affairs, on the GEIR Report Annual Update, Dec. 1, 1997.

[14] U.S. EPA, Environmental Fact Sheet, Adopted Aircraft Engine Emission Standards, April, 1997.

[15] NRDC, Flying Off Course, October, 1996, p. 40. The algae prevents light from penetrating to deeper waters; as algae dies and decays large amounts of dissolved oxygen are consumed by microbes.

[16] U.S. EPA, Environmental Fact Sheet, Adopted Aircraft Engine Emission Standards, April, 1997.

[17] Dockery, Douglas W, et al., "An association between air pollution and mortality in six U.S. cities, New England Journal of Medicine, Dec. 1993, p. 1759.

[18] American Lung Association, Health Effects of Outdoor Air Pollution, 1996, p. 17.

[19] Williamson, S. J. Fundamentals of Air Pollution, Addison Wesley Publishers, 1973, P. 358. This distribution assumes that particles (regardless of size) have about the same density.

[20] U.S. EPA, Region 5, Air and Radiation Division, Estimation and Evaluation of Cancer Risks Attributed to Air Pollution in Southwest Chicago, Final Summary Report, Prepared by ViGYAN, Inc. April 1993.

1996 POPULATION DENSITY BOSTON METROPOLITAN AREA

Figure 1

Persons per Square Mile

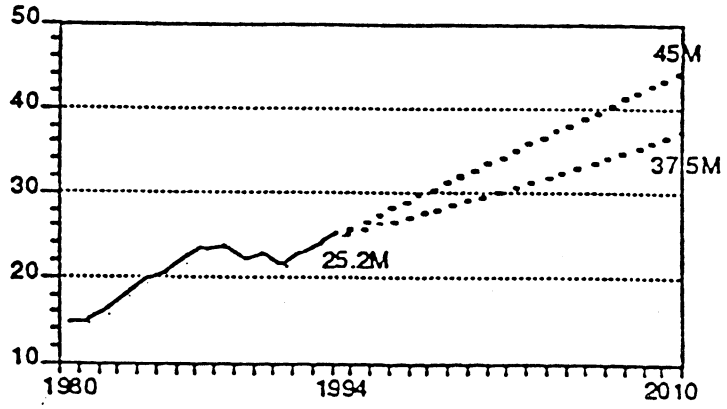
- More than 30,000
- From 10,000 to 30,000
- From 3,000 to 10,000
- From 1,000 to 3,000
- Fewer than 1,000

Total Persons: 4,122,000

Each square = 2 miles

Figure 2

The 2010 Fleet Forecasts were Developed for
Two Alternative Passenger Volumes:
37.5 Million and 45 Million



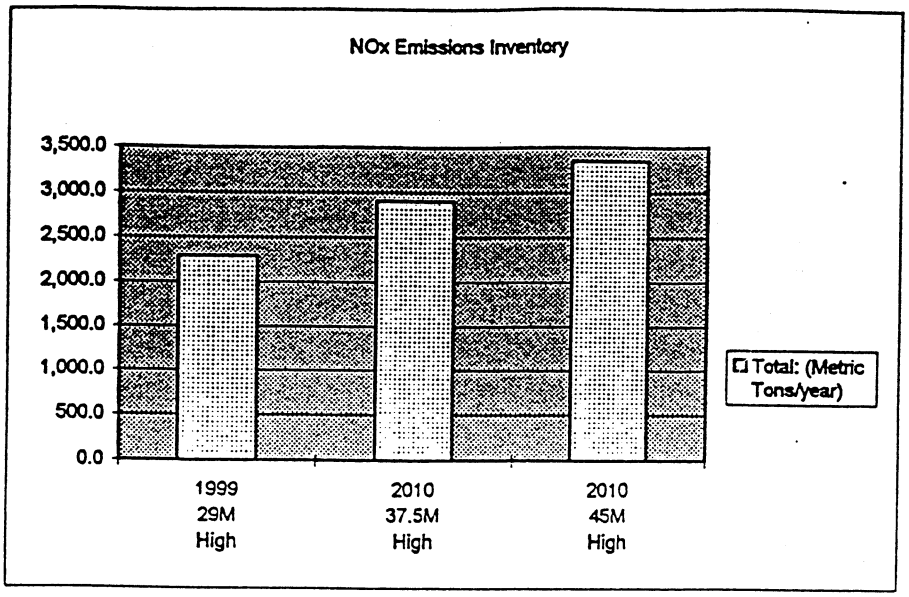
Avg. Annual Growth	
1980-1994	3.8%
1994-2010 (37.5M)	2.5%
1994-2010 (45M)	3.7%

Other Long-Term Forecasts

	U.S.	Transatlantic
FAA National Forecast	4.0%	5.2%
Boeing	4.0%	4.3%
McDonnell Douglas	4.0%	4.0%

Source: Draft Environmental Impact Statement/Report (Vol III), Logan Airside Improvement Project, Feb. 1999

Figure 3a Projected NOx Emissions for Logan Airport



NOx EMISSIONS INVENTORY

Year and Case:	1999 29M High	2010 37.5M High	2010 45M High
Total: (Metric Tons/year)	2,290.7	2,899.9	3,344.9

Note:

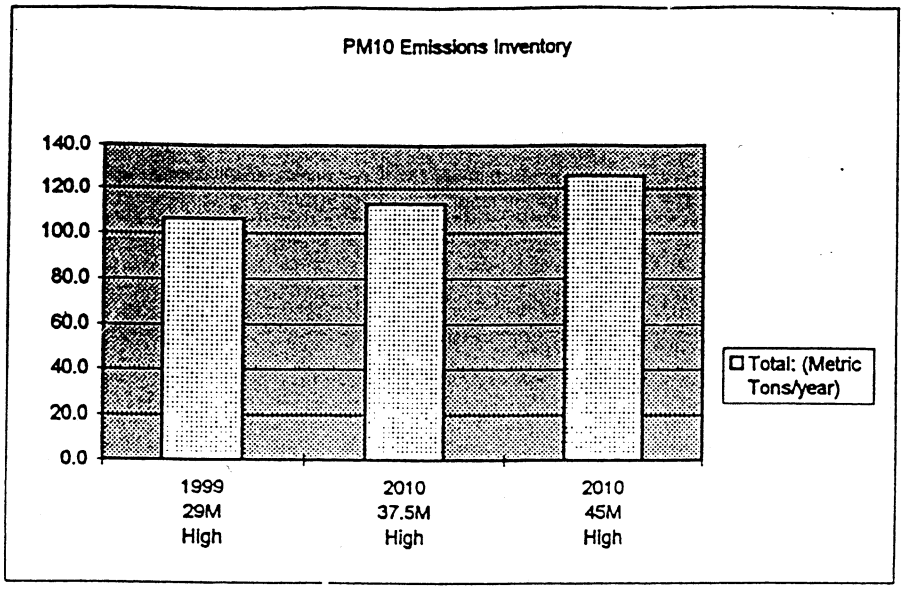
All Totals associated with the following emissions data:

On-Site - Includes aircraft sources, ground equipment, onsite motor vehicles, and other miscellaneous sources.

Off-Site - Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Source: Draft Environmental Impact Statement/Report (Vol 1), Logan Airside Improvement Project, Feb. 1999

Figure 3b Projected PM10 Emissions for Logan Airport



PM10 EMISSIONS INVENTORY

Year and Case:	1999 29M High	2010 37.5M High	2010 45M High
Total: (Metric Tons/year)	106.2	112.8	125.9

Note:

All Totals associated with the following emissions data:

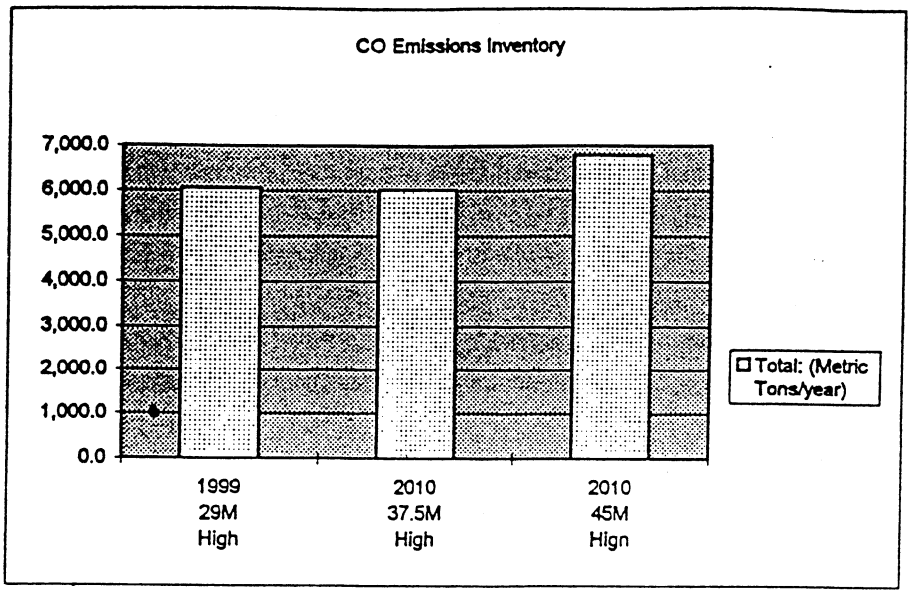
On-Site - Includes aircraft sources, ground equipment, onsite motor vehicles, and other miscellaneous sources.

Off-Site - Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Source: Draft Environmental Impact Statement/Report (Vol 1), Logan Airside Improvement Project, Feb. 1999

Figure 3c

Projected CO Emissions for Logan Airport



CO EMISSIONS INVENTORY

Year and Case:	1999 29M High	2010 37.5M High	2010 45M High
Total: (Metric Tons/year)	6,053.2	6,015.9	6,781.3

Note:

All Totals associated with the following emissions data:

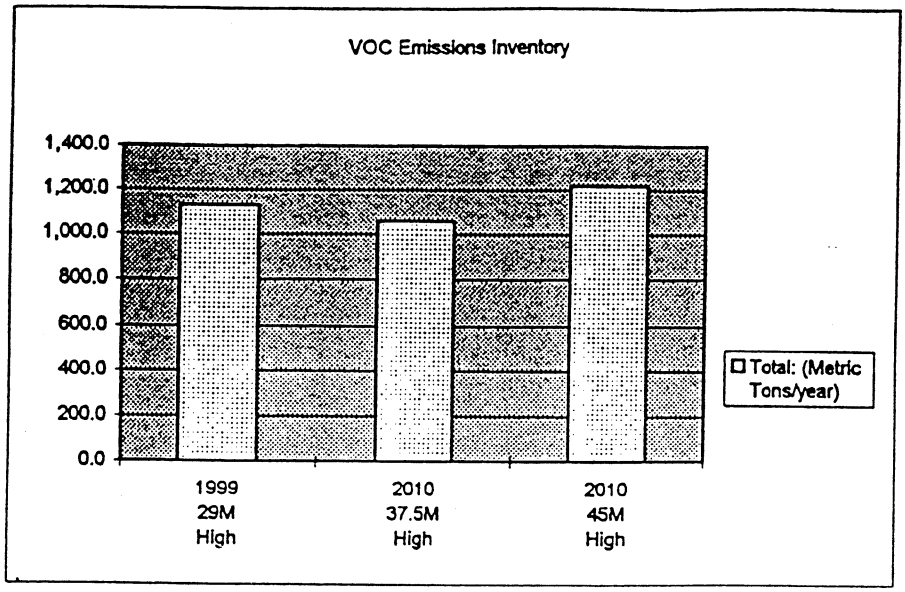
On-Site - Includes aircraft sources, ground equipment, onsite motor vehicles, and other miscellaneous sources.

Off-Site - Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Source: Draft Environmental Impact Statement/Report (Vol 1), Logan Airside Improvement Project, Feb. 1999

Figure 3d

Projected VOC Emissions for Logan Airport



VOC EMISSIONS INVENTORY

Year and Case:	1999 29M High	2010 37.5M High	2010 45M High
Total: (Metric Tons/year)	1,129.3	1,057.8	1,219.1

Note:

All Totals associated with the following emissions data:

On-Site - Includes aircraft sources, ground equipment, onsite motor vehicles, and other miscellaneous sources.

Off-Site - Includes airport-related motor vehicles in the East Boston and Regional Study Areas.

Source: Draft Environmental Impact Statement/Report (Vol 1), Logan Airside Improvement Project, Feb. 1999

Table 1

1997 Estimated Emissions (in kg/day) at Logan Airport

Source Categories:	CO	NOx	VOC
Aircraft Sources			
Air carries	4,698	4,150	1,227
Commuter	700	159	498
Cargo aircraft	514	262	207
General aviation	654	21	27
Total aircraft sources	6,636	4,592	1,959
Ground Service Equipment	6,098**	622**	530**
Airport-Related Motor Vehicles			
Parking /curbside	586	24	102
On-airport vehicles	1,283***	244***	205
Total motor vehicle sources	1,869	268	307
Other Sources			
Fuel storage/handling	0	0	381
Miscellaneous sources+	37	244	6
Total other sources	37	244	387
Total airport sources	**14,640**	**5,726**	**3,183**

** Includes vehicles converted to alternative fuels

*** Includes through traffic from the Ted Williams Tunnel

Note: Particulate (PM10) emissions for the above source categories were not provided in the Source document.

Source: Boston-Logan International Airport, 1997 Annual Update (EOEA #3247/5146), August 1998

Lauri Webster, East Boston

"Sometimes the noise is so bad my husband and I pack the house and leave, just because we can't take the noise any more. It's pathetic-I can't even stay in my own house.

"The blast of the engines crescendos to 95 decibels every 90 seconds as each plane takes off. The screeching and squealing makes me clench my teeth. Each plane thunders down the runway, shaking the windows of the house, vibrating china in the closet and tilting pictures on the wall.

"The noise wakes us up early in the morning and pounds away while we get ready for work. Every night it destroys the peace when we come home from a long day. It makes me irritable and I snap at my three year old. And sometimes this noise goes on for days-sometimes weeks-without a break.

"When the wind changes and peace returns to my neighborhood, it is delightful. Unfortunately, I know that the planes are torturing friends in other neighborhoods and surrounding cities and towns.

"The smell of jet fuel smell knows no boundaries either. It hits me in the face the second the train doors open at Orient Heights T station, and follows me up the hill as I walk home. I can't always escape it once I get inside either, even if I put my head under a pillow.

"I wish I could feel good about this airport expansion project, but I do not. I believe that air travel is still in its infancy, and that everything about it is going to get bigger and faster, and there is going to be more of it. It seems like we ought to be defining some boundaries and setting some limits, like a parent does for a child. One region can only take so much."

Dovi Abbey, Roxbury

"The sleep deprivation is terrible. There are times when I have five consecutive days of planes over my house, going as late as two or three a.m. and starting as early as six in the morning. After five days of that you feel like you're in a war zone. They're turning Boston into Baghdad."

Martha Merson, Jamaica Plain
"My neighborhood has an active Crime Watch. We have organized to get rid of a drug problem, and if we had a truck load of garbage delivered to our street, we would find a way to clean that up too. But the kind of pollution Massport is planning to direct our way can't be contained. It has to be stopped before it starts.

"The people of Boston have done so much work to make our neighborhoods livable; we don't need Massport to turn them into a war zone."

Alan Wright, Roslindale
"I live next to the Arnold Arboretum, a sanctuary in the city. Noisy flights coming off Runway 27 make it unbearable already. Runway 14/23 will triple the overflights and ruin the Arboretum for all our citizens. Massport should restrict or ban older jets, in addition to developing a quality of life master plan for the region. "

117.34

Barbara Flavin, Winthrop
"Honestly, my dream is just to be able to go to bed early, sleep through the night, and wake up late. Due to Logan Airport and the planes, I am unable to do that."

Rebecca Swope, Chelsea
"I'm a first-time homebuyer. I've lived in Chelsea all my life and finally got the money for a home on Tudor Street. I'm doing it all over, but now in my new house I get woken up at two or three in the morning. I can't get any sleep at night!

"I fall asleep during the day. It's been so bad that I'm thinking about moving out of my own home. I never had tension headaches before, but I do now-all thanks to Massport."

Ian McGlocklin, Brookline
"Pollution is becoming an increasingly vital issue for people's health today. More runways mean more plane traffic which means more pollution and greater environmental damage. When will it stop? It should now!" 117.35

Brian Monk, Back Bay
"I'm a college student and can only afford cheap housing. Because of this, my apartment walls are very thin and I hear the "T' and the airport noise all night long, so it's difficult to sleep."

Dave Prusky, Chelsea
"I'm over 60 and retired. I'd like to live out my life in peace and quiet, but Massport's got different plans. The planes are so low over my house that if I were to throw a rock, I could hit one. I'm already partially deaf in my right ear, and I attribute this to having airplanes overhead all the time.

"In my neighborhood, we get a lot of small plane noise. Why is it that I have to pay for an HOV lane on the Southeast Expressway that I can't use, but Massport says it can't limit puddle jumpers' access to Logan? Why not an "HOV airport?" 117.36

Tom Briand, East Boston

"My family has lived in East Boston longer than the airport has been here: over one hundred years. We live in the city-and we love the living in the city-so we expect some noise and traffic. But the growth of Logan is swallowing up a community that has already suffered too much from Logan's expansion. This is our community. This is our neighborhood. This is where we want to raise our kids. Enough is just enough."

Davida Andelman, Dorchester
"Over the last year or so, I've noticed that the noise from Logan over Dorchester has gotten dramatically worse: early in the morning, early in the evening and late at night. It disturbs me when I'm listening to the six o'clock news, when I'm trying to go to sleep, and in the morning when I might want to sleep later. This interferes with my quality of life.

"This is the one issue that can unify all of Boston's neighborhoods. I go to a ton of community groups and meetings, and I haven't heard one person say they think Logan needs another runway."

Robert Massa, Winthrop
"We've lived in the same house for 32 years, and during that time we've had two dogs that have spent most of their time outside in our yard. The first one went deaf at age twelve, and now our current dog is deaf also. If the noise did that to our pets, what's it doing to us?"

Richard Salini, East Boston
"One of Massport's contractors wanted to dump a load of contaminated dirt on the park near my house. It's a great park. I said, you are not putting that dirt on our park. They said, yes we are. Massport would have allowed it to happen too, if our community meeting hadn't stopped them.

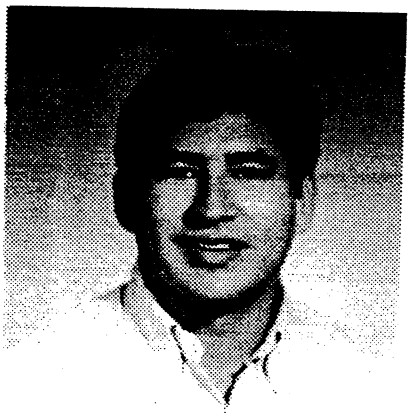
117.37

"Why does Massport calculate the value of passengers' time lost to delays, but ignore the economic costs Logan imposes every day on its neighbors? Every time I drive, I hit traffic associated with the airport, wasting gas, and the aircraft exhaust that covers my car forces me to get my car washed constantly. At home, I have to keep my windows closed year-round, requiring me to keep the air conditioning running all summer long. These add up to hundreds of dollars a year in extra costs due to the airport that I must pay out of my own pocket."

Ignacio Ochoa, East Boston

"I moved from Guatemala to East Boston five years ago. I like East Boston because it is a friendly, safe, ethnically diverse and affordable community that is very convenient to downtown. My wife and I bought a house on Eagle Hill and have worked very hard to renovate it. As soon as we moved in we realized that it is under the flight path of Runway 33.

"Planes wake us up at 6 a.m. and fly continuously (a plane every 1 to 3 minutes) all day and into the night-often past one in the morning. Besides the planes that fly over us we hear the constant ground noise of planes preparing to take off and land. The planes line up one after the next and the background roar never stops. 117.38



"My wife called the Massport soundproofing program and they sent us a blurry map with no street names and a letter telling us that we did not qualify for sound proofing. Massport says our home lies four houses away from the noise contour lines which Massport presently utilizes.

"Because of Logan, East Boston's air quality violates the Federal Clean Air Act and we have some of the highest rates of respiratory infections in the state. How can Massport advocate building a runway that will triple the amount of planes going over our home? Regional planning-not runway expansion-should be implemented immediately. What is Massport's plan to help abutters live with the present noise and contamination? 117.39 117.40 117.41

"In Guatemala, human rights abuses are common. Development projects with undesirable impacts-garbage dumps, toxic waste sites and highways-are always built next to working class communities. In Guatemala, if we speak out against unfair policies and development projects we risk imprisonment or death. But justice is supposed to prevail in the United States, even when the interests of working-class and minority people conflict with the profit interests of big businesses. For this reason, I am a member of Communities Against Runway Expansion (CARE), and am speaking out in the hope that Runway 14/32 will never be built."

Lolly Lincoln, Cambridge
"I live in Cambridgeport and now that I'm home with my kids I'm really aware of the airport, because we get a lot of small planes with really loud engines. My one year old son's bedroom is under the eaves, and the noise has woken him up many times. On nights when the wind is from the east, I hear them one after another. Some days it's relentless, and even the china cabinet shakes.

"I'm also concerned about the air pollution from the planes overhead. Is anyone thinking about the effects of that?"

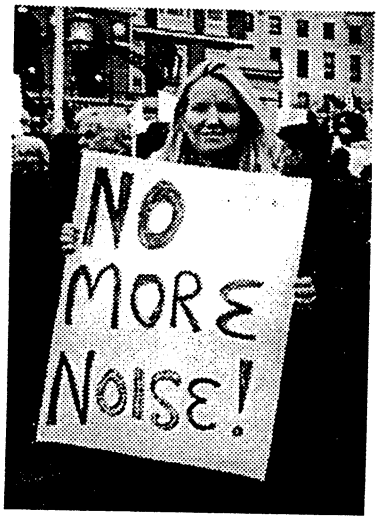
117.42

Pauline Collins, Hull
"I live on a hill in Hull and can see the planes going by my windows. My whole house shakes. I oppose the pollution-noise and chemical-that Logan currently generates, so we certainly don't need more runways at the airport. We need a regional plan to save the neighborhoods around Boston Harbor."

Art Flavin, Winthrop
"Now that I'm retired, I should be able to choose when I'm going to work and when I'm going to rest. However, Logan airport makes sure that I wake up by 6:30 in the morning and that I not go to sleep before 11:30 at night. Naps are out of the question. But according to Massport, the neighborhood should be serene because the so-called average noise level is well within their limits.

"Last spring, we had a meeting last spring with Massport and FAA to discuss quality of life issues and we couldn't hear ourselves speak. Winthrop town hall is a brick and granite building but it was a hot night and we had the door open. It was either leave the door open and be drowned out by the airplane noise, or have our meeting but roast in the heat.

"In theory, my own house isn't supposed to be under any flight path, but when the wind is blowing a certain way, I can't even use my front porch."



Madeleine Steczynski, East Boston
"I have lived in East Boston for eight years. In my time here I have learned what incredible struggles the residents of this neighborhood have had to go through. My opposition to the runway is based on two facts:

"Planes flying over my house at night have been so loud that I awake and think we are at war. Car alarms throughout the entire neighborhood have been set off.

"Also, I work with the kids of East Boston. They deserve a better future!"

Mary Thawley, South End

"Sixty thousand jets over the South End are going to cause air pollution and if they want to fly any lower, there'll be no quality of life. You'll be able to grasp the wing and hitch a ride."

117.43

Gregory Curci, Winthrop
"Eight years ago when I moved into my house in Winthrop, I could hear the airport, but now with the increase in air travel I can also smell the jet fuel, and tires burning from the landings. I'm not supposed to be under any flight path, but there are times when I see three planes crossing simultaneously over my house at different altitudes.

117.44

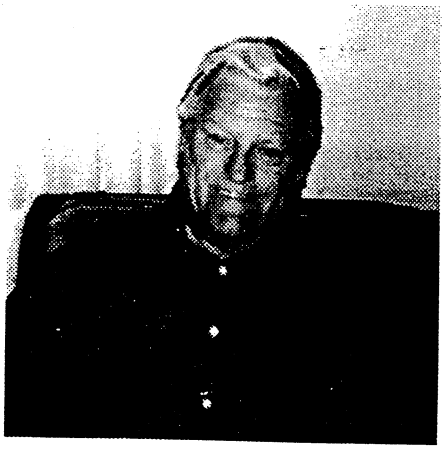
"I'm also starting to get smoke from the airport which hadn't happened before. So my home is no longer safe from the impact of the Logan."

Susan Horn, East Boston
"My sister has asthma, my mother has asthma. Now I have asthma. It makes you wonder that of a family who grew up in the same house near the airport, at least three of us have gotten asthma."

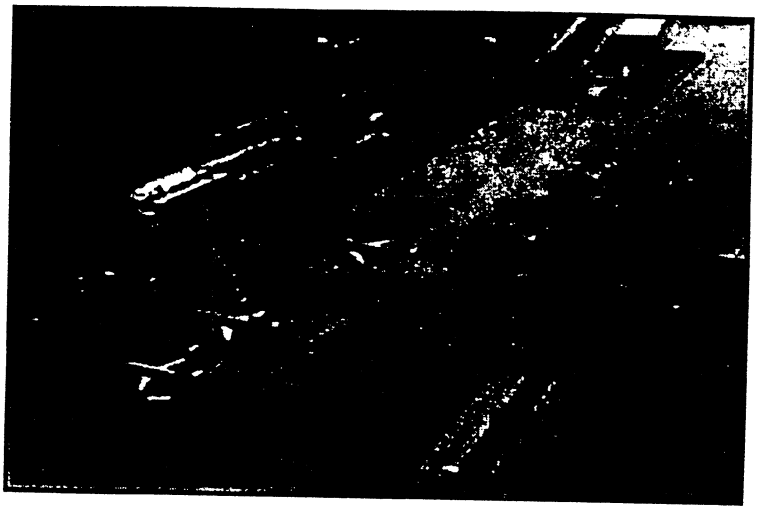
117.45

Bobbie Horn, East Boston
"I've lived in this house almost my entire life. This is a nice place to live-except for the airport. We have soundproofing but it doesn't really improve your quality of life; it just takes the edge off. And already we've had to replace more than a dozen of those windows that have broken. The noise is so bad that the day before I had a party for my daughter, I was actually hoping it would be cold so there'd be a reason to keep the windows closed.

"Sometimes the planes come in so low they clip the treetops. The worst was a day several years ago when they brought the planes in just barely skimming over our roofs. It was so frightening that everybody around here ran out of their houses. "



Arthur Horn, East Boston
"My big problem with Massport is their credibility. They tell you one thing, then they try to do another. They bend the rules when they need to, and obey them only when it's convenient. So when Massport tells people in the Bayswater Street area that 14/32 will cut the traffic over us, it may-for a brief a time. But as soon as air traffic grows enough, they'll send the planes back to us, and at even higher levels."



AIRSIDE IMPROVEMENT PROJECT

A DRAFT ENVIRONMENTAL IMPACT ANALYSIS

By

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Monday, April 19, 1999

SUMMARY OF MASSPORT'S AIRSIDE IMPROVEMENT PLANNING PROJECT

The Draft Environmental Impact Statement and Draft Environmental Impact Report (Draft EIS/EIR) considers the impact of five options on flight-delay reduction and weighs the environmental impact of each. The proposed schemes, called actions in draft report, comprise:

- Constructing and operating a 5,000-foot unidirectional runway (14/32) located at the southwestern edge of the airport for use over the water only. The runway length was selected over a 4,500-foot length in order to accommodate a greater proportion of the regional/commuter carrier fleet and therefore more effective in reducing delay (I:3-1).
- Constructing and operating a 9,300-foot Centerfield Taxiway between runway 4L/22R and 4R/22L.
- Reconfiguring, improving, realigning and extending other Taxiways
- Reducing approach minimums on some runways (15R, 22L, 27 and 33L) by providing precision approach guidance to a point closer to runway touchdown. This will reduce delays and enhance operational safety.
- Peak Period Pricing or landing fee surcharges imposed on carriers during peak flight activity levels and as a result of airline over-scheduling.

The planned project was picked from a list of 5 options or alternatives (I:ES-16 - Table 1).

TABLE 1 - SELECTION OF PROPOSED ACTIONS AND DELAY REDUCTION

Alternative	Proposed Action	Percent Reduction of Delay for Year 2010 per 37.5M Passengers (Low Fleet)	Percent Reduction of Delays for Year 2010 per 37.5M Passengers (High Fleet)	Status
1	All actions	-34.1%	-53.6%	Rejected
1A	All actions without Peak Period Pricing	-29.9%	-31.3%	Accepted
2	All actions without 14/32	-14.1%	-42.7%	Rejected
3	All actions (operational and administrative) but no build	-10.3%	-41.3%	Rejected
4	No actions - allows routine maintenance and annual minor improvements	-	-	Rejected

* Based on table 4.5-2 (I:4-30) and bar graph figure ES-4 (I:ES-19).

Peak Period Pricing was not considered since current flight activity levels and over-scheduling do not exceed current airfield capacity (I:3-39).

Construction traffic during the 2000-2004 period will generate a daily average of 129 (ES:ES-27) truck round trips (range 58-580/day). Routes 1A and the Ted Williams Tunnel will be used as the major gateways. Certain designated routes on State highways would "minimize the impact on local streets" (I:ES-29).

Runway 14/32 would be permitted to operate as a unidirectional runway with all arrivals and departures occurring over B ɔston Harbor. As a result 15% of total airport operations would shift from flight paths over communities to flight paths over the water (I:ES-4). Upon completion, the project will reduce impacts for the most severely noise-affected communities in East Boston, Revere and Winthrop (I:ES-30).

SUMMARY OF PROJECT ENVIRONMENTAL DATA

Logan Airside Improvements Planning Project (EOEA #10458) looked at 2 areas:

- Addressing Logan's delay problem
- Enhancing safety

The two plans will be achieved with *minimal* environmental impact (I:ES-5 - Table 2).

TABLE 2 - SUMMARY OF DRAFT EIS/EIR 'S ENVIRONMENTAL IMPACT AND MITIGATION

ISSUE	DRAFT EIS/EIR STATEMENT
Noise	1. 14/32 will provide more equitable noise distribution and mitigation measures to most affected communities. 2. Communities at 65 decibels will experience a noise increase of 2%. Soundproofing will be provided. 3. Proposed plan will not affect normal activity or aesthetic value of a public park, refuge or historic sites. 4. The Taxiway system will reduce ground noise.
Air Quality/Odors	1. Air quality will improve due to 14/32 added shorter delay periods, and the Taxiway system. 2. Ambient levels of Carbon Monoxide, Nitrogen Dioxide, and volatile Organic Compounds are expected to be well within the air quality standards and are below of all considered alternatives.
Terrestrial Vegetation and Wildlife Habitat	The runway and taxiway constructions will result in the total loss of 39.4 acres of vegetation, leaving behind a total of 440 acres. See also Table 5.4-1 (I:5-60) for a list of avian species within the Logan airfield.
Endangered and Threatened Species of Flora and Fauna	The construction of the Centerfield Taxiway between runways 4L/22R and 4R/22L will result in loss of upland sandpiper (Bartramia longicauda) habitat. A plan with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) will mitigate this impact.
Soils	The reportable concentrations of S1 and S2 soil categories were exceeded in some of the soil samples for arsenic, lead, and two polynuclear aromatic hydrocarbon compounds (I:5-71 and Table 5.6-1 - I:5-72)
Water Quality	Class SB water quality standards are being met under average conditions (Table 5.5-1 - I:5-66).
Wetlands	No federal or state wetlands occur within the airfield study area (I:5-58).
Construction Impact	The construction-related work will be alleviated through "initiatives to limit traffic, noise, and air quality impacts in surrounding communities."

RESPONSE NOTES

There are legitimate questions to be reckoned with as they pertain to nearby communities' expectations. Any Logan improvement should be done in a sensible manner that will not compromise the environment, impact further on our health, irreparably disrupt our lifestyles, or detract from our property values. The submitted report contains numerous deficiencies that fail to compare the benefits of alleviating delays and cutting airline costs to the true environmental, social, economic, and medical costs of the selected scenarios. This report weighs environmental and medical impacts as compared to delay impact.

• Noise Pollution Impact

1. One of the most frequent complaints of local communities' residents is noise. The FAA's threshold of 65 decibels does not accurately assess how many people are disturbed by aircraft noise. The National Resources Defense Council (NRDC) confirmed that Denver International Airport, despite the relatively few people living within its 65 decibel noise contour, receives the highest number of monthly noise complaints from outside this area[9]. Noise can cause serious health problems. It acts as a biological stressor by eliciting a response from the brain's reticular activation system that prepares the body for "fight or flight". Neural impulses then travel throughout the central nervous system and influence perceptual, motor, cognitive, behavioral, glandular, cardiovascular, and gastrointestinal functions. Therefore, noise is thought of as a *major* threat to human health[7]. 117.46

   The constant roar from jet aircraft can seriously affect the health and psychological well being of children, according to a Cornell University study[8]. Gary Evans, a professor of design and environmental analysis in Cornell's College of Human Ecology concluded that there are health problems resulting from chronic airport noise, including higher blood pressure and boosted levels of stress hormones, which may have lifelong effects. Evans contends also that New York children living near an international airport tended to be poor listeners and did not read as well as matched children in quiet schools. Mark Lawrence, an East Boston resident, who currently lives in Florida, recalls[13]:

   > "I REMEMBER being scared out of a deep sleep as a child as a jet would pass over my house so close you could see the pilot's face.
   > I REMEMBER how each year as a student all my teachers would have to pause every 5 or so minutes to allow the screeching jets to pass.
   > I REMEMBER not being able to concentrate in school because of jet noise."

   As many as 115 flights an hour pass over communities north and south of Logan Airport. In a joint public meeting by Massachusetts Environmental Protection Agency (MEPA) and the Federal EPA, Elaine McGrath of Chelsea told the board that, "The communities are speaking with one voice and telling you it's *unbearable*. Massport isn't telling you that"[19].

2. No remedy was given for the structural damage due to low-flying aircraft vibrating homes, school buildings, monuments, and industrial infrastructures within the affected communities. 117.47

3. The following flight path map obtained from the Boston Globe shows the projected impact comparing 1997, and 2001 with or without the new runway.

One obvious problem with this map's projections is that 14/32 will not be completed by 2001. According to a Massport spokesman, Jeremy Crockford, the approval process alone could take two years[20]. But a less obvious issue revolves around the increased fleet capacity projected by 2010. The numbers are therefore meaningless since those communities that are promised a relief for 2001 will not see it materialize in time and will be drowned by an eventual increase in total flights that supercedes the current level. Furthermore, if the plan is implemented, there will be a disproportionate and exorbitant increase in flights over poorer communities such as sections of Chelsea, East Boston, Everett, and Roxbury. The latter fact triggered U.S. Representative Joseph Moakley to argue that the impact statement did not address the environmental effects of the new runway on minority and low-income people in Boston that was required by a 1994 executive order issued by President Clinton[15]. 117.48

4. The Harbor Islands recreational area will suffer significant noise impact. 117.49

- ## Chemical Emission/Impact

Chemical pollutants emitted include cumulative chemicals generated by vehicles within the airport area, such as planes and transport vehicles, as well as road traffic leading to and from the airport.

1. Since the pollution emission predictor uses 1993 as a contrast item, an overcrowded airport year and a peak year for delays, the predicted emission reductions for year 2010 are undoubtedly minimized to favor a lesser environmental impact. Furthermore, the model predicts minor gains in reducing the levels of pollutants in the environment. But, the proposed action model predictor uses alternative 1 to attain this analytical profile (IV:Tables EI1-1-EI1-4). Since plan 1 was rejected in favor of plan 1A, these data do not necessarily fit the report's final conclusions (see Tables 1 and 3 in this report). 117.50 117.51

2. The additional combustion of gasoline and oil will increase the total Volatile Organic Compounds or Hydrocarbons (VOCs) in the atmosphere. VOCs are considered to be photochemical pollutants; a concentration of 3 ppm can result in 0.1 ppm of photochemical oxidants, a class of pollutants that includes both hydrocarbon and nitrogen derivatives. 117.52

3. The EPA's regional administrator stated that "... the number of passengers using the airport is projected almost to double current levels by 2010" (II:1). The projected increase in passenger volume to 45 million by 2010 will have an adverse effect on the local transportation and air quality by increasing the overall level of ozone in the airport region and on roads leading to the airport. Reducing ozone precursors, which includes nitrogen oxides is necessary to help the State attain the health standards for ground-level ozone (smog). Nitrogen dioxide (NO_2) is a pollutant that in concentrations as low as 0.25 ppm for one hour can blanket the horizon with reddish-brownish haze. Smog formation is initiated by the photochemical decomposition of NO_2 to NO + O. The resulting oxygen atoms then react with the more abundant species O_2 resulting in ozone (O_3). Oxygen atoms and Ozone molecules are also highly reactive with hydrocarbons, and a variety of products are eventually formed, including alcohols, ketones and aldehydes. The eye irritation, which is a familiar feature of photochemical smog, is due to the presence of compounds such as formaldehyde and acrolein. Both NO and NO_2 can also react directly with unsaturated hydrocarbons resulting in Methyl Nitrate and Peroxyacetyl Nitrate (PAN), both of which are powerful eye irritants[23]. 117.53

4. Local airport traffic will also add to the problem of Carbon Monoxide (CO) emission. CO is found at normal levels between 0.025-1 ppm. In major cities, it ranges from 10-50 ppm. CO reduces the ability of the blood to transport oxygen though the body. The resulting strain on the heart and lungs can be fatal. CO can also cause dizziness, blurred vision, and distorted perception of time. 117.54

5. Sulfur Oxides, which occur chiefly as Sulfur Dioxide, Sulfur Trioxides, Sulfurous and Sulfuric Acids, can damage vegetation, fabrics, metals, and ecosystems such as lakes and ponds. Levels of 0.25 ppm or above cause irritation to human beings. Concentrations between 0.08 and 0.1 ppm for any length of time are considered unhealthy. It takes usually about 5 ppm of SO_2 for 1 hour to cause irritation to human throat and lung tissue, with accompanying bronchial constriction. But in individuals who suffer from chronic respiratory diseases, a minor increase in the concentration of SO_2 from 0.1 to 0.2 ppm can cause them to start coughing and experience severe difficulties in breathing[23]. Sulfur Dioxide is a heavy

noxious gas that can very quickly combine with water to form Sulfurous Acid (H_2SO_3). Also, Sulfur dioxide can absorb a photon of light and becomes "excited" so that if it collides with an O_2 molecule, it forms sulfur trioxide (SO_3). This is much more toxic than SO_2 and has much more affinity to water molecules in the atmosphere or lungs where it forms Sulfuric Acid (H_2SO_4), a highly corrosive acid. SO_2 emissions were not conducted since, according to the draft report, airports are not identified as significant sources of these emissions (I:6-64).

6. In addition, Sulfur compounds, Nitrogen Oxides, Lead, and various reactive volatile hydrocarbons can form other chemical complexes that are deleterious to all forms of life. These forms include a barrage of toxic and synthetic compounds whose effect on health ranges from clear-cut to suspicious. For example, NO_2 can combine with reactive hydrocarbons to form a wide range of pollutants including PAN, a major reactive pollutant. Some of these compounds are mutagenic and lead to cancer. Substances known to be cardiovascular irritants can directly be linked to emphysema, asthma, chronic bronchitis and heart attacks.

7. Suspended particles or particulates are tiny bits of matter (technically less than 0.1 millimeter) floating in the atmosphere, such as diesel smoke, fine ash, and dust. Particles which are smaller than 2.5 thousandths of a millimeter can pass through the primary, non-specific immune defenses such as nose hair and mucous membranes and may cause illness. Over a period of years, these materials attack lung tissue and increase susceptibility to such diseases as tuberculosis and lung cancer. And in urban areas, these particulates are believed to be responsible for increased asthma attacks, aggravating existing heart and lung conditions, lowering resistance to infection, and breathing problems in children. There is a direct correlation between high particulate air pollution and risk of premature mortality from heart and lung disease. The NRDC estimates that at current levels of pollution, approximately 64,000 premature deaths from cardiopulmonary causes may be attributable to particulate air pollution each year. That represents 6.5% of all cardiopulmonary deaths, which total 986,000 per year[9].

8. Many suspended particles serve as niche sites for microorganisms and their spores, including potential human pathogens.

9. High concentrations of suspended particles can cause reduced visibility caused by absorption and scattering of light. Soiled clothing and soot-covered buildings are other symptoms that are all too familiar.

10. Mixtures of atmospheric pollutants may show synergistic interactions, so that more aggregate damage is done by even small amounts than otherwise be expected. For example, the growth of pasture grasses is suppressed more by a mixture of SO_2 and NO_2 than by that of either alone[1].

11. Benzene, dioxin, toluene, xylene, and formaldehyde are known to be toxic and carcinogenic even at minute concentrations. None were monitored individually in the draft EIS/EIR study. 117.55

12. Overall health problems due to noise and chemical pollution include mental health problems, cardiovascular disease, gastrointestinal disease, compromised immune response, pregnancy and birth defects, learning disabilities, respiratory problems, and cancer[7].

13. Table 5.6-1 (I:5-72) indicates that the reportable concentrations of S1 and S2 soil were exceeded in some of the soil samples for arsenic, lead, and two polynuclear aromatic hydrocarbon compounds (I:5-71). Lead is known to be toxic in trace amounts. S1 soil category applies to those soils where there is a chance for a high frequency and high intensity of exposure to the soil by children and adults. While most of the lead assimilated comes from food and drink, some is inhaled. The residence time of lead in the bones is 78 years, whereas that of blood and soft tissue is about 30 days[6]. Lead emissions were not assessed by the draft report (I:6-64). 117.56

Ultimately, the lack of sufficient epidemiological and long-term health impact analysis due to these pollutants on people in affected communities is troubling.

TABLE 3 - COMPARISON OF DRAFT EIS/EIR ESTIMATES OF MAJOR AIR POLLUTANTS

Pollutant	Total 1993 Levels of Baseline Emissions for Logan (kg/day)	Predicted Low-Levels for 2010 (Alt 4/No Action)	Predicted Low-Levels for 2010 (Alt 1 - All Actions)*	% change from 1993 Levels with No Action (Alt. 4)†	% change from 1993 Levels with Action (Alt. 1)†
Carbon Monoxide	16,043	14,355	13,976	-10.5%	-12.9%
Sulfur Oxides	N/A	N/A	N/A	N/A	N/A
VOC	3,666	2,572	2,383	-29.8%	-35%
Nitrogen Oxides	5,002	7,078	6,919	+41.5%	+38.3%
Particulate Matter	241	280	251	+16.2%	+4.2%
Lead	N/A	N/A	N/A	N/A	N/A

* No data was given for the actual project (Alt. 1A)
† Negative data indicate a decrease in pollutant level while positive data indicate an increase.

- Construction Impact

1. The report claims no more than 0.6% overall impact on daily traffic due to trucking to and from the airport construction sites (I:ES-29). But the use of Routes 1A and the Ted Williams Tunnel will surely exceed that limit as hundreds of daily trucks enter and exit these roads. Furthermore, as to what roads are these trucks using to get to the aforementioned gateways, the report purports that 'certain' designated routes on state highways should be used to 'minimize' the impact on local streets (I:ES-29).

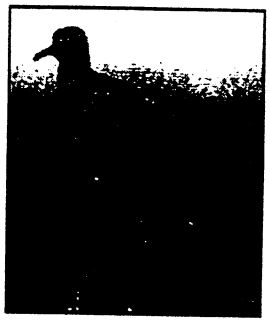
2. The draft report maintains that construction period traffic during the 2000-2004 period will generate a daily average of 129 truck round trips (range 58-580/day). The expected increase in traffic load will go on for years and will add to the already overly congested roads that lead to and from the airport. This will disrupt the normal flow of traffic on affected roads causing traffic delays, increasing traffic noise to neighboring communities as well as augmenting the existing pollution and particulate dust problem, and contributing to road erosion and structural damage. Nighttime construction will also occur. Winthrop's Office of the Board of Selectmen noted in a letter to Secretary Trudy Coxe, the Executive Officer 117.57

of Environmental Affairs, that "Past experience with other Logan construction projects has demonstrated their capacity to severely interrupt sleep patterns" (II:17.6).

• Endangered and Threatened Species of Flora and Fauna

1. The draft report mentions the loss of about 37 acres of existing grassland (I:ES-5) which is described in a later section as a net loss of 39.4 acres of "mowed grass" (I:ES-25), leaving behind 440 acres of vegetation. Of the 39.4 acres lost, 28.5 acres is due to the taxiway improvements, there is a 9% reduction in existing upland vegetation.

2. The loss of vegetation will result in loss of Upland Sandpiper (*Bartramia longicauda*) habitat due to construction of the Centerfield Taxiway between runways 4L/22R and 4R/22L. There is a mitigation plan with the Massachusetts Natural Heritage and Endangered Species Program (MNHES) to save the Upland Sandpiper. Michael Ciaranca, Natural Resource Manager of the Massachusetts National Guard stated that "... you can't simply (physically) move these birds and their nests to a different habitat."[17] Scott Melvin, from MNHES, concurred with Ciaranca that the current bird population and its nests could not be relocated but added that another site at the Massachusetts Military Reservation (Cape Cod) could serve as a new habitat that might conceptually be beneficial for the birds[21].



• Delays

1. The draft report chose 1993, a year in which flights peaked and Logan was overcrowded, as a base year for statistical comparison. In the short term (circa 1999), 29 million passengers were chosen to represent the fleet's annual passenger load. While for the long-term (circa 2010 and beyond), 2 sets were selected: 37.5 and 45 million passengers. At each passenger volume two fleet scenarios were analyzed, representing low and high-range levels of operation (III:Appendix E, p1). The benefits of Alternative Actions 1 and 1A were estimated to provide the greatest level of delay reduction with plan 1 reducing delays by between 29.3% and 60.3% (I:ES-18, and I:4-30). The draft report states that "a comparison of Peak Period Pricing (between 1 and 1A) under near-term, low fleet conditions is only 2 percent" (I:4-30). Table 4.5-2 shows that to be true. But, given the time-line for completing the runway, 1999 is not a realistic goal. Interestingly, the same table shows how the 'no build' option 3 under a high fleet scenario (with either low or high passenger loads) is much better at reducing delays than the 'build' 1A alternative (10% better for a low passenger load and 6.5% better for a high passenger load - see table 4.5-2, I:4-30). The EPA predicts a doubling of passenger capacity by 2010 at Logan (II:EPA Letter 1 dated Nov. 13, 1995), and Massport sees a 35.5% increase by 2010 (29 to 45 million passengers, III:Appendix E, p15), in which case the proposed plan will do little to alleviate congestion. 117.58

2. The Michael S. Dukakis Administration in 1989 imposed a form of peak period pricing which dropped congestion dramatically at the airport[2], thus, putting doubt on the draft report's contention that Peak Pricing is not helpful. 117.59

3. The US Department of Transportation statistics concurs with Massport's data on flight delays. But according to the FAA standards for calculating delays, Logan has only about 3% of its flights delayed[10]. The FAA sensibly does not account for delays of less than 15 minutes or those that end up in flight cancellation. But, even if short delays are excessive, the US Department of Transportation confirmed that delays are not unusual for major airports, even for state-of-the-art facilities like Denver's Centennial airport, which had 29% of its flights delayed last year[11]. 117.60

4. According to FAA data, the delay situation at Logan has improved since 1993 and is essentially in equilibrium. Massport's Aviation Planning Director, Betty Desrosiers, admitted that delays have declined in recent years as airport planners improved scheduling with airlines[10].

CONCLUSIONS

- Massport often hides behind Federal aviation rulings and ignores community pleas to provide relief from daily disturbances living next to the airport (II:9.1). Typically, the draft report gave little to no serious attention to harmful noise and pollution impacts on the people in local communities, including residential neighborhoods, schools, parks, homes for the elderly, monuments, plants, and historic and cultural land. The proposed runway would adversely affect the noise and air quality in surrounding communities and seriously prevent or hamper many redevelopment efforts currently underway. 117.61

- The widespread broadening of flights over many neighborhoods would increase noise impact to intolerable levels. Studies indicate that noise affects one's ability to concentrate and can cause sleep deprivation, resulting in potentially deleterious effects on health and well being[7]. James Maas, professor of psychology at Cornell University and author of "Power Sleep", warned that getting enough sleep is more important than diet, exercise, or any other factor in increasing people's longevity[12]. 117.62

- The draft's conclusions are drawn based on data models that fail to analyze true health impacts or to assess meaningful noise measurements. In fact, the Director of the Environment Department of the City of Boston stated that "... none of the scenarios presented can be considered to provide significant reductions in environmental impacts from airport operations. In particular, the proposed runway 14/32, touted for its unidirectional over-water approach/departure, is only marginally effective at reducing noise" (II:11.1). 117.63

- The EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that *any* increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult (II:1). 117.64

- While implementation of Peak Period Pricing was initially considered, the report claimed that "no US airport imposes a peak pricing system", and that "airline over-scheduling is not a significant contributor to delay under low fleet conditions or in the current or near-term environment at Logan" (I:ES-18). But, interestingly, the same report admits in a footnote that both New York and New Jersey Port Authorities apply a 'surcharge' to general aviation aircraft operating during peak hours. Furthermore, the Dukakis administration in 1989 imposed a form of peak period pricing which dropped congestion dramatically at the airport[2]. Recently, the Conservation Law Foundation weighed in against the runway plan, arguing that Massport could do more to alleviate flight delays by creating cost disincentives for airlines to fly at peak times[24]. 117.65

- The Draft's attempt to 'divide and conquer' local communities by promising a balance in overhead flights is ill advised. In fact, the new runway and taxiway will allow the airport to grow beyond rational limits. Bennet Heart, a spokesperson from the Conservation Law Foundation, stated that "the (environmental impact statement) paints a fairly frightening projection for growth at Logan"[25]. Growth of Logan will augment existing noise and chemical pollution levels for nearby communities. Most troubling is the disproportionate, biased, and significant increase in air traffic over low-income and minority communities of East Boston, Chelsea, Everett, and Roxbury. 117.66

- The report often failed to reference the appropriate tables for the graphs shown. Given the amount of time we were allotted to provide a response, we spend precious time looking for raw data that were not referenced in the shown graphs (see bar graph ES-4: I:ES-19). 117.67

- It is clear from the data that there is no significant decrease in congestion or delays due to the proposed plan and that any minor decrease in delay is invalidated by the immense social cost to the neighboring communities. US Representative Michael Capuano wisely stated that "if 14/32 will not permanently reduce delays, we shouldn't build it. The detrimental impact on our neighborhoods is too great. The burden of proof is on Massport to explain why there is a need for 14/32 when it will drastically increase airplane noise in many communities and doesn't even represent a permanent solution to the problem."[16] Logan has reached its capacity. To obviate the build option, a regional solution should be adopted. It involves moving cargo traffic to regional airports, building a connector from Worcester Airport to MassPike, working to establish North/South rail link and services, and implementing Peak Period Pricing. Long term solutions should look into planning and building a regional airport with an eye on the origin-destination demand (Table 4). 117.68

TABLE 4 - LOGAN'S ORIGIN-DESTINATION DEMAND BY REGION

Region	% of Logan's origin-destination
Vermont	0.4%
Maine	2.8%
New Hampshire	7.4%
Connecticut	0.3%
Rhode Island	2.4%
Massachusetts, west of 495	8.8%
Massachusetts, between Rt. 128 and I-495[2]	**28.6%**
Massachusetts, inside Rt. 128 excluding Boston[2]	**28.6%**
Massachusetts, City of Boston	20.6%
Total	99.9

[1] Adapted from I:2-8 and Executive Summary Report:ES-10.
[2] Combined 57.2% of Logan's origin and destination passenger demand is drawn from these two regions.

- Massport purports the draft report to be a full disclosure document. But, it leaves many details out and obscures the major issues that can potentially affect public health which deserves full public scrutiny under The Massachusetts Environmental Policy Act (MEPA). As the project would significantly increase Logan's airside capacity, the environmental consequences would be extraordinary. Failure to see the environmental impact of the build option will condemn hundreds of thousands of local residents to living with deteriorating medical, social, and environmental conditions. These communities have not been given fair consideration in this matter. 117.69

- Given Massport's history at keeping promises[26], its current assurance[22] that runway 14/32 will be unidirectional is dubious at best (I:ES-4). The FAA and Massport can reverse this 'flight of fancy' promise at any time following runway completion. 117.70

- In the final analysis, Massport is putting a price on our heads. The Agency is gambling away the public's health in favor of alleviating what are mostly minor delays. As the level and cost of airport pollution climbs, Massport has made no apologies and has not addressed the long-term and cumulative impact of pollutants on our health and the environment in a satisfactory manner. 117.71

Massport's argument regarding the "Airside Improvement Project" is myopic: It concentrates more on the economics of cutting airline cost and business benefits but minimizes the tremendous environmental, social, and medical costs it is imposing on its neighbors. The true cost to society, in other words, is never measured properly. We respectfully submit that any permanent and long-term impact damage visited on local communities should not be brushed aside in favor of business 'profit' or for alleviating petty delays. And that any money earmarked for Logan expansion would be better spent on alleviating current levels of noise and chemical pollution felt throughout the local communities.

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ACE
alternatives for community & environment
Law and Education for Environmental Justice

On February 11, 1994, President Clinton signed Executive Order 12898, the Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations ("Executive Order on Environmental Justice"). This precedent-setting measure for the first time in history requires all federal agencies to incorporate achieving environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations of the nation.

Following the directive of this Executive Order on Environmental Justice, the Department of Transportation ("DOT"), in concert with all other federal agencies, established its own "Department of Justice Order to Address Environmental Justice in Minority Populations and Low-Income Populations." Binding on all DOT administrations, including the Federal Aviation Administration, this Order is a key component of DOT's June 21, 1995 Environmental Justice Strategy (60 Fed. Reg. 33896).

In sum, the Executive Order on Environmental Justice, DOT's Order on Environmental Justice, and DOT's Environmental Justice Strategy require in no uncertain terms that disproportionate impacts on low-income and minority populations be avoided.

> It is the policy of DOT to promote the principles of environmental justice (as embodied in the Executive Order) through the incorporation of those principles in all DOT programs, policies, and activities. This will be done by fully considering environmental justice principles through planning and decision-making processes in the development of programs, policies, and activities, using the principles of the National Environmental Policy Act of 1969 (NEPA), Title VI of the Civil Rights Act of 1964 (Title VI), . . .and other DOT statutes, regulations and guidance that address or affect infrastructure planning and decisionmaking; social, economic, or environmental matters; public health; and public involvement.

DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations. [OST Docket No. OST-95-141 (50125)].

The Order underscores the importance of Title VI, further stating that, "[u]nder Title VI, each Federal agency is required to ensure that no person, on the ground of race, color, or national origin, is . . . denied the benefits of, or subject to discrimination under any program or activity receiving Federal financial assistance." *Id.*

DOT's position on environmental justice and fundamental fairness could not be clearer.

Historically an Italian-American population, the community most drastically impacted by Logan International Airport, East Boston, has always been a low- to moderate-income community. However, East Boston is emerging ethnically and culturally as minority populations grow. East Boston now can boast of Italian-Americans living side-by-side with Latino and South East Asian immigrants, for example.

But East Boston is not alone in receiving the impact of Runway 14/32 proposal. With stepped up use of Runway 27 as a part of the new scheme, the communities of Chelsea, Roxbury, the South End, and Jamaica Plain, among others, will receive an appreciable increase in overhead air traffic and noise on the Runway 27 path.

These are the same communities that have the highest asthma hospitalization rate in the state (Roxbury), host the most trash transfer stations, the most brownfields sites, the most diesel buses, and other noxious uses than communities anywhere else in the Greater Boston area. It appears to be no coincidence that Massport and the FAA are planning a further assault on the health and well-being of these communities. The Logan expansion is perpetuating the unfair paradigm that has plagued residents in these communities for decades.

Chelsea is a "majority minority" community with the majority of its residents now people of color. Roxbury continues to be largely populated by people of African descent, now with Haitian, Puerto Rican, Dominican, and Cape Verdean populations along with African-Americans. The South End and Jamaica Plain have similar ethnic mixes that include Latino and African-American populations and a variety of income levels including low-income. Each of these communities includes the very populations that Congress sought to protect under Title VI of the Civil Rights Act of 1964. President Clinton amplified that protection under his Executive Order on Environmental Justice, which was again heightened under the DOT Order on Environmental Justice.

The FAA, by the federal Orders, and Massport, by Title VI, are mandated to make extraordinary efforts to avoid impacts to communities of color as well as low-income communities by selecting appropriate alternatives. The FAA and Massport have failed to make even minimal efforts to avoid impacts to these protected communities. The fact that a host of protected communities in and around Boston will be disproportionately impacted by the proposed expansion is glaring and raises the specter of discrimination prohibited by Title VI of the Civil Rights Act of 1964. 117.72

This proposed expansion is squarely against the letter and spirit of civil rights and environmental justice and in violation of the federal Orders and Title VI. Therefore, the proposed expansion must be stopped.

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Toxic Chemical Emissions, Releases and Storage Logan Airport Impact Area

Summary of Emissions In Airport Expansion Impact Area

Boston, Somerville, Winthrop and other Logan Airport-impacted communities receive a significant burden of toxic chemicals in their air from local concerns which use hazardous chemicals. Additional chemical compounds which are hazardous to health are contributed by air and ground traffic-related sources. These include nitrogen and sulfur oxides, as well as hydrocarbon-based particulates and ozone-producing compounds. The full listing of specific sources included in the USEPA's records follows in an appendix. These records are available from the Toxic Release Inventory(TRI) and the Aerometric Information Retrieval System (AIRS).

These host communities already experience a dose of hazardous air pollutants (HAPs) which measurably, and perhaps dramatically, harms their health. By concentrating airport bound ground traffic into the expanding Logan facility, residents exposure to HAPs increases. Measures which increase this ground and air traffic, such as the expanded parking facilities and runway expansion, add to the air pollution burden.

The host communities are exposed to hazardous air pollutants from stalled tunnel traffic, cars and trucks servicing Logan, local highways and airport access routes, and the airport and aircraft themselves. Given recent reports based on USEPA data that 60 % of these air toxics are being generated by transportation sources, it seems that consideration must be given to reducing traffic in the airport impact area, rather than increasing it. Reducing flight delays does nothing to reduce these air toxics impacts. A regional approach to reducing the ground and air traffic loads is needed.

Boston residents already experience lung cancer rates 18 % greater than statewide averages, with corresponding increases of 62 % for liver, 60 % for esophageal, and 24 % for stomach cancers. Revere residents have 80 % more than expected levels of non-Hodgkins Lymphoma. Everett lung cancer rates are 33 % higher than expected. Women in Hull have 91 % higher than expected levels of lung cancer. (All data is from MADPH 1987 - 1994 figures for males, except where noted)

Impact of Air Pollutants on Health

Government estimates of toxic chemical concentrations in local air indicate that most Americans – over 220 million people -- live in neighborhoods where the additional cancer risk from toxic chemicals in outdoor air was more than 100 times higher than the goal set by Congress a decade ago. For 11 million Americans, according to the new estimates, cancer risk from their neighborhood air is more than 1,000 times higher than Congress' goal, the Environmental Defense Fund (EDF) announced on April 20, 1999. (Source: Environmental Defense Fund report based on USEPA data. see http://www.edf.org)

The newly released government figures are based on 1990 data and represent the first-ever estimate of which toxic chemicals, in what amounts, are in local communities' air. EDF took the government figures and calculated the associated health risks for each community. The 1990-based government estimates come with official cautions about their use, and several accuracy checks showing close comparability with measurements as recent as 1997.

"The numbers show that cars, trucks, and small businesses tend to be responsible for much more of the air's toxicity than is generally recognized," said EDF attorney David Roe. Of the air cancer risk calculated by EDF for the US as a whole, 60% is from mobile sources and 26% from small-business 'area' sources, with the remaining 14% from industrial 'point' sources. "Up to now, lack of information has meant lack of attention to some of the biggest causes of toxic air," Roe said. (see: http://www.edf.org/pubs/NewsReleases/1999/Apr/d_scorecard.html)

Illustrating the point is the fact that the District of Columbia shows a higher per-capita cancer risk in its air than any of the 50 states, despite having virtually no major industrial facilities. Car and truck traffic and the Ronald Reagan (National) Airport were its main sources of air toxics.

Asthma Incidence

New England has the highest number of hospital visits due to asthma per capita, 81% higher than the national average. (IMS) In fact, 10-20% of all summertime respiratory-related hospital visits in the Northeast are associated with ozone pollution. (EPA)

Asthma is the 6th most prevalent chronic condition among adults and children. In the last 10 years the incidence of asthma has doubled, especially among minority populations living in urban areas. (ALA)

Asthma is the most common chronic disease for children. It is the leading cause of school absenteeism; one third of all missed school days are attributed to asthma. For children, asthma is the number one cause of doctor's office visits, emergency room visits, and hospital admissions(Data source: EPA, NEJM; Text source: MADEP)

Role of Motor Vehicle Traffic In Air Pollution

Traffic on the road causes about 40% of the pollutants that react with sunlight to produce ground-level ozone, the main ingredient in smog. (MADEP) Ozone irritates living tissue in lungs, eyes, nose. It burns your lungs the way the sun burns your skin. (ALA)

There are over 4.2 million cars, and about 100,000 buses and trucks,registered in Massachusetts and driving on our roads. And another 500,000 commercial vehicles pass through our state on any given day. (Source: MA DEP web site: http:// www.dep.state.ma.us.

Summation

Any credible model for pollutant reduction includes efforts such as replacing short haul air traffic and its associated ground automobile traffic with electrified high speed rail. This more efficient transportation system would have a positive effect on air pollution if it were given the same level of support from parts of the Community which have pressed for Logan runway expansion. 117.73

The communities in the Logan Airport impact area already experience higher levels of cancer and asthma specifically because of the excessive burden of transportation emissions they experience. Increasing the pace of these emissions may well add to this burden of exposure.

Submitted by Marco Kaltofen, P.E. Civil
Boston Chemical Data Corp.

Letter 117
Green Works
John T. O'Connor, President

Code	Topic 1	Topic 2	Comment	Response
117.1	Air Quality	Impacts	It is probable that construction of a new runway will in fact create new opportunities for growth in airport operations, and consequently, in aircraft and motor vehicle emissions. Viewed this way, Massport's assertion that air quality impacts from 14/32 are beneficial or negligible is just downright wrong.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent EDRs (Annual Updates).
117.2	Air Quality	NAAQS	Massport pays scant attention to Logan's role in MA's ozone problem...the DEIS explores the issue superficially, despite its own projection that Logan growth will cause significant increases in NOx emissions in coming years.	40 CFR 93 instructs parties to address ozone by quantifying its precursors, NO_x and VOCs. This quantification was done for the EIS/EIR, comparing project-related NO_x and VOC emissions to the *de minimis* values for this non-attainment area. The project-related emissions were shown to be *de minimis*.
117.3	Air Quality	NAAQS	The DEIS fails to properly consider certain hazardous air pollutants (HAPs) like benzene and formaldehyde that are known or probable carcinogens, through its misleading use of overly-broad categories.	Although hazardous air pollutants (HAPs) are not specifically addressed, Section 6.8.7 of the Supplemental DEIS/FEIR includes a discussion of public health. Because VOCs and PM_{10} emissions are lower with the Airside Project than without it, it can be concluded that from these emissions will also be lower with the Airside Project Alternatives, when compared to the No Action Alternative.
117.4	Air Quality	NAAQS	Massport's own projections show significant increases in emissions of particulates with diameters less than 10 microns...the DEIS fails to adequately treat the special concerns associated with particulates of less than 2.5 microns.	Particulate Matter (PM) emission factors for aircraft are very limited, at best, and nonexistent in most cases. Therefore, as a conservative, worst-case assumption, the air quality analysis assumed that all PM is less than 10 microns in diameter. No emission factors or approximation methods are available for $PM_{2.5}$. The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR and Appendix F. These inventories show that all Alternatives, including the No Action and Preferred Alternative, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.
117.5	Noise	Impacts	...Massport's treatment of noise as largely a nuisance factor to be dealt with only within the confines of narrowly-drawn and ill-defined contours is unacceptable.	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.

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117.6	Air Quality	Model	The DEIS appears to sharply understate these motor vehicle emissions, by assuming—inexplicably—that motor vehicle traffic growth will lag well behind passenger growth; the direct opposite of what has actually proven true in recent years.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
117.7	Air Quality	Model	The DEIS analysis does not include aircraft emissions at altitudes of above 3,000'.	Emissions released above 3,000 feet are not expected to have any ground-level impact. Therefore, a mixing height of 3,000 feet is considered acceptable for this analysis.
117.8	Environmental Justice	Impacts	...Massport's proposal clearly flouts President Clinton's Executive Order No. 12898, making environmental justice a key criterion.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
117.9	Public Health	Effects	...Massport should be required to thoroughly assess potential health effects associated with existing levels of Logan operations on Massachusetts residents.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

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117.10	Regional Transportation	Regional Airports	Massport instead must be required to operate within the context of a true long-term transportation plan for our region, one that...makes maximum best use of other airports in our region like T.F. Green and Manchester....	Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Worcester Regional and Manchester airports. Service developments and increased traffic at these airports are a component of the region's long-term strategy to accommodate passengers and activity growth. By its agreement to assume operational responsibility and the eventual ownership of Worcester Regional Airport, Massport is working to increase air services at Worcester Regional Airport and its role in accommodating air travel demand generated in communities west of I-95 and I-495. Greater use of the regional airports will relieve traffic growth pressures at Logan Airport, but will not eliminate the need for the Airside Project. Developments at the regional airports and their impacts on Logan Airport are described in Chapter 2 of the Supplemental DEIS/FEIR.
117.11	Regional Alternatives	Passenger Rail	...[a long-term transportation plan] shifts us away from ever-increasing reliance on air travel, and toward transportation alternatives like high-speed rail that have far lower environmental and human impacts.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
117.12	General Opposition		...demand...A binding and legal agreement which halts any existing plans to expand Logan Airport in any way, shape or form. Including but not limited to the completion of the proposed Runway 14/32 and the centerfield taxiway.	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.
117.13	Regional Transportation	Regional Airports	...demand...a regional transportation plan that addresses New England's long-term transportation needs with less reliance on Logan.	Refer to response to Comment 117.10.

Code	Topic 1	Topic 2	Comment	Response
117.14	Environmental Review Process	Blue Ribbon Panel	...demand...An outside evaluation of Logan Airport which assesses performance and makes recommendations for improvements within the existing infrastructure.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
117.15	Environmental Review Process	Public Process	...demand...Establishment of a citizen's advisory board to serve as a liaison between Massport and the effected communities.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

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117.16	Environmental Review Process	Public Process	...demand...Appropriation of funds to conduct an Environmental Impact Study which includes an in-depth, long-term study of Logan Airport's impact on all surrounding cities and towns within heavily traveled flight paths.	To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study.
117.17	Environmental Review Process	Public Process	...demand...Creation of a Good Neighbor Agreement between residents and Massport that requires Massport to provide a forum for good faith negotiations.	Comment noted.
117.18	Air Quality	NAAQS	The EIS fails to address the NOx/ozone question in a meaningful manner, for example, Massport has not included emissions caps in its preferred alternative.	40 CFR 93 instructs parties to address ozone compliance by quantifying its precursors, NO_x and VOCs. This quantification was done for the EIS/EIR. Emissions caps and other potential mitigation measures have been evaluated in the *1999 ESPR*.
117.19	Air Quality	NAAQS	Hazardous Air Pollutants...The EIS fails to assess or project emissions trends for this particularly dangerous component of VOC and fine particulate emissions.	Refer to Response to Comment 117.3.
117.20	Analysis Assumptions/ Methodologies	Passenger Forecasts	...Massport data showing the relationship between passenger use and traffic volume over the past five years suggests that Massport is "low balling" the growth in traffic volume needed to accommodate its forecasts.	The proposed Airside Project will not stimulate additional growth in passenger activity levels at Logan Airport. Off-site motor vehicle emissions estimates are shown in Table 6.4-9 of the Supplemental DEIS/FEIR. Increases in the number of vehicles accessing Logan Airport are not analogous to increases in emissions. As indicated in the table, these emissions generally decrease in the future; as a result of improved motor vehicle emission standards.
117.21	Air Quality	Model	The "emissions gap" problem is heightened by the EIS's neglect of emissions outside of 1-95/128 and aircraft emissions at altitudes greater than 3000 feet.	The air quality analysis was conducted for motor vehicle traffic that can be reasonably distinguished from background traffic on the regional roadway network. Both on-site and off-site roadways are analyzed in Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR. A mixing height of 3,000 feet is standard for aircraft analyses.
117.22	Air Quality	Impacts	...Massport's EIS fails to acknowledge that a new runway will act to stimulate new growth and allow for expansion and is deficient in its assessment of the environmental impacts of Logan expansion.	The Preferred Alternative will not create additional passenger demand or flight operations at Logan Airport. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. Instead, Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The runway will substantially reduce delays that occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in future passenger and aircraft activity at Logan Airport. The environmental impacts associated with these alternative forecasts have been evaluated in the Logan Airport Airside analysis and GEIRs.

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117.23	Regional Transportation	Regional Airports	Massport and state authorities should replace the current Logan expansion plan with a regional transportation based on energy-efficient inter-city rail and improvement of the many other New England airports.	Refer to response to Comment 117.10.
117.24	Regional Transportation	Regional Airports	The state should initiate a true stakeholder involvement process to initiate the planning process for a regional transportation plan.	Since 1990, there have been several studies that have recommended regional initiatives to improve the efficiency of the region's inter-city transportation network. These studies reflect the cooperation of federal, state and local transportation agencies and stakeholders. Section 2.1 of the Supplemental DEIS/FEIR summarizes relevant regional planning studies and their conclusions. All studies have concluded that the Proposed Runway 14/32 and the other airside improvement projects at Logan Airport, along with increased use of the regional airports, including T.F. Green/Providence, Manchester and Worcester Regional airports, and high-speed rail services, are all necessary for accommodating the region's future inter-city air travel demand. Refer to discussion of the role of regional alternatives and steps Massport has taken to foster increased use of these alternatives in Chapter 2 of the Supplemental DEIS/FEIR. There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

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117.25	Environmental Review Process	MEPA	Massachusetts Department of Environmental Protection should ensure that EIS[EIR] fully address significant environmental problems.	Massport's mitigation measures are reinforced through compliance with M.G.L. Chapter 30A, Section 61 and through specific state and federal certificates approving projects that have mitigation. The status of the Section 61 Finding commitments are tracked and reported in the *Logan Airport 1999 ESPR* (previously GEIR).
117.26	Air Quality	Impacts	...[The EIS] fails to consider the impact that the a new runway will have on growth-related emission trends...Massport cannot back its assertion that "the overall impacts associated with the Airside Project Alternatives are beneficial or will remain imperceptible" from an air quality standpoint.	The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR and Appendix F. These inventories show that all Alternatives, including the No Action and Preferred Alternative, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM10) under any alternative and future year.
117.27	Air Quality	Model	...the analysis does not include aircraft emissions that occur at altitudes greater than 3000 feet...does not include emissions from motor vehicles driving to and from Logan Airport that lie beyond I-95/Route 128...does not...include specific hazardous air pollutants (HAP's) and PM2.5...	A mixing height of 3,000 feet is standard for aircraft analysis. The air quality analysis was conducted for motor vehicle traffic that can be reasonably distinguished from background traffic on the regional roadway network. Both on-site and off-site roadways are analyzed in Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR. Although HAPs are not specifically addressed, Section 6.8.7 of the Supplemental DEIS/FEIR includes a discussion of public health. Particulate Matter (PM) emission factors for aircraft are very limited, at best, and nonexistent in most cases. Therefore, as a conservative, worst-case assumption, the air quality analysis assumed that all PM is less than 10 microns in diameter. No emission factors or approximation methods are available for $PM_{2.5}$.
117.28	Air Quality	NAAQS	One of the most glaring deficiencies of the EIS is its failure to address the potential impact of emission trends...[it] says almost nothing about the impact of Logan emissions on ozone...makes no estimates of the impact of precursor emissions on ozone...fails to assess how the increases in NOx projected for Logan Airport will affect the state's ability to meet the new and stricter 8-hour average standard of 0.08 ppm.	Ozone analyses are conducted on a regional level and are not feasible for a single project. NO_x and VOCs, which are addressed in the Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR, are lower with the project alternatives, when compared to the No Action Alternative.
117.29	Air Quality	NAAQS	...the EIS fails to address a number a critical issues associated with NOx. These are...NOx is an important precursor to acid rain...NOx emissions to the atmosphere are an important source of nitrate deposition to coastal waters...NOx emissions may also form secondary particulate matter, which can impact the respiratory system....	The assessment of NO_x included in the Supplemental DEIS/FEIR shows a reduction in emissions from the Airside Project alternatives, when compared to the No Action Alternative.
117.30	Air Quality	Impacts	The EIS fails to present evidence on the particle size distribution of particles emitted from aircraft...[It] should also consider how this particle size distribution is modified as it moves through the urban atmosphere.	The FAA acknowledges that little or no information is known about the particle size distribution from aircraft emissions. For the purpose of this analysis, it was conservatively assumed that all particulate matter is less than ten microns in diameter.
117.31	Air Quality	Impacts	The Logan EIS presents no information on hazardous air pollutants and their potential impact on cancer rates in surrounding communities.	Refer to Response to Comment 117.3.
117.32	Ground Transportation	Access to Logan	The EIS does not sufficiently address the impact of its projected expansion rates on airport traffic.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
117.33	Regional Transportation	Regional Airports	The EIS fails to develop a regional transportation plan as a serious alternative to a new runway and continued expansion.	Refer to response to Comment 117.10.

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117.34	Open Space/ Parkland	Impacts	Runway 14/32 will triple the overflights and ruin the Arboretum for all our citizens.	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.
117.35	General Opposition		More runways mean more plane traffic which means more pollution and greater environmental damage.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.
117.36	Alternatives	Preferred Alternative	Why is it that I have to pay for an HOV lane on the Southeast Expressway that I can't use, but Massport says it can't limit puddle jumpers' access to Logan? Why not an "HOV airport?"	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.
117.37	General Opposition		Why does Massport calculate the value of passengers' time lost to delays, but ignore the economic costs Logan imposes every day on its neighbors?	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
117.38	Noise	Sound Insulation	Massport sent us...a letter telling us that we did not qualify for sound proofing. Massport says our home lies four houses away from the noise contour lines which Massport presently utilizes.	Massport continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR.*
117.39	Air Quality	NAAQS	Because of Logan, East Boston's air quality violates the Federal Clean Air Act....	The dispersion modeling results indicate no violation of the NAAQS (NAAQS) or, analogously, the CAA because of Logan Airport.

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117.40	Regional Transportation	Regional Airports	Regional planning-not runway expansion-should be implemented immediately.	Regional initiatives to improve the efficiency of the region's inter-city transportation network have been studied since 1989. Section 2.1 of the Supplemental DEIS/FEIR summarizes relevant planning studies and their major conclusions. A regional transportation strategy that includes the expansion of regional airports, the development of high-speed rail, and the construction of Runway 14/32 and other infrastructure improvements at Logan Airport has evolved from these important studies. All the major improvements to the regional transportation system have been implemented except for improvements to Logan Airport's airfield. The regional airports have been experiencing tremendous growth in services and passenger traffic since 1996 and Amtrak introduced its high-speed Acela train service between Boston and New York in December 2000. Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. While greater use of the regional airports and high-speed rail will provide relief to Logan Airport, the proposed Airside Project provides clear benefits at current, as well as future, traffic levels. The benefits will only increase in the future, even as regional transportation developments act to reduce the rate of future growth at Logan Airport.
117.41	Noise	Impacts	What is Massport's plan to help abutters live with the present noise and contamination?	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. Chapter 8 of the Supplemental DEIS/FEIR summarizes Massport's proposed project-specific mitigation program associated with the Preferred Alternative including: Runway 14/32 would be designed, constructed, and operated to handle over-water operations only. Massport would seek to construct Runway 14/32 to reflect unidirectional use. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. During the construction period an extensive array of traffic, air quality and noise mitigation measures will be employed to mitigate temporary construction impacts. A PRAS monitoring system to gather data and report on the actual achievement of PRAS. The objective of this system is to improve the FAA's achievement of the community's PRAS goals and to provide a broader platform for disclosure of the monitoring results. While not related to Airside Project impacts, Massport will commit to discussions with the FAA with the goal of instituting local or national restrictions on the use of hushkitted Stage 3 aircraft at Logan Airport. Massport reports the status of those consultations in the *1999 ESPR* and subsequent EDR. Massport is actively involved in many air quality initiatives and explored other options to reduce emissions from activities at Logan Airport in the *1999 ESPR*

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117.42	Air Quality	Impacts	I'm also concerned about the air pollution from the planes overhead. Is anyone thinking about the effects of that?	Aircraft emissions are evaluated to 3,000 feet. Beyond this height, emitted gases and particles are not expected to have substantial ground-level effects.
117.43	General Opposition		Sixty thousand jets over the South End are going to cause air pollution and if they want to fly any lower, there'll be no quality of life.	Emissions are shown to decrease with the Preferred Alternative when compared to the No Action Alternative. Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
117.44	Air Quality	Impacts	Eight years ago when I moved into my house in Winthrop, I could hear the airport, but now with the increase in air travel I can also smell the jet fuel, and tires burning from the landings.	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative. Massport is actively involved in many air quality initiatives and explored other options to reduce emissions from activities at Logan Airport in the *Logan Airport 1999 ESPR* (previously GEIR).
117.45	General Opposition		...a family who grew up in the same house near the airport, at least three of us have gotten asthma.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop.A review of the available information did not indicate any causal relationship based on proximity to the airport. The 1999 Massachusetts budget included $150,000 to fund an environmental assessment of the health impacts of Logan Airport on any community located within a five-mile radius of the airport. The final protocol for the study is being developed. The study is expected to be completed in summer 2002.
117.46	Noise	Impacts	The FAA's threshold of 65 decibels does not accurately assess how many people are disturbed by aircraft noise.	A noise exposure of 55 to 65 dB DNL is believed to be generally compatible with residential land use, although the expected percentage of the population to be highly annoyed ranges from four percent at the 55 dB end of the range to 15 percent at the 65 dB end. Exposure to 65 to 75 dB DNL is considered marginally compatible with residential land use with residential structures that have a 25 to 30 dB noise level reduction. In this higher noise exposure range, the expected percentage of the population to be highly annoyed varies from 15 percent at 65 dB to 37 percent at 75 dB.
117.47	Noise	Mitigation	No remedy was given [in the Draft EIS/EIR] for the structural damage due to low-flying aircraft vibrating homes, school buildings, monuments, and industrial infrastructures within the affected communities.	Neither Massport nor the FAA is aware of any evidence to support the contention that structural damage has ever occurred due to overflights. Noise-induced vibration levels from aircraft, though they may cause rattling, are normally less than footfalls produced by people walking through their own homes.

Code	Topic 1	Topic 2	Comment	Response
117.48	Environmental Justice	Impacts	...if the plan is implemented, there will be a disproportionate and exorbitant increase in flights over poorer communities such as sections of Chelsea, East Boston, Everett, and Roxbury.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.
117.49	Open Space/ Parkland	Impacts	The Harbor Islands recreational area will suffer significant noise impact.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
117.50	Analysis Assumptions/ Methodologies	Base Year	...emission predictor uses 1993 as a contrast item...the predicted emission reductions for year 2010 are undoubtedly minimized to favor a lesser environmental impact.	The Supplemental DEIS/FEIR includes updated operational and environmental analyses of 1998 conditions similar to that contained in the *1998 Annual Update* prepared in October 1999. While the *1999 ESPR* published in December 2000 includes updated analyses for 1999, the differences between the two study years are small. Between 1998 and 1999, operations declined by 2.5 percent, primarily due to a decline in regional carrier operations. Since the fleet mix and runway use varied little, the shape of the noise contours and the population impacts were also similar, with slightly less impact in Winthrop and Boston and slightly more impact in Chelsea and Revere in 1999 compared to 1998. The air quality and other environmental analyses also yielded similar results. Since the relevant comparison for evaluating the proposed airside improvements is the comparison between the No Action and Preferred Alternatives, and since 1998 and 1999 are similar in terms of passengers, operations, and environmental impacts, this Supplemental DEIS/FEIR maintains the 1998 modeling analysis as a representation of recent conditions at Logan Airport.
117.51	Air Quality	Model	...the proposed action model predictor uses alternative 1 to attain this analytical profile...Since plan 1 was rejected in favor of plan 1A, these data do not necessarily fit the report's final conclusions....	The air quality assessment was conducted for the No Action Alternative (Alternative 4) and Alternative 1 (the Preferred Alternative with PPP) because the full range of potential air quality effects is bracketed by Alternatives 1 and 4. Alternative 1 results in the same air quality conditions as the Preferred Alternative (Alternative 1A).
117.52	Air Quality	Impacts	The additional combustion of gasoline and oil will increase the total Volatile Organic Compounds or Hydrocarbons (VOCs) in the atmosphere.	Although VOC emissions increase over time because of increased aircraft operations activity at Logan Airport, emissions are lower with Alternatives 1 and the Preferred Alternative, when compared to the No Action Alternative. The decreases are attributable to both the proposed Runway 14/32 and the taxiway improvements.
117.53	Air Quality	Impacts	The projected increase in passenger volume to 45 million by 2010 will have an adverse effect on the local transportation and air quality by increasing the overall level of ozone in the airport region and on roads leading to the airport.	Although ozone dispersion modeling is not possible for the Airside Project (because ozone, which is not directly emitted but formed through reactions, modeling must be done on a regional basis), emissions and dispersion of ozone precursors were calculated. The NO_x and VOC emissions from the Airside Project have been compared to the federally set *de minimis* levels for an ozone non-attainment area. Project-related emissions, which include local transportation emissions, have been found to be *de minimis*.

Code	Topic 1	Topic 2	Comment	Response
117.54	Air Quality	Impacts	Local airport traffic will also add to the problem of Carbon Monoxide (CO) emission.	The Airside Project does not result in additional aircraft operation or passenger demand for ground access services, since the project will not induce additional passenger demand. Refer to the *Logan Airport1994/95 GEIR* which includes Massport's Ground Access Management Plan and forecasted Vehicle Miles Traveled for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis.
117.55	Air Quality	NAAQS	Benzene, dioxin, toluene, xylene, and formaldehyde are known to be toxic and carcinogenic even at minute concentrations. None were monitored individually in the draft EIS/EIR study.	Toxic or hazardous air pollutants are discussed in Section 6.4 of the Supplemental DEIS/FEIR.
117.56	Air Quality	Impacts	Lead emissions were not assessed by the draft report...the lack of sufficient epidemiological and long-term health impact analysis due to these pollutants on people in affected communities is troubling.	Lead, in general, is not associated with airport emissions. The phasing out of leaded gasoline in motor vehicles means that this compound is no longer a problem in most of the United States. Issues related to health are discussed in Section 6.8 of the Supplemental DEIS/FEIR.
117.57	Ground Transportation	Impacts	The expected increase in traffic load will go on for years and will add to the already overly congested roads that lead to and from the airport.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
117.58	Analysis Assumptions/ Methodologies	Base Year	The draft report chose 1993, a year in which flights peaked and Logan was overcrowded, as a base year for statistical comparison.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
117.59	Alternatives	Peak Period Pricing	The Michael S. Dukakis Administration in 1989 imposed a form of peak period pricing which dropped congestion dramatically at the airport, thus, putting doubt on the draft report's contention that Peak Pricing is not helpful.	The impacts of the Program for Airfield Capacity Efficiency (PACE) are described and evaluated in Section 3.5.1 of the Supplemental DEIS/FEIR.
117.60	Purpose and Need	Delay	...even if short delays are excessive, the US Department of Transportation confirmed that delays are not unusual for major airports, even for state-of-the-art facilities like Denver's Centennial airport, which had 29% of its flights delayed last year. According to FAA data, the delay situation at Logan has improved since 1993 and is essentially in equilibrium.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion by addressing constraints at Logan Airport. Delays caused by conditions at other airports or other factors, such as mechanical failure, are not addressed since Massport cannot influence these delays. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays which would be directly affected by Runway 14/32 have risen steadily since 1994.

Code	Topic 1	Topic 2	Comment	Response
117.61	Noise, Air Quality	Impacts	The proposed runway would adversely affect the noise and air quality in surrounding communities and seriously prevent or hamper many redevelopment efforts currently underway.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
117.62	Noise	Impacts	The widespread broadening of flights over many neighborhoods would increase noise impact to intolerable levels.	There is no change in the flight paths over most of the neighborhoods. The only changes in flight paths are associated with new Runway 14/32 and these changes occur primarily over water, not over neighborhoods.
117.63	Noise	Impacts	The draft's conclusions are drawn based on data models that fail to analyze true health impacts or to assess meaningful noise measurements.	The models used for the air quality analyses (emissions inventory and dispersion modeling) are EPA- , DEP-, and FAA-approved. The dispersion modeling allows impacts to be compared to the NAAQS (NAAQS), which are designed to protect human health and welfare, including sensitive groups. There were no violations of the NAAQS for any alternative. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights.
117.64	Air Quality	NAAQS	The EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that any increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult....	DEP recently submitted a demonstration of an ozone (one-hour average) attainment plan to the U.S. EPA. This plan includes current Logan Airport-related emissions and all other emissions in Massachusetts. It is expected that DEP will be able to continue to include airport-related emissions, which show Massport's emission reduction measures, in the ozone attainment plan.

Code	Topic 1	Topic 2	Comment	Response
117.65	Alternatives	Peak Period Pricing	Peak Period Pricing [should be] considered.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5.4 of the Supplemental DEIS/FEIR.
117.66	Environmental Justice	Impacts	Most troubling is the disproportionate, biased, and significant increase in air traffic over low-income and minority communities of East Boston, Chelsea, Everett, and Roxbury.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
117.67	Noise	Studies	The report often failed to reference the appropriate tables for the graphs shown.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
117.68	Regional Transportation	Regional Airports	To obviate the build option, a regional solution should be adopted.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
117.69	Public Health	Effects	Failure to see the environmental impact of the build option will condemn hundreds of thousand of local residents to living with deteriorating medical, social, and environmental conditions.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport. The 1999 Massachusetts budget included $150,000 to fund an environmental assessment of the health impacts of Logan Airport on any community located within a five-mile radius of the airport. The final protocol for the study is being developed. The study is expected to be completed in summer 2002. Emissions are shown to decrease with the Preferred Alternative when compared to the No Action Alternative.
117.70	Alternatives	Runway 14/32	Given Massport's history at keeping promises, it current assurance that runway 14/32 will be unidirectional is dubious at best....	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
117.71	Public Health	Effects	...Massport...has not addressed the long-term and cumulative impact of pollutants on our health and the environment in a satisfactory manner.	Refer to response to Comment 117.9.
117.72	Environmental Justice	Impacts	The FAA and Massport have failed to make even minimal efforts to avoid impacts to these protected communities.	Refer to response to Comment 117.66.

Code	Topic 1	Topic 2	Comment	Response
117.73	Regional Transportation	Regional Airports	A regional approach to reducing the ground and air traffic loads is needed...Any credible model for pollutant reduction includes efforts such as replacing short haul air traffic and its associated ground automobile traffic with electrified high speed rail.	Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.

Thomas A Kershaw Remarks

April 7, 1999: 6:00 pm
State Transportation Building : Conference Room 5 & 6

LETTER 118

Hampshire House restaurant calls for action on Logan Airport unidirectional runway 14/32

- The proposed Logan Airport runway 14/32 is critical to the health of Boston's future convention and business travel - and restaurants that depend on the visitor industry -and I urge state and federal officials to move forward on approval of this project. 118.1

- **If we do not act on this now we will be making a multi-*billion* dollar mistake on Boston's future**

- Our competitive position as a leading visitor destination is *directly* tied to the ability of Logan Airport to handle the region's air service needs. The new 14/32 runway will be critical in reducing delays and making Logan Airport more efficient

- **The success of the new $700 million convention center, that will open in the Seaport District in late 2003, depends on the efficiency of Logan Airport.**

- If the delay problem is not addressed, it will cripple our efforts to attract and retain conventions, meetings and business travelers to Boston. At the very time when the new convention center will open delays at Logan International Airport will have grown to the point that will be unacceptable to meeting planners. As the new center reaches peak efficiency - attracting more than 300,000 visitors a year - Logan will become a national disgrace- with delays up to 54 minutes per flight!

- I support the development of a comprehensive regional airport system and the growth of Providence, Manchester and Portland Airports--as well as the high-speed rail system from New York to Boston that debuts later this year. 118.2 118.3

- Nevertheless- Logan remains the hub of the region's transportation system for business travelers and for the convention and meetings market and the success-or failure of the industry and restaurants like Hampshire House depend on an efficient Logan Airport.

Letter 118
Thomas A. Kershaw
Hampshire House

Code	Topic 1	Topic 2	Comment	Response
118.1	Purpose and Need	Delay	The proposed Logan Airport runway 14/32 is critical to the health of Boston's future convention and business travel — and restaurants...Our competitive position as a leading visitor destination is directly tied to the ability of Logan Airport to handle the region's air service needs.	Comment noted.
118.2	Regional Transportation	Regional Airports	I support the development of a comprehensive regional airport system and the growth of Providence, Manchester and Portland Airports....	Comment noted.
118.3	Regional Transportation	Passenger Rail	...[I support the] the high-speed rail system from New York to Boston that debuts later this year.	Comment noted.

INTERNATIONAL UNION OF LOCAL 4 OPERATING ENGINEERS AFL-CIO

120 Mount Hope Street
Roslindale, Massachusetts 02131
Area Code (617) 323-9300
FAXphone (617) 323-7821

William P. Ryan, Business Manager

LETTER 119

April 22, 1999

Mr. Arthur Pugsley - EOEA No. 10458
M E P A Office
100 Cambridge Street, 20th Floor
Boston, MA 02205

Attention: Secretary of Environmental Affairs

Dear Mr. Pugsley:

The International Union of Operating Engineers, Local 4, is writing today in support of the Massachusetts Port Authority's Airside Improvement plan for Logan International Airport. Local 4 firmly believes this project is necessary to reduce delays, improve the quality of life of our memgbers and provide much needed employment opportunities. 119.1

Delays at Logan are consistently among the worst in the United States. These delays are not only inconvenient, they are costly. In 1998 delays at Logan cost airlines and their passengers nearly $310 million. These losses ultimately affect the livelihood of many working men and women as it impedes the ability of Boston and the region to compete in a global economy.

A major component of the Airside Improvement Project, Runway 14/32, provides significant noise relief our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area. The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities. The proposed centerfield taxiway and other improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxing aircraft to adjacent neighborhoods. 119.2

With an annual economic impact of $5 billion, Logan International Airport is directly responsible for creating more than 15,000 jobs in this area, many of which are the hard working men and women of the International Union of Operating Engineers.

It is therefore, without reservation, that Local 4 wholeheartedly supports Airside Improvements at Logan Airport and eagerly looks forward to the projects approval.

Thank you for your attention to this matter

Sincerely yours,

William P. Ryan,
Business Manager

Letter 119
International Union of Operating Engineers – Local 4
William P. Ryan, Business Manager

Code	Topic 1	Topic 2	Comment	Response
119.1	General Support		Local 4 firmly believes this project is necessary to reduce delays, improve the quality of life of our members and provide much needed employment opportunities.	Comment noted.
119.2	Noise	Runway Use	...Runway 14/32, provides significant noise relief for our members living in the highest impacted noise areas of East Boston's Bayswater, Revere's Beachmont and Winthrop's Court Road and Point Shirley as well as South Boston's Castle Island area.	Comment noted.

Iron Workers District Council of New England

International Association of Bridge, Structural
& Ornamental Iron Workers
AFL-CIO

JOSEPH M. QUILTY, PRESIDENT
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LOCAL No. 7
Boston, MA

LOCAL No. 37
Providence, R.I.

LOCAL No. 57
Worcester, MA

LOCAL No. 357
Springfield, MA

LOCAL No. 474
Manchester, N.H.

LOCAL No. 496
Portland, Maine

LOCAL No. 501
Boston, MA

LOCAL No. 523
Pawtucket, R.I.

LOCAL No. 745
Portsmouth, NH

LOCAL No. 807
Winslow, Maine

LETTER 120

April 22, 1999

Mr. John C. Silva
Manager, Environmenta Programs
Airports Division
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Silva:

I am writing today on behalf of the International Association of Bridge, Structural, Ornamental and Reinforced Iron Workers to voice our strong support for the Massachusetts Port Authority's Airside Improvement plan for Logan International Airport. The Iron Workers District Council firmly believe this project is necessary to reduce delays, improve the quality of life of our members and provide much needed employment opportunities. 120.1

I personally have had many problems getting into Logan. In my last six (6) flights into Logan Airport, my plane was put into a holding pattern just flying around waiting for a runway to open. On a trip from Denver, we were in a holding pattern so long that we started to run out of fuel and had to go to Rhode Island to refuel.

This is not the way a big City like Boston can encourage people to visit our fair city if they are continuously held up by delays, etc.

Logan Airport is constantly building and expanding. Those who have built hotels, etc., depend on the growth of this airport. They can neither grow or expand if traffic is re-routed to another airport.

Mayor Menino worked hard trying to get the National Democratic Convention. If he was successful, how would we have handled the many people coming from all over the Country. Would we send them to Manchester, N.H. or Providence, R.I. and tell them to drive from there?

I know that many of the residents in the town surrounding the airport are concerned and are opposed to a third runway. However, people in those towns still buy homes and open businesses knowing fully well that the airport is there.

The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities, in accordance with community noise goals. The proposed centerfield taxiway and other taxiway improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxing aircraft too close in neighborhoods. 120.2 120.3

Logan International Airport is directly responsible for creating more than 15,000 jobs in this area, many of which are the hard working men and women of the Iron Workers Union.

It is therefore, without reservation, that the Iron Workers District Council wholeheartedly support's Airside Improvements at Logan Airport and eagerly looks forward to the projects approval.

With best wishes, I remain

Sincerely,

Joseph M. Quilty
President

JMQ/gf

Letter 120
Iron Workers District Council of New England
Joseph M. Quilty, President

Code	Topic 1	Topic 2	Comment	Response
120.1	General Support		The Iron Workers District Council firmly believe this project is necessary to reduce delay, improve the quality of life of our members and provide much needed employment opportunities.	Comment noted.
120.2	Noise	Runway 14/32	The new unidirectional Runway shifts 75,000 flights over water rather than over communities. It also allows noise impacts to be spread more equitably across communities, in accordance with community noise goals.	Comment noted.
120.3	Air Quality	Taxiway Improvements	The proposed centerfield taxiway and other taxiway improvements would further enhance air quality by reducing aircraft idling and queuing on the airfield and reduce ground noise from taxing aircraft too close in neighborhoods.	Comment noted.

Neighborhood Association
C/o Ms. Karen M. Maddalena
4 Lamson Street
East Boston, MA 02128

LETTER 121

April 21, 1999

'Executive Office of Environmental Affairs
ATTENTION MEPA OFFICE
Mr. Arthur Pugsley #10458
100 Cambridge Street, Room 2000
Boston, MA 02202

Dear Mr. Pugsley:

On Monday, February 8, 1999, the Jeffries Point Neighborhood had its monthly meeting. Peter Blute, Executive Director of Massport and his staff were present at this meeting. They gave a presentation on the proposed New Runway and Taxiway 14/32. After the presentation an open dialogue took place between Mr. Blute, his staff, and the participants.

A motion was made to oppose the construction of the New Runway and Taxiway 14/32 a vote was taken, (there was 150 people present) the vote was unanimous.

The Jeffries Point Neighborhood Association has united with other neighborhoods and other communities in strong opposition to the **new runway/taxiway proposal** being made by Massport. Representatives from the JPNA and citizens have been actively meeting with our state and federal government legislators to discuss our concerns regarding this specific proposal, as well as the core problem of dealing with the projections for significant increases in air traffic demand for the region.

Massport has pitched the Runway 14/32 proposal as providing some relief to some areas of East Boston and distributing the impact all over East Boston Winthrop at the expense of Boston and other communities. Even if true, and we have serious doubts, it would only be short-term relief. We are concerned about the entire Boston area as well as the surrounding communities. Regardless of a new runway, and according to Massport's own projections, demand for passengers and aircraft to come to the area is expected to grow significantly, and flight delays are expected to soar. As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in **extreme danger!**

Please know that we support economic growth for Boston, the Commonwealth and New England. We are working closely Mayor Thomas Menino, City Councilors P. Scapacchio, P Mullen, F. Roche, S. Murphy, Senator Travaglini, Congressman Markey, Congressman Capuano and others in support of potential solutions to the regional air transportation problem, such as secondary airports, etc. There are answers to the problem, which could bring economic benefit outside of Boston, but trying to increase capacity at Logan is not the answer. Such a course would be severely detrimental to those of us who call the Boston area home and, ironically, to those visitors expected to fly here as well. Our health and safety are already at great risk. Our burden has increased each year. We cannot accept more!

Listed below are the some of reasons we think that Massport's draft environmental impact study (EIS/EIR0 is flawed:

- Massport's draft environmental impact study (EIS/EIR) did not rigorously explore all reasonable alternatives. 121.1
- Massport supported its conclusions with outdated studies and figures.
- There can be not guarantee of "unidirectional use" of Runway 14/32. This is an FAA decision and the FAA is making no such guarantee 121.2
- FAA modeling was not used. FAA data shows delay reduction since 1993. Massport's delay figures are inflated. 121.3
- **Affected communities were not given fair consideration we will bet 23,000 more flights over our heads annually. Soundproofing cannot mitigate the impact of this increase in noise and air pollution.** 121.4
- 121.5

Huge issues such as air pollution and respiratory health, unequal impacts, secondary ground traffic and others are ignored or glossed over, enough so that in truth, on might well ask if there is anything good to be said about it. Y 121.6

Sir, we need your attention to this issue. We ask that you listen to our concerns and protect the **Quality of Life in our Community**, hear our concerns regarding our health and the environmental impact of this proposal. There are serious questions regarding the adequacy, quality and reliability of information supplied by Massport. Additional

understand that the quality of life of Boston area residents is threatened. We need your help!

Respectfully,

Karen M. Maddalena
Chairperson

Letter 121
Jeffries Point Neighborhood Association
Karen M. Maddalena, Chairperson

Code	Topic 1	Topic 2	Comment	Response
121.1	General Opposition		A motion was made to oppose the construction of the New Runway and Taxiway 14/32 a vote was taken, (there was 150 people present) the vote was unanimous.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
121.2	Environmental Review process	MEPA	Massport's draft environmental impact study (EIS/EIR) did not rigorously explore all reasonable alternatives.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
121.3	Analysis Assumptions/ Methodologies	Base Year	Massport supported its conclusions with outdated studies and figures.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Harold\D07465\Docs\Reports\Recirculated Comments & Responses\Letters Groups 1.doc

Code	Topic 1	Topic 2	Comment	Response
121.4	Alternatives	Runway 14/32	There can be no guarantee of "unidirectional use" of Runway 14/32. This is an FAA decision and the FAA is making no such guarantee.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
121.5	Delay	Model	FAA modeling was not used. FAA data shows delay reduction since 1993. Massport's delay figures are inflated.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

Code	Topic 1	Topic 2	Comment	Response
121.6	Noise	Sound Insulation	Soundproofing cannot mitigate the impact of this increase in noise and air pollution.	While sound insulation does not mitigate exterior sound levels, it is a widely accepted measure considered appropriate for general mitigation of noise impacts. Sound insulation reduces noise inside the home. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative. The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR and Appendix F. These inventories show that all Alternatives, including the No Action and Preferred Alternative, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.
121.7	Public Health	Effects	Huge issues such as air pollution and respiratory health, unequal impacts, secondary ground traffic and others are ignored or glossed over, enough so that in truth, one might well ask if there is anything good to be said about it.	Noise was identified as the only off-airport impact from the Preferred Alternative (refer to Section 6.2 of the Supplemental DEIS/FEIR for a discussion on noise impacts). Because of improved airfield efficiency and shorter delay periods, the Preferred Alternative is projected to slightly reduce air emissions when compared to the No Action Alternative. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8.7 of the Supplemental DEIS/FEIR. A review of the available information did not indicate any causal relationship based on proximity to the airport. Construction will be managed to minimize air, noise and other impacts to the adjacent communities. All construction vehicles will be required to use designated truck routes and avoid local streets.

LETTER 122

Jeffries Point Neighborhood Association
C/o Ms. Karen M. Maddalena
4 Lamson Street
East Boston, MA 02128

April 21, 1999

Executive Office of Environmental Affairs
ATTENTION MEPA OFFICE
Mr. Arthur Pugsley #10458
100 Cambridge Street, Room 2000
Boston, MA 02202

Dear Mr. Pugsley:

Enclosed in this package are petitions and letters from the Jeffries Point community and impacted communities. The people who signed these petitions and letters are concerned about the expansion of Logan Airport and the environmental issues caused by this expansion..

Listed below are the some of reasons we think that Massport's draft environmental impact study (EIS/EIR0 is flawed:

- Massport's draft environmental impact study (EIS/EIR) did not rigorously explore all reasonable alternatives. 122.1
- Massport supported its conclusions with outdated studies and figures. 122.2
- There can be not guarantee of "unidirectional use" of Runway 14/32. This is an FAA decision and the FAA is making no such guarantee 122.3
- FAA modeling was not used. FAA data shows delay reduction since 1993. Massport's delay figures are inflated. 122.4
- **Affected communities were not given fair consideration we will bet 23,000 more flights over our heads annually. Soundproofing cannot mitigate the impact of this increase in noise and air pollution.** 122.5
-

Huge issues such as air pollution and respiratory health, unequal impacts, secondary ground traffic and others are ignored or glossed over, enough so that in truth, on might well ask if there is anything good to be said about it. 122.6

Sir, we need your attention to this issue. We ask that you listen to our concerns and protect the **Quality of Life in our Community**, hear our concerns regarding our health and the environmental impact of this proposal. There are serious questions regarding the adequacy, quality and reliability of information supplied by Massport. Additional health/environmental studies are needed to access the damage already caused by Logan Airport. We ask you to understand that the quality of life of Boston area residents is threatened. We need your help!

Respectfully,

Karen M. Maddalena
Chairperson

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further **erode our quality of life.** It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Phyllis Mann	253 Bremen St	East Boston Mass
Mary Albano	118 Webster St	East Boston Mass
Anna Rizzo	78 Havre St	East Boston
Marie Mckeon	78 Havre St	East Boston Mass
Lemetilde Mié - Lourdes Mendez - Petronila Rodrigue		
168 Chelsea ave #2	Chelsea Ma. (02150)	
Mary Pozzie	284 Sumner St	E. B. Mass 02128
Patricia Sumner St.	30 Walden St	Everett
Clotilde Keegan	8 Trajacobard	E Boston
Angelina Sullivan	4 Marginal St.	E.B.
Jane Concelos	284 Sumner St	E B
Victor Embros	124 Chestnut	Chelsea
Maria Rocco	124 Chestnut	Chelsea
Elena Allen	154 Bennington St.	Chelsea
Frances Impot	176 Bremen St	East Boston
Janet Lanzisera	757 Sumner ST	E Bos
Rose marie Roberts	131 Webster St	E.B.

1 of 26

Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
Mrs (Domenic) Carmela D'Amore	62 Haynes St 02128 E. Boston MA
Tony Scarpetta	363 Maverick St, E. Bo
A—— V. D'A——	3801D landing way
William Rachford	73 Oswalford Way
Josie Costa	133 Cottage St E B.
Nella Guarino	54 Orleans St E. B.
Rose Catena	54 Orleans St EB Mass
Millie Quintiliani	52 Jaynes Ave E B
Theresa Le Rossa	481 Sumner St. E.B
Madeline Tino	298 Marginal St EB.
Ellen T. McColgan	30 South Bremen St EB
Esta Bruno	54 Orleans St EB Mass
Angelina Scarpetta	363 Maverick St E. B. M.
Barbara LaPia	56 Haynes St E. B. Mass
Josiane Romero	62 Haynes st E.B. Mass
Domenic D'Amore JR.	62 Haynes St. E.B
Anthony D'Amore	62 Haynes St. E.B
Joseph D'Amore	62 Haynes St E. B, Mass.
J Coakley	106 Marginal St East Boston
Rita Valenti	112 Marginal St E. Boston
Louis Valenti	112 Marginal St E Boston

2 of 26

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
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Name	Address	City or town
Shawki Saleh	418 B SUMNER St	E Boston
THOMAS CLACKETT	418 SUMNER ST	E. BOSTON
MELINDA JONES	"	"
JESSA KNIGHTS	"	"
GREG COUCON	"	"
ERIC MURPHY	"	"
Rose Marie Doyle	52 Jeffries ST	E B
Angela Biscitelli	60 Trenton St	E B
Kathy Mark	CHELSEA MASS	
Danielle Velasquez	LYNN MASS	
Helen Cheros	1 Lamson Ct.	E.B.
Dorothy M Leary	247 Webster St.	E.B.
Mary Cogswell	175 Coleridge St	E.B.
Richard Hutchinson	175 Coleridge St	E.B.
Rita Todisco	52A Marion St	E B
Rita Todisco	115 Bennington St	E.B
Joanne Nugent	176 Coleridge St	E.B

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Jeffries Point Neighborhood Association and Impacted Communities

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NAME	ADDRESS
Lillian Frare	72 Gladstone St. E. B.
Norma Wyatt	79 Winthrop St. Winthrop
Margaret Pond	101 Addison St. E.B.
Josephine Forgione	198 Leyden St EB Mass.
Gloria Dempsey	141 Pomona St. Revere
Rita Sullivan	46 Carleton St Revere
Josephine Powers	810 Border St E.B.
Lucy Perkins	Washington St Revere
Rose Cambria	105 addison St E.B.
Louis Mavotta	951 SARATOGA ST. E.B.
Mary E Albanese	121 Princeton St E.B.
Joseph Forgione	198 Leyden St E.B.
James E Mullen	49 W. Eagle St E.B.
Clara L White	49 W. Eagle St. E.B.
Angelo Faro	72 Gladstone St - E.B.
Joseph & LeBlanc	Saratoga ST
A. Teresa Gallotta	Bennington St EB
Anne Gallotta	557 Bennington St E B
Del Marrie	
Elena M. Vitale	20 Trenton St. E.B.
Elizabeth D'Angelis	176 Brooks St E.B.

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Jeffries Point Neighborhood Association and Impacted Communities

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NAME	ADDRESS
Stephen Tarrone	76 Trenton st Unit 1 Revere 7
Carmen Vee Lucci	192 Cottage St. E.B.
[illegible]	234 Bennington St. E.B.
Anthony Paolucci	37 Haynes St. East Boston
Anthony J. Amato	33 NEP. CIR. E. BOS.
[illegible]	132 Saratoga St E. B. Mass
Fred A Pecaro	5 Walden Winthrop, Ms
Joseph Martell	286 Revere St. Revere Mass
Phyllis J. Spatuzza	599 Bennington E Boston
John J. Sabatis	73 Maverick St E.B.
Thomas B. Shea	6 Bisbee Rd Saugus, Mass
Charles Falino	255 Bradst. Ave Revere
[illegible]	63 C FERRY ST. E Boston
Barbara J Starkis	274 Western Ave, Lynn, MA 01904
Liz Kelly	46 Sargent St. Winthrop, Ma, 02152
[illegible]	114 Richard St Dudley, MA
Arnold Speech	5 Cloverdale Rd Milford
David B Richardson	10 Sheridan Terr. Swampscott, Ma. 01907
Wilfred L Green	17 Morgan St Lynn 01905
Glenn McGrand	2 Rogers Ave Lynn
L J Barrett	37 Castle Malden
Sergeant Lewis	4 Goodwin Ave. Revere

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further erode our quality of life. It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Richard Nugent	176 Coleridge St	E.B.
Joseph Tarantino	177 Coleridge St	E.B
Nancy Tarantino	177 Coleridge St	E.B
[illegible]	4 LAMSON ST	E.B
Angela Bottelli	5 Lamson St	E.B
[illegible]	5 Lamson St	E.B
[illegible]	5 Lamson St	E.B
[illegible]	5A Saratoga St	East Boston
[illegible]	7 Noble Ct.	East Boston 02128
[illegible]	" " "	"
Jennie Chiella	256 Marion St	E.B.
[illegible]	60 Homer Street	East Boston, MA 02128
[illegible]	44 Fairview	Winthrop
[illegible]	352 Saratoga St	EB
[illegible]	261 Newbury St	Peabody, Mass 01960
Jane McManus	24 Neptune Cir	EAST B.

6 of 26 ✓

Jeffries Point Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
Maria Afonso	1 Lamson St. E Boston
Lisa Marcelli	1 Lamson St E Boston
Marlene Paglucia	159 Maverick St. E Boston
Peter Cosmo	1 Lamson St E Boston
Mary Ann Pardi	35 Everett St. E. B.
Anna Pardi	33 Everett St. E B.
Joseph Pardi	35 Everett St. E. B.
Ken Ruben	35 Everett St E.B.
Richard Paglucia	159 Maverick St. E Boston
Joseph Cosmo	37 Lincoln St. E. Boston
Lisa Paglucia	217 Lincoln St E Boston
Dan Clark	9 Lamson St E. Boston
Joe O'Neil	7 Lamson St E. Boston
Paul Marcelli	1124 Bennington St E Boston
Mary Johnston	140 Wordsworth St E Boston
Judy Ortiz	178 Faywood Ave E. Boston
Kitty Cosmo	217 Lexington St. E. Boston

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Jeffries Point Neighborhood Association and Impacted Communities

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NAME	ADDRESS
[illegible] Cipriano	17 Lamson St. E. Boston
[illegible] Marcello	[illegible] Lamson St E. Boston
Marlene Pagliuca	159 Maverick St. E. Boston
Peter Cipriano	17 Lamson St E. Boston
Mary Ann Pardi	35 Everett St. E. B.
Angie Pardi	35 Everett St. E.B.
Joseph Pardi	35 Everett St. E.B.
Ben Ribeiro	35 Everett St E. BOSTON
Richard Pagliuca	159 maverick st. E. BOSTON
Theresa Sousa	37 Princeton St. E. Boston
Ann Pagliuca	247 Princeton St E. Boston
Lauren Clark	9 Lamson St E. Boston
Joe D'Meo	7 Lamson St. E. Boston
Paul Marcello	1124 Bennington St. E. Boston
Mary Johnston	140 [illegible] Wordsworth St E. Boston
Sandra Ortiz	179 Fayerweather E. Boston
Ruth Sousa	247 Princeton St E. Boston
Michele DeMeo	174 Bayswater St. E. Boston

8 of 28

Jeffries Point Neighborhood Association and Impacted Communities

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NAME	ADDRESS
Jerry Demenmonstier	242 EVERETT. ST. E.B
Marie R. Demenmonstier	242 Everett St E Bo.
Colette Demenmonstier	242 Everett St E.B.
Robert Osburn	444 Sumner St, East Boston Ma. 02128
Margaret L. Osburn	444 Sumner St. East Boston Ma.
[illegible]	154 Sumner St. E. Boston, Ma.
Joseph F. Gorham	347 Sumner St E Boston
Ozan Mut	21 Jeffries ST. EB
[illegible]	234 Sumner St.
John Sarcillo	244 Leyden St E
Gina Barry	194 Leyden St E. B
KATHIE JULIANO	194 Leyden St E. B.
Dolores J LAMATTINA	7 DRAKE PLACE E.B.
Mary Roach	77 Drake Place E.B.
[illegible]	49 WALDEMAR AVE WINTHROP
Carol Mangano	52 Fillmore St Revere. Ma.
Mercedes	90 Lovell Winthrop Ma
Beverly Barnes	690 Saratoga St E Boston
Robert E Barnes	690 Saratoga St East Boston
Lillian Comerford	20 Meadow Brook Rd Lynn MA
Evelyn Comerford	20 Meadow Brook Rd Lynn
Ann Lawrence	512 Bennington St E. Boston

9/15/04

Jeffries Point Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
John Lawrence	512 Bennington St.
Shelma Cacchiotti	19 Lamson St. E 13
Chris Cacchiotti	19 Lamson St. E 13

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Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

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Name	Address	City or town
Theresa Donato	111 Everett	E. B.
Dana C. Wyllie	72 Marginal ST	E.B.
Marion Wyllie	72 Marginal ST	E.B.
George J. Gambale	21 Lamson St	W. Roxj

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Jeffries Point Neighborhood Association and Impacted Communities

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Name	Address	City or town
Susanna Moscaldi	Sears ST.	E.B.
Charles Thompson	86 Bellingham st	Chelsea
Teddy Dahl	17 Decker st	E.B.
[illegible]	226 Saratoga	E.B.
[illegible]	102 Paris	E.B.
Jason Baker	226 Saratoga	E.B
[illegible]	120 Everett st	E B
Justin DeFreitas	120 Everett st	E.B.

1/2 of 26

Jeffries Point Neighborhood Association and Impacted Communities

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Name	Address	City or town
Viola Bertulli	1111 Saratoga St	E B
Martha Campos	132 Marginal St	E B
Anna M Emmons	54 Roden	E B
Sarah Burgoine	361 Sumner St	E B
Nancy Brown	71 Leyden St	E. Boston
Cynthia Weis		E Boston
Jon Malone	58 Jasper	Saugus
Phyllis Cicolini	64 Halstead St	Saugus
Ron Forgett	5 Fairmont Pl	Saugus
Jeanne Scaduto	66 Webster St	E.B.
Mario Scaduto	66 Webster St	E B.
Rita Valente	112 Marginal St.	E B.
Don Valente	112 Marginal St.	E B.
Karen Siciliano	94 Webster St.	E B.
Alfred Siciliano	94 Webster St	E B
Jeanne Belmonte	66 Webster St	E B
John Belmonte	66 Webster St	E B.

Jeffries Point Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
Carmella Lightbody	537 Bennington St. E. B
Mary F Rennie	16 Walley St E. Bosi
Harrison J Fisher	54 Genesee St Revere
Dorothy Gagnon	
Lucy Sacco	41 Lamson St. East Boston

Jeffries Point Neighborhood Association and Impacted Communities

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NAME	ADDRESS
Tannis Tavares	422 Sumner St East Boston
Jay Benson	210 Webster St EB 02128
Theresa Cepeiras	17 Lamson St. E. Boston
Joseph J. Mason	44 Everett St E. Boston
Virginia McColgan	467 Sumner St E Boston
Mary E. Siracusa	474 Sumner St. E B. 02128

Jeffries Point Neighborhood Association and Impacted Communities

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NAME ADDRESS

Ramon Valentin 112 Marginal St E.B.
Anthony Amato 41 Haynes St E.B.
Elizabeth Fernandez 41 Haynes St E.B.
Steve Giorgio 406 Meridian St. E.B.
Sandra Gamble 333 Maverick St. E.B.
Alfonso Gamble 333 Maverick St E.B.
Michelle Jasso 333 Maverick St E.B.
Marilyn Scott 363 Maverick St E.B.
Sean Scott 363 Maverick St E.B.
Mr + Mrs Martin Scott, 316 Carter St. Chelsea
[illegible] 169 Porter St E. Boston
[illegible] 171 Porter St E. B
[illegible] 793 Saratoga St E B
[illegible] 793 Saratoga St E B

11 of 28

Jeffries Point Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
Bonnie Lavoie	422 Sumner St East Boston
Jay Benson	210 Webster St EB 02128
Joseph J. Mason	464 Everett St E.B. Mass.
Theresa Capriano	17 Lamson ct. E Boston, Ma.
Virginia McColgan	467 Sumner St E Boston Ma 02128
Mary E Siracusa	474 Sumner St. E B. 02128

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further erode our quality of life. It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
[illegible]	121 Falcon St #4	East Boston MA 02128
Arthur M Cardoza	85 Condor St	E. Boston MA 02128
[illegible]	61 Trenton St	E Boston 02128
[illegible]	221 Webster, #1	E Boston 02128
Kimpton Mgmt	209 Trenton St	E Bos MA 02128
Dora L. Conte	82 Leyden St	EB Ma 02128
Cheryl Gamdale	169 Condor St	E B M. 02128
Antonia P Gamdale	169 CONDOR ST	E BOSTON MA 02128
Jeanne Fonzo	40 Falcon St.	E Boston 02128
[illegible]	40 Falcon St	E B 02128
Celia Plazenza	46 Saratoga St	E B 02128

2/01/26

Jeffries Point Neighborhood Association and Impacted Communities

We the undersigned are opposed to " Logan Airside Improvement Plan" (the proposed construction of Runway 14/32, the Centerfield Taxiway at Logan Airport, and the lowering of the minimum.) There are far too many unanswered question to allow the runways to be built. The proposed runways will affect our Quality of Life. The people who currently reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment from the planes, automobiles, trucks, busses and other Massport related operations.

NAME	ADDRESS
Maria Chiarati	394 Chelsea St. E.B.
Jeanne Scudieto	66 Webster St. E.B.
Mario Scudieto	66 Webster St. E.B.
Michael P. McCole	389 Sumner St. E.B.
Judith A. McCole	389 Sumner St. E.B.
Pamela Panzini	118 Bremen St E.B.
Jeanne VanHof	163 Cottage ST EB
Pauline Lafiotta	36 Lexington St E.B.
Grace Montanari	117 Cottage St E.B. Ma.
Frank C. Leone	164 Eutaw St E.B. Ma.

Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further erode our quality of life. It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Lilly Schacht	239 Everett St	E. Boston
Al Schacht	239 Everett St	E. Boston
Renee Scalfani	361 Sumner St.	E. Boston
Millie Rizzo	483 Sumner St	E Boston
Rosetta Scalfani	361 Sumner St.	E.B
Francis Sullivan	345 SUMNER ST	E.B
JUREMA PEPE	349 SUMNER ST #1	E.B
Christine Cinelli	99 Webster st	EB
Kay Swindle	361 Sumner st	E.B.
GARY TANTILLO	2 BRIGHAM ST	EAST BOSTON

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further **erode our quality of life.** It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Angela Pascatella	60 Frankfort St	~~E~~
Carmella Perrone	227 Maverick St.	E.B.
Theodore Miller	34 Frankfort St.	E.B.
Lucy Balla	8 Addison Ter	E.B.
Janet Galante	99 Gove	E.B.
Filomena Greco	111 Lexington St	E.B. Mass.
Pamela Barzini	118 Bremen St	E.B.
Mary Ann Cogliani	104 Bremen St.	E.B.
Louise Vonhof	163 Cottage ST	E.B.
Theresa Donato	111 Everett	E.B.

24 M2C

Jeffries Point Neighborhood Association and Impacted Communities

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further **erode our quality of life.** It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
William Eppie	275 Sumner St	
Lilli Wolff	Trenmont St	E'B
Cornelia Nunez	27 Princeton St	E'B
Lauri Lee	84 Chelsea St	E'B
Jo Fung	99 Chelsea St	E'B
Wilma K Willoughby	344 Saratoga St	E'B
Donald M Willoughby	344 Saratoga St	
Ria Leone	84 Chelsea St	E'B
Elizabeth Smith	99 Saratoga St	E'B
William Smith	111 South Central Ave.	

2 of 26

Communities Against Runway Expansion

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further **erode our quality of life.** It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Susan Gellerman	59 Temple Place	Boston
George Varga	88 Robinwood Ave #2	Jamaica Plain
Patricia Y. Rand	17 Belmont St.	Newton 02458
Nan Dirr	526 Washington St.	Boston 02132
Robert Tynes	29 Hancock Street	Boston, MA 02114
Mary Vercouteren	75 St. Alphonsus	Boston, MA
Phil Kwiat	2 Brigham St	East Boston
Mary Lou Maloney	117 Sheridan St	Jamaica Plain
Wanda Shaw	150 Huntington Ave	Quincy 02169
Mary L. Kelly	49 Westmoreland St.	Dorchester
Nancy Farrell	27 Willow Ave.	Brookline 02445
Carl Pratzka	52 Waldeck St	Dorchester 021
Lina Sheth	18 Montrose St #2	Somerville, MA 0214
Briana Pham	11 PARK St #2	Dorchester, MA 021
John T. Wang	9 Hawthorne Pl. #10K	Boston, MA 02114
Lenani Urpada-Va	18 O'Rourke Path	Newton, MA 02459
Valerie Green	59 Temple pl	BOSTON

Communities Against Runway Expansion

SUPPORT: REGIONAL TRANSPORTATION PLANNING
rail development
use of alternate regional airports
NO LOGAN INTERNATIONAL AIRPORT EXPANSION!

Massport is pushing for major expansion at Logan International Airport which will eventually lead to increased flights, noise and pollution over, and in, our neighborhoods and surrounding communities. The new projects will further **erode our quality of life.** It will also be inadequate to handle the increased demand soon after it is built. We, the undersigned, demand that Massport and do the necessary regional transportation planning fully, including high-speed and other rail development for the Greater Boston area before enbarking on any expansion project. If Logan Airport is an "economic engine" for New England, then let the rest of New England share in its impact.

Name	Address	City or town
Larry Pinault	1 Long Wharf Bldg	Boston
Keller Eaton	45 St Alphonsus St	Boston
Jody Tunelle	340 Main St.	Milford
Sara Goodman	1008 Paradise Rd.	Swampscott
Helen Shea	21 Bateman Ave	Revere
Julia Price	13 Bolton Place	Boston
[illegible]	1 Alfred Rd	Fram. Mass
John H. Hogan	27 Hale Ave	Winthrop MA.
Chas R Brown	247 Baldwin Ave	Revere MA
Arthur M. Lichtoff	241 Proctor Ave	Revere Ma
[illegible]	29-6 Concord Cove	Concord, Ma.
[illegible]	1167 Boylston St. 16	Boston
William P. Nolan	568 Metropolitan Ave	Hyde Park
[illegible]	3 Foster St	Boston
Richard Cimes	1595 Beacon St.	Brookline
Hal Fishbein	220 Boylston St.	Boston
Alex Medeiros	52 Temple Place	Boston

Letter 122
Jeffries Point Neighborhood Association
Karen M. Maddalena, Chairperson

Code	Topic 1	Topic 2	Comment	Response
122.1	Environmental Review Process	MEPA	Massport's draft environmental impact study (EIS/EIR) did not rigorously explore all reasonable alternatives.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
122.2	Analysis Assumptions/ Methodologies	Base Year	Massport supported its conclusions with outdated studies and figures.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
122.3	Alternatives	Runway 14/32	There can be no guarantee of "unidirectional use" of Runway 14/32. This is an FAA decision and the FAA is making no such guarantee.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
122.4	Delay	Model	FAA modeling was not used. FAA data shows delay reduction since 1993. Massport's delay figures are inflated.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

Code	Topic 1	Topic 2	Comment	Response
122.5	Noise	Sound Insulation	Soundproofing cannot mitigate the impact of this increase in noise and air pollution.	While sound insulation does not mitigate exterior sound levels, it is a widely accepted measure considered appropriate for general mitigation of noise impacts. Sound insulation reduces noise inside the home. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative. The emissions inventories for future conditions and alternatives are contained in Section 6.4 of the Supplemental DEIS/FEIR and Appendix F. These inventories show that all Alternatives, including the No Action and Preferred Alternative, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.
122.6	Public Health	Effects	Huge issues such as air pollution and respiratory health, unequal impacts, secondary ground traffic and others are ignored or glossed over, enough so that in truth, one might well ask if there is anything good to be said about it.	Noise was identified as the only off-airport impact from the Preferred Alternative (see Section 6.2 of the Supplemental Draft EIS/Final EIR for a discussion on noise impacts). Because of improved airfield efficiency and shorter delay periods, the Preferred Alternative is projected to slightly reduce air emissions when compared to the No Action Alternative. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental Draft EIS/Final EIR. A review of the available information did not indicate any causal relationship based on proximity to the airport. Construction will be managed to minimize air, noise and other impacts to the adjacent communities. All construction vehicles will be required to use designated truck routes and avoid local streets.

LETTER 123

GOULSTON & STORRS
A PROFESSIONAL CORPORATION
COUNSELLORS AT LAW
400 ATLANTIC AVENUE
BOSTON, MASSACHUSETTS 02110-3333
(617) 482-1776

TELECOPY/FAX (617) 574-4112

April 21, 1999

BY OVERNIGHT COURIER

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, Massachusetts 02202

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Re: Comments to Draft Environmental Impact Statement
and Draft Environmental Impact Report ("Draft EIS/EIR")
Logan Airside Improvements Planning Project (February 1999)

Dear Messrs. Pugsley and Silva:

These comments are submitted on behalf of our client, LaSalle Hotel Operating Partnership, L.P. ("LaSalle"). Pursuant to LaSalle's Ground Lease with Massport, LaSalle owns the Hyatt Harborside Hotel located at 101 Harborside Drive at Logan International Airport. As the owner of the Hyatt Harborside Hotel, which in addition to providing conference center services, provides accommodations for visitors, tourists and business travelers alike, LaSalle is interested in the proposals set forth in the Draft EIS/EIR that would enhance travel and tourism in Boston and the greater New England region. LaSalle believes that first-class hotel accommodations and conference center facilities play a vital role in attracting and accommodating visitors to the Boston area and have wide-ranging positive economic affects on the region. On behalf of LaSalle's guests, including those from the surrounding communities, we appreciate this opportunity to pose some concerns and questions regarding certain aspects of the Draft EIS/EIR.

LaSalle wishes to voice its opposition to Layout Option A, which according to the Draft EIS/EIR places Runway 14/32 in such close proximity to the Hyatt Harborside Hotel as to raise significant safety, noise and operational concerns that cannot be mitigated. Moreover, Layout Option A would remove 174 parking spaces (or 71% of available parking) from the Hyatt Harborside Hotel, significantly hampering LaSalle's ability to attract guests and operate the Hotel. Such a layout would effectively eliminate LaSalle's ability to attract guests for the conference facilities and operate guest accommodations. As stated in the Draft EIS/EIR, no viable option for parking for the Hyatt Harborside Hotel would be available if Layout Option A moved forward. Layout Option A would, in effect, destroy LaSalle's multi-million dollar investment at Logan. 123.1

In general, LaSalle supports Massport's goal of improving service at Logan through means other than Layout Option A. It would, however, be helpful to have the proponent address certain issues more specifically or direct us to the existing studies that address these issues. In particular, the issues are as follows: (i) the noise impact on the Hotel; (ii) the light impact on the Hotel; (iii) the impact on air quality surrounding the Hotel; (iv) any mitigating steps that might be available to lessen the noise, light, or air quality impacts on the Hotel and who is responsible for the costs of such actions; (v) the area to which airplane parking positions would be relocated; (vi) safety factors for the Hotel's premises and mitigating actions that may be necessary; and (vii) access to and from the Hotel and any possible relocation of Harborside Drive. 123.2 123.3

LaSalle would appreciate the opportunity to review the above matters with Massport prior to Massport filing its Final EIR/EIS so that we can understand the impacts of Massport's proposal and are satisfied that Massport is committed to providing adequate mitigation measures.

Respectfully submitted,

Michael J. Haroz
as attorney for and on behalf of LaSalle Hotel Operating Partnership, L.P.

cc: Peter Blute, Massport Executive Director
Betty J. Desrosiers, Massport Director, Aviation Planning & Development
Todd Noonan, LaSalle Vice President
David J. Martin, Hyatt General Manager

GSDocs-757865-3

Letter 123
LaSalle Hotel Operating Partnership c/o Goulston & Storrs, Michael J. Haroz (as attorney on behalf of LaSalle Hotel Operating Partnership, L.P.)

Code	Topic 1	Topic 2	Comment	Response
123.1	Alternatives	Runway 14/32	LaSalle wishes to voice its opposition to Layout Option A, ...Layout Option A would remove 174 parking spaces... significantly hampering LaSalle's ability to attract guests... no viable option for parking for the Hyatt Harborside Hotel would be available if Layout Option A moved forward.	Refer to Section 8.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32.
123.2	Alternatives	Runway 14/32	In general, LaSalle supports Massport's goal of improving service at Logan through means other than Layout Option A.	Refer to response to Comment 123.1.
123.3	Alternatives	Runway 14/32	Issues affecting the Hyatt Harborside Hotel such as noise, light, air quality, mitigation, airplane parking positions, safety factors, and access to and from Harborside Drive should be addressed more specifically.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* (previously the GEIR) and its updates.

Logan Airlines Management Council

LAMCO

April 7, 1999

LETTER 124

Secretary of Environmental Affairs
Attn.: MEPA
Mr. Arthur Pugsley
EOEA #10458
100 Cambridge St. - 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

124.1

We, the undersigned executive board members of LAMCO (Logan Airlines Management Council), wish to express our support for the series of airside improvements currently proposed by MASSPORT. In an effort to reduce delays and improve efficiency on Logan's airfield, we support the following projects:

*Construction of a uni-directional runway 14/32 for over the water operations.

*Construction of a centerfield taxiway to reduce taxiway congestion.

*Realignment and extension of existing taxiways to enhance airfield safety.

*Reduction of approach minimums on runways to upgrade Logan Airport to industry standards.

The Logan Airlines Management Council is comprised of the following member carriers:

Aer Lingus	Air Canada
Air France	America West
Alitalia	American
Atlantic Coast Airlines	

Logan Airlines Management Council

LAMCO

British Airways
Cape Air
Delta
Eastwind
Icelandair
LufthansaMidway
Northwest
Sun Country
TAP/Air Portugal
Trans States
USAirways
US Airways Express
Business Express
Continental
Delta Shuttle
Frontier
Korean
Midwest Express
Olympic Airways
Swissair
TWA
United
USAirways Shuttle
Virgin Atlantic Airways

On behalf of the over 26 million customers using Logan Airport, we strongly reiterate our support for EOEA #10458.

Sincerely,

LAMCO

Charles Ferrara, President
Speros Frangules, Vice President
Robert Costello, Secretary/Treasurer

Letter 124
Logan Airlines Management Council
Charles Ferrara, President

Code	Topic 1	Topic 2	Comment	Response
124.1	Purpose and Need	Delay	We, the undersigned executive board members of LAMCO (Logan Airlines Management Council), wish to express our support for the series of airside improvements currently proposed by Massport...to reduce delays and improve efficiency on Logan's airfield....	Comment noted.

LOGAN AIRLINES MANAGEMENT COUNCIL

April 7, 1999

LETTER 125

Secretary of Environmental Affairs
ATTN: MEPA
Mr. Arthur Pugsley
EOEA #10458
100 Cambridge St. - 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

We, the undersigned co-chairpersons of the LAMCO (Logan Airlines Management Council) Cargo sub-committee wish to express our support for the series of airside improvements currently proposed by Massport. In an effort to reduce delay and improve efficiency on Logan's airfield, we support the following projects: 125.1

⇒ Construction of an uni-directional runway 14/32 for over the water operations.

⇒ Construction of a centerfield taxiway to reduce taxiway congestion.

⇒ Realignment and extension of existing taxiways to enhance airfield safety.

⇒ Reduction of approach minimums on runways to upgrade Logan Airport to industry standards.

On behalf of our Customers, who annually ship over 814 million tons of cargo and mail in and out of Logan Airport, we strongly reiterate our support for the Logan Airside Improvement Planning Project (EOEA #10458).

Sincerely,

Jeff Ealy
Co-Chairperson

Enrico Miranda
Co-Chairperson

William Taylor
Co-Chairperson

CARGO SUBCOMMITTEE

Letter 125
Logan Airlines Management Council Cargo Subcommittee, Co-Chairpersons

Code	Topic 1	Topic 2	Comment	Response
125.1	Purpose and Need	Delay	We, the undersigned co-chairpersons of the LAMCO (Logan Airlines Management Council) Cargo sub-committee wish to express our support for the series of airside improvements currently proposed by Massport...to reduce delay and improve efficiency on Logan's airfield....	Comment noted.

LETTER 126

Manchester Airport
One Airport Road
Suite 300
Manchester, NH
03103-3395
Tel: 603-624-6539
Fax: 603-666-4101
http://www.flymanchester.com

Alfred Testa, Jr.
Director

02 April 1999

Mr. Arthur Pugsley - EOEA No. 10458
Secretary of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

Please accept this letter as a comment on Logan Airport's Airside Improvements Project. There have been many comments made by various officials regarding Massport's dedication and commitment to a regional approach for the mitigation of impacts.

I wish to assure you as Director of Manchester Airport that for the past five years Massport has worked diligently with the regional airports of New England in an effort to find some regional solutions to the congestion at Logan Airport. These meetings have resulted in various approaches for many of the regional airports depending upon their ability to take on more traffic, and their proximity to Logan Airport. Massport's work with Worcester Airport is well noted and I need not comment on it here. 126.1

The unprecedented growth at T.F. Green in Providence and Manchester Airport in New Hampshire is a testament to the regional approach we all have been taking. However, one must understand that Logan's Airside Improvements are complimentary to the hundreds of millions of dollars of improvements already done at T.F. Green and Manchester Airport. One will not work without the other. For airports that are further away in distance from Logan, peak hour pricing is a very viable and supportable solution. 126.2 126.3

I cannot reiterate strongly enough how much Massport has been involved in the regional attempt to mitigate traffic congestion, but, I must also strongly emphasis that no matter how much increased air traffic Providence and Manchester may be able to manage, Logan must still improve its airside efficiency. 126.4

I am moving on to become the Director of Philadelphia International Airport where, by the way, a uni-directional commuter runway is under construction for exactly the same reasons Logan is seeking to do the same.

If you have any questions, please do not hesitate to call me at Philadelphia International Airport.

Sincerely,

Alfred Testa, Jr.
Airport Director

AT/ds

cc: Betty Desrosiers/Massport

Letter 126
Manchester Airport
Alfred Testa Jr., Airport Director

Code	Topic 1	Topic 2	Comment	Response
126.1	Regional Transportation	Regional Airports	I wish to assure you as Director of Manchester Airport that for the past five years Massport has worked diligently with the regional airports of New England in an effort to find some regional solutions to the congestion at Logan Airport.	Comment noted.
126.2	Regional Transportation	Regional Airports	...Logan's Airside Improvements are complimentary to the hundreds of millions of dollars of improvements already done at T.F. Green and Manchester Airport. One will not work without the other.	Comment noted.
126.3	Regional Transportation	Regional Airports	For airports that are further away in distance from Logan, peak hour pricing is a very viable and supportable solution.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport. See Section 4.5 of the Supplemental DEIS/FEIR.
126.4	Purpose and Need	Delay	...no matter how much increased air traffic Providence and Manchester may be able to manage, Logan must still improve its airside efficiency.	Comment noted.

LETTER 127

Massachusetts Audubon Society
208 South Great Road
Lincoln, Massachusetts 01773
(781) 259-9500 April 22, 1998

Robert Durand, Secretary
Executive Office of Environmental Affairs
Arthur Pugsley, EOEA #10458
100 Cambridge St., 20th Floor
Boston, MA 02202

Attention: MEPA Unit

Re: **EOEA #10458, Logan Airside Improvements, Boston and Winthrop**

Dear Secretary Durand:

On behalf of the Massachusetts Audubon Society, I submit the following comments on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the above-referenced project.

The Massachusetts Audubon Society has not conducted an in-depth review of this document, therefore our comments will be limited to two aspects: general transportation planning issues and proposed rare species impact mitigation.

Transportation Planning

Massport has proposed these airside improvement to alleviate current and future delays at Logan. Meanwhile, other related planning and transportation activities are ongoing, including the proposal for Massport to take over management of Worcester Airport, discussion of the roles of regional airports both within Massachusetts and in neighboring states, provision of high speed rail service to New York, and the North-South Rail Link project. All of these projects and activities have some bearing on the congestion situation at Logan. There are also environmental and community impacts associated with many of the alternatives under consideration, particularly the aviation alternatives. Decisions on the future configuration of the commonwealth's and New England's transportation networks have huge implications for land use and environmental quality. These decisions should not be based only on an uncoordinated series of independent environmental reviews for specific alternative projects. There should be some more centralized, organized approach which fully engages the public. The Massachusetts Environmental Policy Act (MEPA) process is a good mechanism for public participation, and we urge you to determine means of better coordinating the state's transportation improvement planning processes through MEPA. 127.1

The Draft EIR/EIS shows that alternatives to aviation travel, including increased reliance on rail and video conferencing, may divert up to 7.3 million passengers away from Logan in the year 2010 (Table 2.4-9). Nearly half of this diversion amount is attributed to diversion to other regional airports, which will transfer some of the impacts to other sites without fundamentally alleviating aviation impacts such as noise impacts on neighborhoods. However, this analysis does indicate that Logan passenger demand in 2010 may only increase to 30.2 million compared to 29 million today. Thus, it is clear that alternatives analysis

is critical for finding the region's most environmentally sound transportation solutions, and that this analysis must include consideration of other modes including the effects of two major rail projects: high speed rail to New York and the North-South Rail Link. Other options such as peak pricing deserve further consideration as well. At the same time, it should be recognized that some options, like the proposed expansion of the New Bedford airport, will have insignificant impacts on Logan's congestion situation (potentially diverting one cargo flight per day) while resulting in tremendous environmental impacts. The New Bedford project entails the largest wetland fill ever proposed in Massachusetts since the Wetlands Protection Regulations were promulgated in 1983. The relative utility and impacts of the full range of alternatives (aviation and non-aviation) should be considered and subjected to public review through the MEPA process. 127.2 127.3 127.4

Rare Species

Habitat of rare grassland birds, notably the state-endangered upland sandpiper, would be destroyed by the proposed central taxiway. The DEIR/EIS mentions the possibility of restoring grassland habitat at Camp Edwards on Cape Cod as part of a mitigation package for these impacts. One rational for off-site mitigation (or off-site mitigation combined with on-site mitigation) is the high risk of bird/aircraft collisions due to the high volume of flights at Logan. However, this off-site mitigation proposal requires substantial additional consultation among Massport, Massachusetts Natural Heritage and Endangered Species Program (MNHESP), and the military officials who control Camp Edwards. While off-site mitigation has the potential to benefit rare grassland birds, there are many details which remain unresolved, including permission for Massport to undertake such activities on Camp Edwards land and requirements for undertaking, monitoring, and maintaining grassland restoration. Massport should be required to pursue those consultations actively, and to submit a near-final, detailed mitigation plan with the Final EIR/EIS. 127.5

Conclusion

Many transportation improvement projects, including the proposed Logan expansion and some of the alternatives proposed to avoid the expansion, have large impacts of concern to the affected communities. These issues should be addressed in a fair manner, with a level playing field that allows comparison of relative impacts of various alternatives. The FEIR for this project should be required to more fully evaluate the role of Logan within a regional transportation system and to seek options which minimize environmental impacts at all locations. 127.6

Thank you for the opportunity to comment.

Sincerely,

E. Heidi Roddis
Environmental Policy Specialist

cc: Massport
Robert Bartanowicz, FAA
Elizabeth Higgins Congram, U.S. EPA
MNHESP

Letter 127
Massachusetts Audubon Society
E. Heidi Roddis, Environmental Policy Specialist

Code	Topic 1	Topic 2	Comment	Response
127.1	Environmental Review Process	MEPA	Decisions on the future configuration of the commonwealth's and New England's transportation networks have huge implications for land use and environmental quality. These decisions should not be based only on an uncoordinated series of independent environmental reviews for specific alternative projects. There should be some more centralized, organized approach which fully engages the public. The Massachusetts Environmental Policy Act (MEPA) process is a good mechanism for public participation, and we urge you to determine means of better coordinating the state's transportation improvement planning processes through MEPA.	Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.
127.2	Regional Transportation	Regional Airports, Passenger Rail	...[An] alternatives analysis is critical for finding the region's most environmentally sound transportation solutions, and that this analysis must include consideration of other modes including the effects of two major rail projects: high speed rail to New York and the North-South Rail Link. Other options such as peak pricing deserve further consideration as well.	Refer to response to comment 127.1. Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.

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Code	Topic 1	Topic 2	Comment	Response
127.3	Regional Transportation	Regional Airports	...the proposed expansion of the New Bedford airport, will have insignificant impacts on Logan's congestion situation (potentially diverting one cargo flight per day) while resulting in tremendous environmental impacts.	Comment noted.
127.4	Environmental Review Process	MEPA	The relative utility and impacts of the full range of alternatives (aviation and non-aviation) should be considered and subjected to public review through the MEPA process.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
127.5	Ecosystems	Rare Species	While off-site mitigation has the potential to benefit rare grassland birds, there are many details which remain unresolved, including permission for Massport to undertake such activities on Camp Edwards land and requirements for undertaking monitoring, and maintaining grassland restoration. Massport should be required to pursue those consultations actively, and to submit a near-final, detailed mitigation plan with the Final EIR/EIS.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
127.6	Environmental Review Process	MEPA	The FEIR for this project should be required to more fully evaluate the role of Logan within a regional transportation system and to seek options which minimize environmental impacts at all locations.	In accordance with the MEPA Certificate on the Airside Project Draft EIS/EIR, the Supplemental DEIS/FEIR contains a summary of the environmental impacts of growth at the regional airports, based on existing available environmental documents and studies. Refer to Appendix B of the Supplemental DEIS/FEIR.

MBR
Massachusetts Business Roundtable

LETTER 128

April 7, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley-EOEA #10458
100 Cambridge Street
20th Floor
Boston, MA 02205

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Division
12 New England Executive Park
Burlington, MA 01803

RE: Draft EIR/EIS
Logan Airsides Improvement Project

Dear Sirs:

The Board of Directors of the Massachusetts Business Roundtable, a statewide organization of seventy-five of Massachusetts' leading chief executives, has recently voted unanimously to strongly support the opening of runway 14/32 and the creation of a new taxiway at Logan International Airport. 128.1

Over the last decade, the Governor and the Legislature have accomplished a great deal to improve the ability of Massachusetts' businesses to grow, create jobs, and compete with companies based in other states and around the world.

However, the growth of our current economy will not continue forever and, not withstanding the efforts of the Legislature and the Governor, Massachusetts has higher costs of living and of doing business than almost any other state in the country. Predictable and efficient air travel for employees, customers and goods are a key component of any company's ability to grow and to compete. This runway will help our state leaders to prepare for the future and to ensure that Massachusetts businesses have a level playing field to compete and create jobs, even in less positive economic times. 128.2

This proposal is not an expansion of Logan and will not result in an increase in flights. The reduction of weather related delays will enhance safety, allow Massport to utilize Logan's existing allowable daily capacity to its utmost, and have a positive ripple effect on other airports on the East Coast. It will reduce air and noise pollution over surrounding residential areas, and move a greater number of takeoffs and landings over the harbor.

The ability of Massachusetts' businesses to expand and to create jobs, in good times and bad, depends on their ability to move employees, customers and goods into and out of Massachusetts. The efficient use of Logan's existing

capacity, through this runway and taxiway, will allow our businesses to continue to create jobs here in Massachusetts and to compete nationally and around the world.

The Massachusetts Business Roundtable would be pleased to work with you in any way to address this critical issue.

Sincerely,

Nader Darehshori

Nader F. Darehshori
Chairman
Massachusetts Business Roundtable
Chairman, President and Chief Executive Office
Houghton Mifflin Company

Letter 128
Massachusetts Business Roundtable
Nader F. Darehshori, Chairman

Code	Topic 1	Topic 2	Comment	Response
128.1	Alternatives	Runway 14/32	The Board of Directors of the Massachusetts Business Roundtable...has recently voted unanimously to strongly support the opening of runway 14/32 and the creation of a new taxiway at Logan International Airport.	Comment noted.
128.2	Purpose and Need	Economic Impacts	Predictable and efficient air travel for employees, customers, and goods are a key component of any company's ability to grow and to compete. ...[The proposed new] runway will help our state leaders to prepare for the future and to ensure that Massachusetts businesses have a level playing field to compete and create jobs, even in less positive economic times.	Comment noted.

LETTER 129

MASSACHUSETTS SIERRA CLUB
100 Boylston Street Boston MA 02116 (617) 423-5775 fax (617) 423-5858

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention: MEPA Office
Mr. Authur Pugsley, EOEA No. 10458
100 Cambridge Street, Room 2000
Boston, MA 02202

John C. Silva, Manager
Environmental Programs
Airports Division, ANE - 600
New England Region
12 New England Executive Park
Burlington, MA 01803

April 22, 1999

Re: Massachusetts Port Authority (MPA) Logan Airside Improvements Planning Project ("Project") DEIS/DEIR - **EOEA No. 10458**
Boston-Logan International Airport

The Massachusetts Chapter of the Sierra Club (the Club) with over 20,000 members, including the Greater Boston Group with over 7,000 members, request that the Secretary of Environmental Affairs (the Secretary) and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed; that the document be found "**INADEQUATE**"; and that a new Draft document be required. Each of the major three parts; the proposed runway 14/32, the centerfield taxiway between the 4/22 runways, and the lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed. In addition, the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to at least 2020. 129.1 129.2 129.3

The Club furthers wishes to go on record concerning the conflict of interest that exists for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. We strongly request that the EPA take the lead role for any decision making because of this conflict. 129.4

Please note our major concerns:

1. **A comprehensive Northeast regional transportation plan, including all forms of transportation, needs to be developed and subjected to public review before any further airport expansion is allowed** 129.5

The study area must include the Federal Aviation Administration's **Eastern and New England** regions with a goal of identifying and quantifying long range airside, landside and groundside demand requirements. The present system of piecemeal airport expansion throughout the Northeast has become counterproductive, with each airport justifying projects seemingly based on parochial competition rather than regional cooperation. 129.6

The Club realizes that we are asking for a drastic remedy for what is supposed to be a local issue, but this isn't just a local Massachusetts issue and the answers won't come from just looking at Logan Airport. All throughout the Northeast, the same questions and concerns are being raised by more and more residents and groups as to the environmental and economic consequences of

polices that were put into place many years ago before airline deregulation and the enormous growth of airline traffic. As the DEIS/DEIR reminds us, over 100 homes and a church are to be taken for the expansion of the Manchester, NH airport.

The scope for such a study should include, but not be limited to:

- an inventory of all airports and associated planned regional airside and landside projects.
- existing and planned rail passenger services(both Amtrak and commuter rail).
- an inventory of underutilized railroad rights of way and potential uses.
- an analysis of future high speed rail initiatives.
- an inventory of the existing interstate highway system and any planned system expansion.
- an analysis of regional air cargo demand
- a discussion of how airports with constrained landside expansion potential deal with airside capacity issues. 129.7
- all environmental impacts on wetlands, waterways, flora, fauna, and human, including health studies as well as air, noise and odor impacts.
- potential for future reduction in peak time business trips due to improvements in teleconferencing.
- The implications on regional airside planning of NLA's(New Large Aircraft) - more later.
- The implications on regional groundside planning of the construction of the North/South Rail Link - more later.

This study should be accomplished with the cooperation of all interested parties including, but not limited to, residents, businesses, and organizations.
The goal of the above study would be to determine the least invasive environmental impacts of future transportation developments needed to meet the region's requirements for future long term growth. Segmental planning cannot and should not be tolerated.

2. The North/South Rail Link must be a integral part of the planning process for Logan or any other regional airport expansion projects. 129.8

The ridership figures referenced in Massport's DEIS/DEIR for the proposed North/South Rail Link project are in ***draft*** form and have not been reviewed by the Rail Link CAC (Citizen's Advisory Committee) established by EOEA as part of an ongoing process to evaluate the MIS(Major Investment Study)/DEIS/DEIR(**EOEA 10270**) for the Rail Link project. Members of the Rail Link CAC have serious concerns with the intercity(Amtrak) numbers for trips originating and terminating north of Boston, as well as potential diversions from airside demand. 129.9
The Club feels that the low estimates for Rail Link airside Logan diversions have more to do with artificial constraints, primarily parking supply, than with actual Northeast Corridor ridership potential. For example, lack of sufficient parking for Amtrak riders at Route 128 Station has long been considered to be a formidable disincentive for potential rail passengers. The provision of adequate parking at the new Woburn Transportation Center(tentatively identified in the draft Rail Link MIS/EIS/EIR as the initial terminus of Amtrak's high speed service) should generate significantly more airside diversions from Logan than presently referenced.
With the Rail Link in place, New York City will be accessible in about three and one half hours from Woburn! With the Rail Link in place, proposed T.F. Greene commuter rail service from Boston could be extended to any number of Northside destinations! With the Rail Link in place, some Amtrak Northeast Corridor services will be extended to Portland Maine and beyond; while others could be extended into Nashua, New Hampshire and beyond!
In any case, Massport's DEIS/DEIR should be withdrawn pending the completion of the Rail Link MIS/DEIS/DEIR, and the incorporation of its findings into a regional transportation study. 129.10
The Rail Link CAC is also concerned that the MIS/DEIS/DEIR for the Rail Link project is significantly behind schedule. This sorry state of affairs seems to be due more to internal

Massachusetts political squabbling over funding for future local Boston transit projects, rather than as a judgment of the potential value of the Rail Link.
The Rail Link has always been recognized as a project of ***"Regional and National Significance"*** and not just as a local Boston transit project. Funding for the Rail Link must be on a regional basis and be based on the benefits accruing to the entire Northeast, as well as Massachusetts, from the extension of Amtrak's Northeast Corridor to the north of Boston.

3. **The impact of New Large Aircraft (NLA) must be quantified as to their impacts on Logan and other regional airports.** 129.11

There is another trend that impacts the 14/32 runway project.
According to sources in the aviation community, 2003 will see the start of commercial availability of NLAs from Boeing and Airbus Industrie, i.e. New Large Airplanes with a capacity of up to 1000 persons per airplane and needing runways up to 11,000 feet in length. It is inconceivable that Massport is not engaged in some sort of internal planning process with the aim of accommodating NLAs though so far there has been no mention. Since NLAs take a lot of space on the ground, 14/32 might be important to provide more runway and taxiway space for the safe and efficient operation while NLA aircraft use existing runways. These existing runways would need to be extended for the NLAs and many small to medium aircraft would be diverted to 14/32. In short, 14/32 would help clear the way for NLAs at Logan.
It follows that the accommodation of NLAs at Logan will affect terminal building layout and construction, and all aspects of ground transportation.
It is important to ask Massport to describe what plans, if any, have been made to address the impacts of NLAs. And if such an effort is ongoing, the result is segmentation of the EIS/EIR process which is not legal, especially when the runway 14/32 project would be a small part of an EIS/EIR looking at Logan expansion as a whole. 129.12

4. **The reopening of a discussion regarding the construction of a second major airport is counterproductive at this time and would preclude the discipline necessary for any true analysis of transportation alternatives.** 129.13

5. **Any discussions of future regional airport development must be based on reality and not just on wishful thinking.**

The Sierra Club and others are presently contesting New Bedford's proposed airside expansion due to the significant amount of wetlands filling involved. Because of our environmental concerns, the Club has had to review the "purpose and need" justification for this project, and we have yet to find any overwhelming economic "need" that would necessitate the proposed action. Yet, New Bedford, as well as other regional airports, continue to pop up as potential candidates for everything from commuter to air cargo operations.

Additional concerns are as follows.

The MPA makes the claim in their transmission letter of February 19, 1999 that, "...the lapse of time between the publication of the ENF and the publication of notice availability of this Draft EIR ***has no adverse environmental consequences...***" This is very much open to discussion as weather conditions alone have dramatically changed over the last five years because of the El Nino and La Nina effects. FAA delay data (DELAYSIM) shows that Logan's delay situation has improved since 1993 and is essentially in equilibrium. The entire analysis in the document needs to be updated. 129.14
The Sierra Club urges the Secretary and FAA to require the MPA to change the base year for planning for the project to calendar year 1998; to revise all presentations in the DEIS/DEIR, including the appendices thereto, to reflect the changes; to extend the planning period to 2020 129.15

from 2010 with concomitant revisions in projected levels of activity and impact and to require that the DEIS/DEIR be republished.

Massport has not met the requirements of the National Environmental Policy Act (40 CFR Part 1502 Environmental Impact Statements) which requires:

1. the DEIS/DEIS to ***"Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated".*** [i] 129.16

A reasonable person could expect the DEIS/DEIR alternatives to include, but not be limited to, the following:

- Consideration of Implementing a High-Density Rule (Slots). 129.17
- Consider Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan in order to provide noise relief to affected communities.
- Thorough regional transportation planning, including rail, and that all environmental impacts be addressed

2. regarding methodology and scientific accuracy, that, ***"...They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and the sources relied upon for the conclusions in the statement".*** [ii]

The DEIS/DEIR does not indicate the detailed methodology used to develop the levels of passenger forecasts presented. 129.18

3. the environmental consequences regarding the following, ***"The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. It shall include discussions of: ...(g) Urban quality, historic and cultural resources, and the design of the built environment...".*** [iii]

The DEIS/DEIR discusses the preferred alternatives effect on historic districts but does not comment on the urban quality, or the design of the built environment. Although Peak Hour Pricing in Alternate 1 clearly shows to be the most beneficial for delays and thus, noise reduction, the MPA continues not to consider this alternative except as a future option. 129.19 129.20

4 ***"An agency shall commence preparation of an environmental impact statement as close as possible to the time the agency is developing or is presented with a proposal (PP 1508.23) so that preparation can be completed in time for the final statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decision making process and will not be used to rationalize or justify decisions already made." PP 1508.23 describes a proposal as the following: " 'Proposal' exists at the stage in the development of an action when an agency subject to the Act has a goal, is actively preparing to make a decision on one or more alternative means of accomplishing that goal, and the effect can be meaningfully evaluated."*** [iv]

The ENF Certificate was issued November 22, 1995. The MPA and the FAA have not complied with the required timing of the DEIS/DEIR document. Furthermore, the analysis uses baseline 129.21

data of 1993 for a document submitted in 1999. Weather, as well as aircraft and major regional infrastructure and have occurred to the point where a 1998 base year should be required. 129.22
A lack of "reasonable alternatives" exists because of the lack of an assessment of the entire Northeast regional transportation system, the documentation of the history of PRAS and the problems of implementation. The surrounding communities cannot continue to absorb the landside growth that would accompany the proposed airside growth at the airport. 129.23 129.24

There should be a detailed analysis of the causes of the delays in the document which show aircraft mechanical problems, crew caused delay, and weather causes both at Logan and those caused by weather at other airports. This analysis is outdated and inadequate. 129.25

Lowering of the minimum on runway 22L is an additional concern of the Sierra Club for the near in neighborhood of the Saratoga Street area of East Boston. Not only does this allow for an increased number of flights to land at Logan Airport, it also will spread the noise from the missed approach aircraft more horizontally thus impacting the neighborhood at the end of runway 22L with increased noise. Further computer modeling does not present the real life occurrence in the surrounding communities and a more accurate analysis needs to be done. Communities constantly challenge the 65 db contour lines with regards to soundproofing which does not include air conditioning and which requires that the residence meet current code guidelines. That can cause financial stress on the already noise impacted residents. 129.26

The proposed centerfield taxiway between runways 4L/22R and 4R/22L leads to further increased operations at Logan Airport and increased noise for the close in residents of Winthrop, Revere, and East Boston. This taxiway will allow for additional queuing of aircraft very close to the surrounding neighborhoods and Constitution Beach, increased operations which will increase noise and further degrade the quality of life for these residents. 129.27

Boston as an historic city will suffer the brunt of negative impacts from the proposed Project and will lose a quality of life that will never be recaptured! The additional number of flights, as well as increased traffic, that the Project would allow and encourage will do irreparable harm to the historic city of Boston and the greater metropolitan area. Development of high speed rail connections to other airports and the connection of Boston's two rail stations with the North/South Rail Link could help reduce these impacts. Convention locations and tourist destinations are not determined by the accessibility of an airport, rather they are determined by the quality of the experience of the location. No other major city around the world has had loss of tourists or conventions because of the convenience or inconvenience of the locality's airport. For the MPA to claim that the additional runway and centerfield taxiway are needed for the proposed new convention center is nothing more than an exaggeration. Time and again the MPA has claimed the need for the Project for the good of the city of Boston. With the proposed growth for Logan Airport needless adverse impacts will continue to grow over one of the most historic cities in the country. Mayor Menino does not agree with the MPA hypothesis and neither does the Sierra Club. 129.28 129.29 129.30

Massport and the FAA both state ***"when dealing with an existing airport (such as Logan Airport) within an urban setting (such as metropolitan Boston), any change in operating conditions aimed at more equitably distributing noise impacts (here, in accordance with the PRAS goals) may result in some increase in noise at specific historic areas while at the same time decreasing noise at other historic areas."*** [v]
The Sierra Club believes that changes to Logan's operating conditions are not any more important than the cultural, historical and urban quality of life in the metropolitan Boston area.

The state listed endangered upland sandpiper habitat which would be disrupted by the enterfield taxiway is not adequately addressed and there is no agreement with the Massachusetts Natural 129.31

Heritage and Endangered Species Program although this has been a known area of concern since 1993.

A primary concern for the newly created Boston Harbor Islands National Recreation Area is the proposed construction of runway 14/32 and the resultant 75,000 proposed flights over the newly created Boston Harbor Recreational Area. This impact, one of environmental injustice, would occur to mostly inner city residents who frequent the islands to get away from the noise and hubbub of city life. This is, and should continue to be, a time for them to experience nature, to hear and smell the harbor and study the skies. These sensory experiences would be severely impacted by the exorbitant number of flights over the harbor. 129.32

Children from school groups, Boy and Girl Scout troops, Inner City Outings groups, and many other groups camp and explore the islands and enjoy learning experiences from the skies to the flora and fauna of the islands to the marine life and water quality. All of this will be degraded by the subject project.

The roar of the overhead planes will make a camping experience a horror rather than the wonderful enjoyment of sleeping under the stars. The fuel emissions and dumping from the airplane engines will contaminate the islands and the wildlife, not to mention the humans who will be much more exposed by being out of doors rather than at home or work.

In conclusion, ***The Sierra Club sees this proposed Project as the first step in further major development at Logan airport***, sees a lack of guarantee of the unidirectional use of the proposed 14/32 runway, and believes the lack of future plans and analysis for the airport over the next 20 years must be found and the current document declared inadequate. In addition, ***the public has not been given fair consideration of the proposed Project***. It is merely an interim solution to a much bigger and more complex problem which must be addressed before allowing the project to go forward. In addition the projected growth of jet operations is horrifying. Other alternatives must be assessed. 129.33

Because none of these impacts has been adequately addressed or, in some cases, even mentioned in the DEIS/DEIR, the Sierra Club requests that the Secretary of Environmental Affairs (the Secretary) and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed, that the document be found **"INADEQUATE"** and that a new Draft document be required 129.34

Thank you for this opportunity to comment.

John F. Deacon, Chair
Greater Boston Group

cc: John Devillars, Director, Regional EPA
Robert Bartonowicy, Regional Director, FAA

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[i] Council on Environmental Quality, 40 CFR Part 1502.14(a)

[ii] Council on Environmental Quality, 40 CFR Part 1502.24

[iii] Council on Environmental Quality, 40 CFR Part 1502.16

[iv] Council on Environmental Quality, 40 CFR Part 1502.5

[v] DEIS/DEIS Section 8.6.1.2 "Assessment of Impact"

Letter 129
Massachusetts Sierra Club
John F. Deacon, Chair, Greater Boston Group

Code	Topic 1	Topic 2	Comment	Response
129.1	Environmental Review Process	FAA/NEPA, MEPA	The Massachusetts Chapter of the Sierra Club...requests the Secretary of Environmental Affairs (the Secretary) and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed; that the document be found "INADEQUATE", and that a new Draft document be required.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
129.2	Alternatives	Preferred Alternative	Each of the major three parts: the proposed runway 14/32, the centerfield taxiway between the 4/22 runways, and the lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed.	Refer to response to comment 129.1.
129.3	Analysis Assumptions/ Methodologies	Base Year	...the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to at least 2020.	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. Analysis of 1981 to 90 weather with 1989-98 weather identifies no significant differences in statistical properties.
129.4	Environmental Review Process	FAA/NEPA	The Club further wishes to go on record concerning...[there is a] conflict of interest...for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. We strongly request that the EPA take the lead role for any decision making because of this conflict.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
129.5	Regional Transportation	Regional Airports	A comprehensive Northeast regional transportation plan, including all forms of transportation, needs to be developed and subjected to public review before any further airport expansion is allowed.	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market.
129.6	Analysis Assumptions/ Methodologies	Passenger Forecasts	The study area must include the Federal Aviation Administration's Eastern and New England regions with a goal of identifying and quantifying long range airside, landside and groundside demand requirements.	The proposed Logan Airport Airside Project is necessary and provide clear benefits at current traffic levels. Massport has long recognized that service development and increased passenger traffic at the regional airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, especially high-speed rail to Logan Airport's largest market, New York. Section 2.3 of the Supplemental DEIS/FEIR evaluates T.F. Green/Providence, Manchester, and Worcester Regional airports and their potential impacts on Logan Airport. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport but will not eliminate the need for airside projects.
129.7	Regional Transportation	Regional Airports	The scope for such a study should include, but not be limited to: ■ an inventory of all airports and associated planned regional airside and landside projects. ■ existing and planned rail passenger services (both Amtrak and commuter rail). ■ an inventory of underutilized railroad rights of way and potential uses. ■ an analysis of future high speed rail initiatives. ■ an inventory of the existing interstate highway system and any planned system expansion. ■ an analysis of regional air cargo demand. ■ a discussion of how airports with constrained landside expansion potential deal with airside capacity issues. ■ all environmental impacts on wetlands, waterways, flora, fauna, and human, including health studies as well as air, noise and odor impacts. ■ potential for future reduction in peak time business trips due to improvements in teleconferencing. ■ The implications on regional airside planning of NLA's (New Large Aircraft) - more later. ■ The implications on regional groundside planning of the construction of the North/South Rail Link.	The discussion of alternatives in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR responds to federal and state scoping directives and provides appropriate analytical context for assessing the need for the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
129.8	Regional Transportation	Passenger Rail	The North/South Rail Link must be a integral part of the planning process for Logan or any other regional airport expansion projects.	Massport has actively encouraged regional transportation alternatives to Logan Airport, including rail. Massport supports intercity rail planning through its membership in the Boston Metropolitan Planning Organization (MPO). The MPO is a cooperative planning board whose membership also includes MassHighway, Metropolitan Area Planning Council; MBTA, and MBTA Advisory Board. As members of the MPO, Massport and these agencies are responsible for preparing the *Boston Transportation Improvement Program (TIP)* and the *Transportation Plan for the Boston Region.* In this capacity, Massport influences regional transportation plans for intercity rail. Massport also holds a seat on the Citizens Advisory Committee (CAC) of the MBTA's North-South Rail Link Project. The CAC met monthly and provided a forum for Massport and the MBTA to coordinate their ridership estimates and assessments of the relationship of the North-South Rail Link on airport access and airport usage. To date, the North-South Rail Link Project has not received funding and will not impact Logan Airport over the study time frame. Should the North-South Rail Link be constructed, resulting passenger diversions from Logan Airport to rail could reach 46,700 annual passengers, or less than one-half of one percent of Logan Airport's total annual traffic.
129.9	Analysis Assumptions/ Methodologies	Passenger Forecasts	Members of the Rail Link CAC have serious concerns with the intercity (Amtrak) numbers for trips originating and terminating north of Boston, as well as potential diversions from airside demand. The Club feels that the low estimates for Rail Link airside Logan diversions have more to do with artificial constraints, primarily parking supply, than with actual Northeast Corridor ridership....	The analysis of regional alternatives presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR relies on air to high-speed rail diversion estimates published in the Supplemental DEIS/FEIR and Section 4(f) Statement, Northeast Corridor Improvement Project, prepared by the Federal Rail Administration in October 1994. In preparing the Supplemental DEIS/FEIR, Massport contacted Amtrak for more recent estimates, but Amtrak did not have any updated ridership estimates that could be released to Massport. Amtrak's written response to Massport's request for updated ridership numbers is contained in Appendix B of the Supplemental DEIS/FEIR. See Appendix B for the latest status of the North-South Rail Link diversion estimates.
129.10	Regional Transportation	Passenger Rail	In any case, Massport's DEIS/DEIR should be withdrawn pending the completion of the Rail Link MIS/DEIS/DEIR, and the incorporation of its findings into a regional transportation study.	Refer to response to Comment 129.9.
129.11	Analysis Assumptions/ Methodologies	Fleet Mix	The impact of New Large Aircraft (NLA) must be quantified as to their impacts on Logan and other regional airports.	So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years. Consequently, the NLA was not included in the Future Fleet scenarios.
129.12	Alternatives	Runway 14/32	It is important to ask Massport to describe what plans, if any, have been made to address the impacts of NLAs. And if such an effort is ongoing, the result is segmentation of the EIS/EIR process which is not legal, especially when the runway 14/32 project would be a small part of an EIS/EIR looking at Logan expansion as a whole.	Refer to response to Comment 129.11.
129.13	Regional Transportation	Passenger Rail	The reopening of a discussion regarding the construction of a second major airport is counterproductive at this time and would preclude the discipline necessary for any true analysis of transportation alternatives.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
129.14	Analysis Assumptions/ Methodologies	Planning Period	FAA delay data (DELAYSIM) shows that Logan's delay situation has improved since 1993 and is essentially in equilibrium. The entire analysis in the document needs to be updated.	Section 1.4 and Appendix C of this Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
129.15	Analysis Assumptions/ Methodologies	Base Year	The Sierra Club urges the Secretary and FAA to require the MPA to change the base year for planning for the project to calendar year 1998; to revise all presentations in the DEIS/DEIR including the appendices thereto, to reflect the changes; to extend the planning period to 2020 from 2010 with concomitant revisions in project levels of activity and impact and to require that the DEIS/DEIR be republished.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.
129.16	Environmental Review Process	NEPA	Massport has not met the requirements of the National Environmental Policy Act (40 CFR Part 1502 Environmental Impact Statements) which requires...the DEIS/DEI[R] to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated".	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
129.17	Alternatives	Other Non-Construction Alternatives	...the DEIS/DEIR alternatives...[should] include, but not be limited to, the following: ■ Consideration of Implementing a High-Density Rule (Slots). ■ Consider Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan in order to provide noise relief to affected communities. ■ Thorough regional transportation planning, including rail, and that all environmental impacts be addressed.	Neither federal nor state scoping directives required an analysis of slotting. Imposition of slot controls constitutes a federal policy that has been preempted to the FAA under federal law and is not within Massport's jurisdiction. Congress determined that the slot program has a number of significant problems. The U.S. DOT has studied options for reducing slot controls at airports. As a result, the AIR-21 Act, which was enacted in March 2000, eliminates all slots at three of the nations slot controlled airports. Slots at the Chicago O'Hare airport will be eliminated by July 1, 2002 and slots at New York LaGuardia and New York JFK will be eliminated by January 1, 2007. PPP represents a market approach that should encourage the highest value services to use Logan Airport during periods of scarce capacity without the market disruption and other inefficiencies related to slot control. The phaseout of Stage 2 aircraft operations was complete as of December 31, 1999. Refer to response to Comment 85.26. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
129.18	Analysis Assumptions/ Methodologies	Passenger Forecasts	The DEIS/DEIR does not indicate the detailed methodology used to develop the levels of passenger forecasts presented.	The 29 M level was developed in the *Logan Airside Improvements Feasibility Study*. It represented the growth from 1993 level at the historic (1960 to 1993) average growth rate of approximately three percent annually. The 37.5 M and 45 M levels have been used historically in other planning studies at Logan Airport and represent estimates of future demand under constrained and unconstrained growth scenarios. More information can be found in *Passenger Forecast for Logan International Airport*, Massport, 1991 and in *Logan Airside Improvements Feasibility Study Phase 1 Report*, Massport, July 1995.

Code	Topic 1	Topic 2	Comment	Response
129.19	Open Space/ Parkland	Impacts	The DEIS/DEIR discusses the preferred alternatives effect on historic districts but does not comment on the urban quality, or the design of the built environment.	The proposed projects evaluated under each of the alternatives are located on the existing airfield. Implementation of any of the proposed projects will not physically change the urban characteristics or the design of the built environment within adjacent communities when compared to the No-Action Alternative. Off-airport noise impacts from the Preferred Alternative are discussed in Section 6.2 of the Supplemental DEIS/FEIR.
129.20	Alternatives	Peak Period Pricing	Although Peak Hour Pricing in Alternate 1 clearly shows to be the most beneficial for delays and thus, noise reduction, the MPA continues not to consider this alternative except as a future option.	See Section 4.5 of the Supplemental DEIS/FEIR.
129.21	Environmental Review Process	FAA/NEPA, MEPA	The MPA and the FAA have not complied with the required timing of the DEIS/DEIR document.	Massport and FAA have complied with all applicable state and federal requirements.
129.22	Analysis Assumptions/ Methodologies	Base Year	...a 1998 base year should be required.	Refer to response to Comment 129.15.
129.23	Environmental Review Process	NEPA	A lack of "reasonable alternatives" exists because of the lack of an assessment of the entire Northeast regional transportation system, the documentation of the history of PRAS and the problems of implementation.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
129.24	Cumulative Impacts	Landside Improvements	The surrounding communities cannot continue to absorb the landside growth that would accompany the proposed airside growth at the airport.	The Airside Project has independent utility from existing and proposed landside projects at Logan Airport. The proposed improvements analyzed in the Supplemental DEIS/FEIR involve both construction and administrative actions that will facilitate aircraft operations (landings, takeoffs and taxiing). None of the improvements involve landside facility improvements (*e.g.*, terminals and roadways) or related operations. The Supplemental DEIS/FEIR analyzes in detail the impacts from aircraft operations, including analysis of noise and air quality impacts during the years 1993, 1998 and under future forecast scenarios as well as environmental benefits from certain of the improvement concepts under review. In this respect, the Supplemental DEIS/FEIR conforms with scoping directives from the lead federal agency (the FAA) and with applicable FAA environmental orders, all issued in accordance with NEPA, and with directives from EOEA issued under MEPA. The various GEIR documents, including the *Logan Airport 1998 Annual Update* and the *1999 Environmental Status and Progress Report* (previously GEIR), provide additional analytic context by examining cumulative impacts from airside (*i.e.*, aircraft) operations and landside (*e.g.*, vehicular traffic, terminal service vehicles) operations at Logan Airport as well as Massport's comprehensive mitigation program. The ESPR/GEIR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR as a background document. Each GEIR/ESPR submission is subject to public review and comment. The *Logan Airport 1998 Annual Update* and the *1999 ESPR* analysis is based on the same forecast levels used in the Supplemental DEIS/FEIR. The GEIR/ESPR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Supplemental DEIS/FEIR. Consistent with past practice, Massport expects that the FAA will take the GEIR/ESPR analysis into account during its deliberations and ultimate decision on the Supplemental DEIS/FEIR.
129.25	Delay	Model	There should be a detailed analysis of the causes of the delays in the document which show aircraft mechanical problems, crew caused delay, and weather causes both at Logan and those caused by weather at other airports.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
129.26	Alternatives	Reduced Approach Minima	Lowering of the minimum on runway 22L [will cause increased noise]...the near in neighborhood of...Saratoga Street area of East Boston.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.

Code	Topic 1	Topic 2	Comment	Response
129.27	Alternatives	Taxiway Improvements	The proposed centerfield taxiway between runways 4L/22R and 4R/22L...will increase noise and further degrade the quality of life for [residents of Winthrop, Revere, and East Boston]....	Section 6.2 of the Supplemental DEIS/FEIR shows that there are small noise benefits from the construction of the Centerfield Taxiway. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on the taxiways reducing ground noise and emissions for close in residents of East Boston and Winthrop. It also should eliminate aircraft landing on Runway 4R from waiting to cross Runway 4L and aiming their intake noise toward Constitution Beach. Section 6.4 of the Supplemental DEIS/FEIR discusses the air quality benefits of the Centerfield Taxiway.
129.28	Open Space/ Parkland	Impacts	Boston as a historic city will suffer the brunt of negative impacts from the proposed Project....	The FAA and Massport have consulted with the Massachusetts Historical Commission (MHC). The MHC has concurred with the FAA's determination that the Preferred Alternative will have no adverse effect on significant historic properties. Refer to Section 6.3.2 of the Supplemental DEIS/FEIR for a description of historic properties, project impacts and mitigation.
129.29	Regional Transportation	Passenger Rail	Development of high speed rail connections to other airports and the connection of Boston's two rail stations with the North/South Rail Link could help reduce these impacts.	Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
129.30	Ground Transportation	Access to Logan	[The convenience level of a city's airport has no effect on tourism or convention business.]	The delay analysis presented in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR clearly indicates that delays will increase in the future if Runway 14/32 is not built. Section 1.2 of the Airside Project Draft EIS/EIR and Section 1.3 of the Supplemental DEIS/FEIR discuss the importance of Logan Airport to the regional economy. Refer also to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of the delays that would occur under future scenarios if no actions were taken, and the delay reduction benefits of the Preferred Alternative.
129.31	Ecosystem	Rare Species	The state listed endangered upland sandpiper habitat which would be disrupted by the centerfield taxiway is not adequately addressed and there is no agreement with the Massachusetts Natural Heritage and Endangered Species Program....	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
129.32	Alternatives	Runway 14/32	[The proposed new runway will have a very adverse impact on the Boston Harbor Islands National Recreation Area including increased noise, scenic, water quality, and wildlife impacts.]	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
129.33	Environmental Review Process	Public Process	...the lack of future plans and analysis for the airport over the next 20 years must be found and the current document declared inadequate. In addition, the public has not been given fair consideration of the proposed Project. It is merely an interim solution to a much bigger and more complex problem which must be addressed before allowing the project to go forward.	Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts. There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
129.34	Environmental Review Process	MEPA	Because...impacts ...[have not] been adequately addressed....the documents [should] be found "INADEQUATE" and ...a new Draft document [should] be required.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

LETTER 130

BRIEFING REPORT

State of the State: The Need for Logan Airport Improvements

EXECUTIVE SUMMARY

Improvements at Logan Airport Badly Needed. With an annual economic impact of $5 billion, Boston Logan International Airport is at the heart of the region's economy. But in 1998, Logan experienced more than 120,000 hours of delay, making it the sixth-worst airport for delays in the nation. The annual cost of those delays to airlines and passengers? An estimated $310 million.

Surprising Reason for Logan Delays: Wind. The layout of Logan's four major runways means that when strong winds blow from the northwest, only one or two of the existing runways can be used. The normal of capacity 120 takeoffs and landings per hour drops to 90 or even 60, causing huge traffic delays.

New Over-Water Runway Is the Key to Improvement. Massport has proposed a series of airside improvements to reduce delay and improve efficiency on Logan's airfield. The centerpiece would be a new 5,000-foot commuter aircraft runway with all arrivals and departures occurring over water. The new runway would reduce delays up to 90 percent on northwest wind days, by more than 50 percent on good weather days, and by up to 25 percent annually.

Other Airports Can Help But Not Enough. Passenger growth in 1998 was up 75 percent at Manchester Airport and 14 percent at T.F. Green Airport (R.I.), making them two of the fastest growing regional airports in the country. Hanscom Field already is the second largest New England airport in landings and takeoffs. This growth helps to siphon off some of Logan's congestion but is not enough to make a serious dent in Logan's delays.

Public Overwhelmingly Favors Airport Improvements. 70 percent of citizens statewide consider Logan Airport very important to the region's well being, and 88 percent of the public favors a program to modernize Logan. 62 percent of Massachusetts residents and 52 percent of those in Boston support the new runway construction, specifically.

Logan Upgrade Helps Residents and Job Growth. A more efficient and hassle-free Logan made possible by airside improvements will support business expansion and job growth, the new convention center and Boston's Seaport District. At the same time, the new runway will spread noise impacts more equitably across communities near the airport and shift 75,000 flights over water—and that benefits everyone. The new runway also will improve air quality by reducing aircraft queuing, idling and circling overhead.

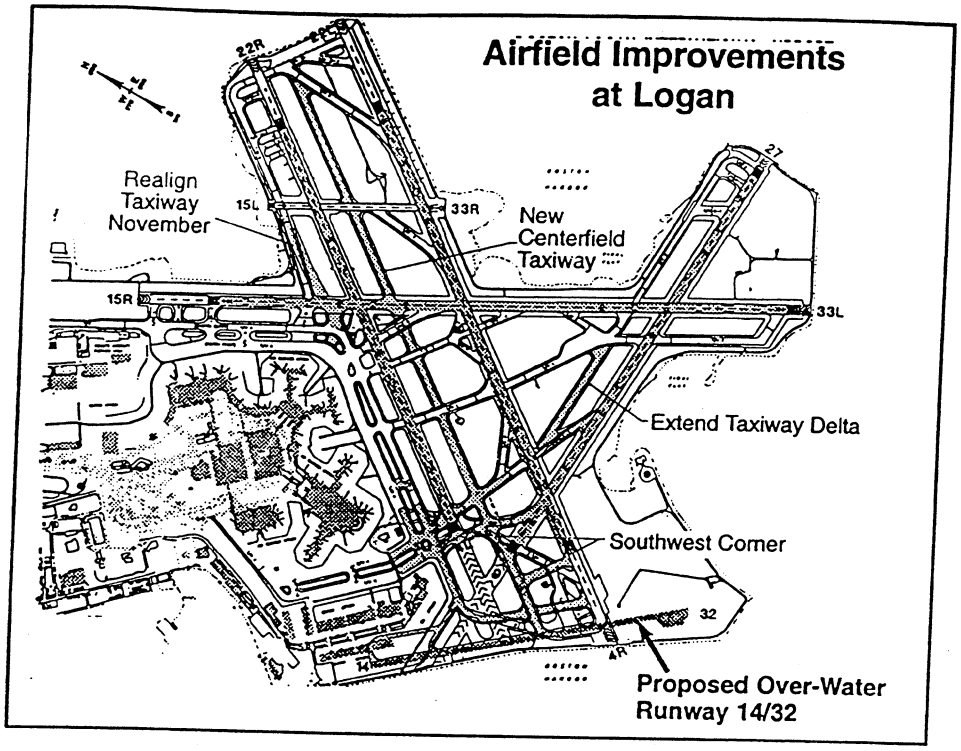
A Corporate Client Report
Vol. 10, No. 1 March 1999

On February 24, Boston Edison was pleased to host Mass Insight's annual winter review of the state's public policy agenda, with a special focus on the proposed new runway at Logan Airport. This briefing report summarizes the Logan Airport issues and includes highlights of the Mass Insight winter public opinion research on Logan and other public priorities.

At the briefing, **Betty Desrosiers**, director of aviation planning and development for Massport, presented the new runway project at Logan Airport. **Mark Robinson**, chairman of Massport, and **Gloria Larson**, chairman of the Mass. Convention Center Authority, emphasized the critical importance of the project for the state. Business initiatives to generate support were outlined by **Alan Macdonald**, executive director of the Massachusetts Business Roundtable, **Brian Gilmore**, executive vice president of Associated Industries of Massachusetts, and **James Klocke**, director of government affairs and economic development for the Greater Boston Chamber of Commerce.

As chair of the Mass. Business Roundtable's Transportation Committee, I know that improving Logan is one of the most important infrastructure projects under discussion now. Public opinion favors the effort, but it will be critical for business, state and local leaders to speak out at upcoming public forums on the issue, including NEPA/MEPA hearings on April 7 at 6:30 PM at the State Transportation Building in Boston and on April 8 at 6:30 PM at the Holiday Inn, Route 1A North in East Boston.

Thomas May
CEO, Boston Edison



THE ISSUE: LOGAN AIRFIELD LAYOUT LEADS TO POOR SERVICE—AND THE PUBLIC SUFFERS

Delays at Logan Are Five Times the Congestion Minimum and Costly. Logan's 120,000 hours of delay in 1998 were at five times the FAA threshold for congestion. Delays cost Massachusetts businesses, passengers, and airlines more than $300 million annually. High-growth industries in particular depend on Logan—business, management and financial services, high tech and communications. 78 percent of local businesses expect their demand for air travel to increase over the next five years.

Wind and Airfield Layout the Culprits. Logan has four major runways. The FAA tower uses three runways at a time to accommodate 120 takeoffs and landings per hour. Under these conditions, demand can be accommodated with little delays. But when strong winds come from the northwest, one or two of the runways become unusable, making operations plunge to between 60-90 per hour. Even when the weather is clear, airplanes at Logan can end up taking off late, and planes in other airports embarking for Boston remain grounded.

The Public Sees Logan as Non-Competitive. 43 percent of Massachusetts residents feel that Logan Airport is worse than other airports, 27 percent feel it is better, and 14 percent believe it is about the same as other airports. Among airport users, negative ratings jump. 53 percent of people using Logan one to five times in the last year say it is worse than other airports.

Delays Create More Noise for Logan's Neighbors. Residents in communities surrounding the airport suffer from delays. Late daytime schedules mean planes continue operations later at night. The lack of a third east-west runway forces the FAA to rely heavily on Logan's north-south oriented runways, significantly impacting communities to the north and south. This also limits how often planes can takeoff and land over the water.

LOGAN IMPROVEMENT IS CRITICAL TO THE REGION'S COMPETITIVE ADVANTAGE

Job Growth Hinges on Improvements. Boston-area businesses surveyed said that dependable and frequent air service is the second-most important factor when considering where to locate a business. A delay-prone airport alienates executives considering Massachusetts as a home base and undermines Boston's new convention center and Seaport District. No significant improvements have been made to Logan's airfield in more than 25 years. Other major U.S. cities are investing in new runways to enhance their airports; Boston must do the same to remain competitive.

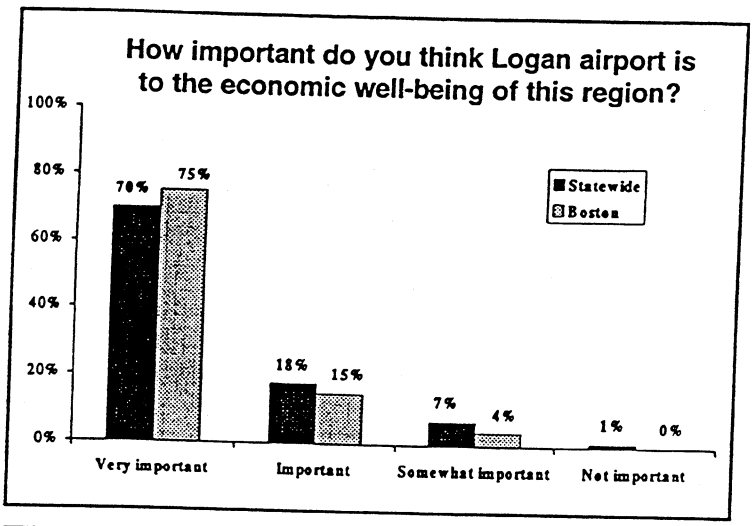
Logan Airport Creates Jobs and Revenue Directly. Logan supports more than 100 airport-related businesses and provides jobs for more than 15,000 employees. Airport payroll, local purchases, and taxes translate to $1.4 billion, while visitor expenditures, travel commissions and related revenue generate another $3.6 billion.

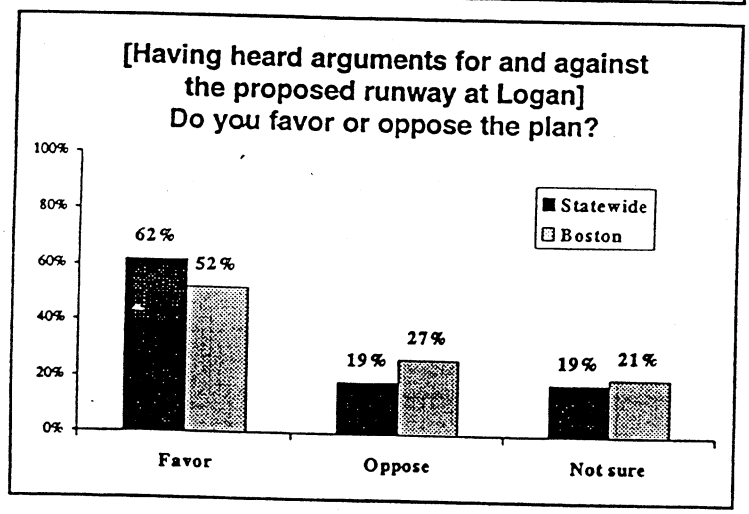
Public Sees Logan's Importance to Residents and Businesses. More than half (56 percent) of Massachusetts residents have used Logan airport in the past year. 86 percent of the public consider the airport to be important to the economic well being of the region; the number is even higher in Boston. One-third of state residents consider Logan to be important to their employers. In Boston, nearly half (47 percent) see the airport as important to their business.

OVER-WATER RUNWAY 14/32: THE KEY TO IMPROVEMENT

New Over-Water Runway Is the Critical Element. One of the key solutions Massport has proposed to increase

efficiency at Logan is the uni-directional over-the-water runway 14/32. The new runway 14/32 would reduce delays up to 90 percent on northwest wind days. Flights to Logan are expected to grow at about 1.5 percent annually. That's because Boston has a vibrant economy and is one of the most popular destinations for business and leisure travel in the U.S. Runway 14/32 will allow the FAA to better manage the traffic that is coming anyway and distribute flights more equitably over nearby neighborhoods, reducing persistent noise over any one community.





Other Airside Improvements Support the New Runway. Proposed improvements to Logan also include a centerfield taxiway, which would reduce taxiway congestion and ease movement of aircraft between terminal areas and runways. Proposed changes would also lower approach minimums—the point at which a pilot must decide whether to abort a landing—for Logan's runways. Reduced minimums will further ease delays, enhance safety and improve operational flexibility by giving air traffic controllers a choice of runways under poor weather conditions.

ALTERNATIVE SOLUTIONS ARE NOT ENOUGH

Relief Provided by Other Airports Necessary But Not Sufficient. Hanscom Field is already the second busiest New England airport in operations, serving the corporate market. Passenger growth in 1998 was up 75 percent at Manchester, N.H., Airport and 14 percent at T.F. Green (Providence) Airport, siphoning off some of Logan's congestion. Planned expansion at Worcester and New Bedford airports can help. However, Logan will remain the region's hub airport, and none of these developments will sufficiently decrease delays at Logan.

Peak-Period Pricing Doesn't Address the Problem. Pricing landing/takeoff fees higher at peak-travel times will not address weather-related delays, which are the principal cause of slowdowns at Logan. In addition, the costs to important regional carriers, such as Cape Air and Business Express, could be devastating.

PUBLIC SUPPORT, EVEN IN BOSTON, FOR THE PROJECT

Public Strongly Favors Modernization. 88 percent of the public favor a program to improve Logan. The public strongly supports the construction of a new runway: 62 percent are in favor, 19 percent oppose it, and 19 percent are unsure. Even in Boston, the majority (52 percent) are in support of a new runway, while 27 percent oppose it.

Gaining Momentum for the Project. Massport has filed the Environmental Impact Statement Report for the Logan Airside Improvements Planning Project, as it is called, to the appropriate state and federal agencies and hopes to have the project permitted by the end of 1999. In early 2000, Massport will seek relief from a 1975 court injunction, which was based on a petition filed by a community-based organization opposing construction of the new runway. Design and construction of the runway is planned for 2000-2001 and should be completed within a year. Other improvements will take an estimated three to five years to complete.

Public and Business Support Crucial. The support of business and community leaders is critical at public hearings and in the media. A partial list of hearings includes the NEPA/MEPA hearings on **April 7** at 6:30 PM at the State Transportation Building in Boston and on **April 8** at 6:30 PM at the Holiday Inn, Route 1A North in East Boston. The Greater Boston Chamber of Commerce is coordinating an effort involving the Mass. Business Roundtable, A.I.M. and other advocates.

Letter 130
Mass Insight, State of the State Executive Summary

Code	Topic 1	Topic 2	Comment	Response
130.1	General Support		State of the State: The Need for Logan Airport Improvements. Briefing Report in support of improvements at Logan Airport including the new runway.	Comment noted.

LETTER 131

MASSPIRG
Massachusetts Public Interest Research Group
29 Temple Place, Boston, MA 02111-1350 (617) 292-4800
http://www.pirg.org/masspirg

TO: Secretary Bob Durand
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

FR: Rob Sargent, Legislative Director

Date: April 23, 1999

Attn: MEPA Unit
Re: Logan Expansion/Runway 14/32

Dear Secretary Durand,

MASSPIRG urges you to reject the Massachusetts Port Authority's (MASSPORT) current Environmental Impact Statement (EIS) on their proposed runway expansion as insufficient. The EIS fails to adequately take into account existing pollution from the airport and the increased pollution from the planned expansion in light of their projected increases in passenger load. The EIS fails to specifically address past commitments that have been made to contain the environmental footprint of the airport. 131.1 131.2

You will hear from many commenters, well documented accounts of the level of current air, water and noise pollution. You will also receive many comments making an assailable argument that MASSPORT has neglected many factors which will contribute to increased pollution resulting from the airport expansion. Therefore, MASSPIRG will limit its comments to a number of conceptual considerations which must be taken into account before approving this EIS or any expansion at Logan Airport

Existing Burdens on the Environment and the Health of the Surrounding Communities

Logan Airport already poses an overwhelming air pollution burden on the communities surrounding it. It is directly responsible for very substantial emissions of smog-causing Nitrogen Oxides, hazardous air pollutants, including known and suspected carcinogens such as benzene and formaldehyde, and fine particulate pollution, a fine soot for which is increasingly known to be directly responsible for premature deaths. 131.3 131.4

Additionally, the airport is responsible for polluted runoff and other pollution of the surrounding harbor.

Past Assurances of No Net Increase in Environmental Impacts

MASSPORT has made statements in the past that it would not expand the "environmental footprint" of the airport. The EIS neglects to address these past commitments. The EIS states that the runway expansion will make the airport more efficient resulting in reduced congestion, idling and circling planes. Yet, it completely ignores the accompanying projections of growth in air traffic. The new runway must be considered in the context of the projected growth. In that light, the new runway can only be seen as an enabler to increased traffic in the absence of a commitment to cap air traffic at existing levels. 131.5 131.6

MASSPORT should not even consider a new runway without adopting policies which incent more efficient use of the runways. 131.7

Any increase in emissions and other environmental and health impacts must be offset by equivalent or greater reductions those impacts in the neighborhoods most directly affected by airport pollution. MEPA should reject any MASSPORT plan which does not contain clearly enforceable plans which adhere to this principle. 131.8

A Clear Accounting for Resources Committed For Past Environmental Mitigation Commitments

Consideration of the assumptions about and promises about future environmental impacts currently being made by MASSPORT cannot be done without a tough look at what has happened in past mitigation efforts.

Past mitigation commitments have included commitments continually increase the mix of passengers reaching the airport by public transit. Substantial resources were have been earmarked for this and other mitigation commitments. MEPA should demand a full accounting where those resources have been spent and where they intend to spend them in the future. 131.9

Flaws in State Transportation Planning

Lastly, the debate over the runway has fueled a much needed debate on transportation planning in the Commonwealth and in the region. This runway, nor any other changes in our tranportation infrastructure, should be considered with a comprehensive assessment of transportation options. 131.10

This must include a well thought out and coordinated regional plan including rail and a balanced use of the region's airports.

Letter 131
MASSPIRG
Rob Sargent, Legislative Director

Code	Topic 1	Topic 2	Comment	Response
131.1	Environmental Review Process	MEPA	The EIS fails to adequately take into account existing pollution from the airport and the increased pollution from the planned expansion in light of their projected increases in passenger load.	The air quality analysis includes all existing sources and future growth at Logan Airport.
131.2	Environmental Review Process	FAA/NEPA, MEPA	The EIS fails to specifically address past commitments that have been made to contain the environmental footprint of the airport.	Massport's airport-wide mitigation commitments are well documented and tracked in the Environmental Status and Planning Report and its annual updates. The Airside Improvements Planning Project proposed recommendations does not include the expansion of the footprint of Logan Airport. Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR.
131.3	Air Quality	Impacts	Logan Airport already poses an overwhelming air pollution burden on the communities surrounding it.	Modeling of air emissions shows no violation of the NAAQS in any areas surrounding Logan Airport.
131.4	Water Quality	Impacts	...the airport is responsible for polluted runoff and other pollution of the surrounding harbor.	Massport presents data regarding outfall monitoring in its GEIR/ESPRs and its subsequent Annual Updates. Similarly, Massport has developed extensive documentation regarding its development of the new salt marsh restoration area along Taxiway November. The Airside Project has been designed in a manner to avoid any wetland or harbor construction and a mitigation program has been developed to ensure that the project will not adversely affect water resources.
131.5	Environmental Review Process	FAA/NEPA, MEPA	Massport has made statements in the past that it would not expand the "environmental footprint" of the airport. The EIS neglects to address these past commitments.	See Response to 131.2. Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR. Extensive analysis of impacts of the 37.5 million scenario is discussed in detail in Chapters 5 and 6 of the Supplemental DEIS/FEIR.
131.6	Alternatives	Runway 14/32	...the new runway can only be seen as an enabler to increased traffic in the absence of a commitment to cap air traffic at existing levels.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.
131.7	Alternatives	Runway 14/32	Massport should not even consider a new runway without adopting policies which incent more efficient use of the runways.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway 14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.

Code	Topic 1	Topic 2	Comment	Response
131.8	Public Health	Effects	Any increase in emissions and other environmental and health impacts must be offset by equivalent or greater reductions [to] those impacts in the neighborhoods most directly affected by airport pollution.	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.
131.9	Ground Transportation	Access to Logan	Past mitigation commitments have included commitments [to] continually increase the mix of passengers reaching the airport by public transit. Substantial resources were [to] have been earmarked for this and other mitigation commitments. MEPA should demand a full accounting [of] where those resources have been spent and where they intend to spend them in the future.	The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's progress on meeting its air passenger goal of 35.2 percent by the time air passenger volumes reach 37.5 million annual passengers. Consideration will be given to ways to enhance transit ridership and use of the Logan Express bus service. In addition, Massport is considering consolidation of car rental facilities, which will facilitate the consolidation of the courtesy vehicles serving the rental car companies.
131.10	Regional Transportation	Regional Airports	...[The proposed new runway and] any other changes in our transportation infrastructure, should be considered with a comprehensive assessment of transportation options.	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market.

MJ Research, Inc.

April 22, 1998

LETTER 132

Secretary of Environmental Affairs
attn: Arthur Pugsley -- EOEA #10458
100 Cambridge Street, 20th Floor
Boston, Mass. 02205

Re: New Runway at Logan Airport; Expansion at S. Weymouth & Hanscom

Dear Mr. Secretary:

I wish to offer some comments regarding the runway expansion at Logan Airport, as well as further observations regarding alternatives for expanded airport capacity in Eastern Massachusetts. This is a matter that is vital to the future of our company—as well as many other growing businesses in Eastern Massachusetts.

I write on behalf of MJ Research, Inc., which is a biotech manufacturing firm in Waltham. Our company employs about 250 people in a wide variety of disciplines, and we are a world leader in our area of DNA analysis technology. We have distributors in over forty nations, we have been two years an "Inc. 500" company, and we were recently honored with a "Business Excellence" award from the Greater Boston Chamber of Commerce. In short, I think we are the sort of business that Massachusetts wishes to develop (and keep).

PROBLEM FOR MASSACHUSETTS BUSINESS

A significant problem MJ Research frequently experiences is the slow (and exceedingly expensive) airline travel in and out of Boston. The biotech business requires that executives, scientists, service personnel, etc. frequently fly to other cities for one-day meetings or service calls, leaving in the morning and returning in the evening. But that is almost impossible to do in a reliable fashion from Logan Airport, because even on clear days, you will often find yourself sitting for two hours on the tarmac at Newark Airport, for example, waiting for a landing slot at Logan. This can be very imposing upon the time of the employees of MJ Research, diminishing our corporate efficiency and morale considerably. 132.1

PROBLEM REGARDING CONVENTION CENTER EXPANSION

This persistent "delay" problem is going to be exacerbated extraordinarily by the construction of a new convention center. We typically exhibit at 20+ conferences at such convention centers each year. Believe me, flying in an out of a convention city with 20,000 other attendees jams the airport in every convention city in the U.S. on the days that a major convention begins or ends (which typically composes three or four days in a week). Those individuals who advocate a vastly expanded convention business in Boston, while simultaneously opposing a runway expansion, are naïve at best. 132.2

NEED FOR NEW RUNWAY; SYPMPATHY FOR EAST BOSTON RESIDENTS

In the short term, I see no alternative but to open the proposed new runway at Logan Airport. It is the central airport of New England, and the fact is, the current runways are oversubscribed the instant a land breeze begins to blow towards Boston Harbor. We need a new runway at Logan, period.

But I am sympathetic to the concerns of the citizens of East Boston, Roxbury, Chelsea, Quincy and elsewhere, and I don't think these communities deserve to have every jet airplane flying in and out of Boston passing over their heads for the next fifty years. Rather, I wish to advocate in addition to the Logan expansion increased commercial service at Hanscom Field. But more importantly, I believe we should develop the old South Weymouth Naval Air Station as a new Boston airport.

INCREASED COMMERCIAL SERVICE AT HANSCOM FIELD

As our company is located on Route 128 in Waltham, increased commercial service at Hanscom Field would be exceedingly convenient for us (as well as everyone else on Routes 128 and 2 and along the Interstate 93 corridor). Hanscom has the advantages of having existing highway approaches from both Routes 2A, 4 and 225—which should give adequate capacity for a moderate expansion. In particular, if there were simply increased commercial service to the New York, Chicago, and Washington D.C. airports, a large fraction of the highly-profitable business traffic could be diverted to this airport, without imposing excessively on the local citizens or the highway infrastructure. These three cities represent major hubs both nationally and internationally, and it would be greatly helpful to have Hanscom as a viable airport alternative for the Route 128 and the Metrowest crowd.

132.3

FORMER SOUTH WEYMOUTH NAVAL AIR STATION

Perhaps the biggest unrealized opportunity for improving commercial air service in New England lies in the property that was once the South Weymouth Naval Air Station (NAS). This is an existing large airport, it has long runways capable of handling heavy jet traffic, and it has been used until quite recently for heavy military jet traffic (most of the approaches to the former NAS are over forest, highways or industrial buildings). Although the South Weymouth NAS Re-Use and Planning Committee has studied the matter for some time and has decided upon making the property into a shopping mall -- this old air base is potentially a resource of extraordinary value for ALL of New England. Thus I think its redevelopment should be more carefully considered, with the needs of the whole region in mind (and I hear the shopping mall plan is in trouble anyway).

The decisions being made today will affect all of New England for decades to come. It is inconceivable to me that more attention has not been given to the South Weymouth alternative, for this a unique opportunity to address fundamental problems with the New England infrastructure that are causing this ages-old Logan debate in the first place. The former NAS is well located on Routes 128 and Route 3, it would give good access to the South Shore and Cape Cod, and it is located along the new South Shore Commuter Rail Line. Furthermore, a short extension of the Red Line could easily bring MBTA subway service, which would conveniently connect a new airport to all of central Boston.

I have heard some argue that use of the old NAS as a commercial airport "interferes with Logan flight paths." As a licensed pilot of fifteen years experience, I simply don't understand this argument. The Navy's heavy use of this airport for decades didn't interfere—and military flight paths are typically considerable. Even if there were some limited interference—surely the flight paths of Logan could be adjusted to accommodate an airport a dozen miles away, if these same paths can be adjusted to accommodate a new Logan runway a quarter mile from existing runways.

Assembling property in the 1990's for a wholly new airport is a virtual impossibility—and the problem will only get worse in the twenty-first century. But in South Weymouth we have an existing large airport seemingly tailor-made for commercial use! A new Boston airport would provide long-term, high-quality local job opportunities for the residents of Weymouth, Rockland, Abington and Hingham (as well as the rest of the South Shore), while improving the air transportation opportunities for all of New England.

Thank you for taking the time to read my comments, and I look forward to your determination on the current proposal. It truly is a matter of significant concern for all of Massachusetts business.

Sincerely,

John Finney

JOHN FINNEY
President
MJ Research, Inc.

Enclosures

Letter 132
MJ Research, Inc.
John Finney, President

Code	Topic 1	Topic 2	Comment	Response
132.1	Purpose and Need	Delay	[Air service at Logan is unreliable due to delay problems.]	Comment noted.
132.2	Purpose and Need	Delay	[Logan needs to be efficient if Boston is to attract significant convention business.]	Comment noted.
132.3	Regional Transportation	Regional Airports	I...advocate in addition to the Logan expansion increased commercial service at Hanscom Field. But more importantly, I believe we should develop the old South Weymouth Naval Air Station as a new Boston airport.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field, consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.

Nantucket Island Chamber of Commerce
48 Main Street • Nantucket, Massachusetts 02554-3595 . 508-228-1700 . FAX: 508-325-4925

April 7, 1999

LETTER 133

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

As an advocate for the business community on Nantucket Island, the Nantucket Island Chamber of Commerce wishes to make a statement regarding the proposed unidirectional runway at Logan airport.

Nantucket is geographically isolated, and relies more than most communities on safe and efficient air travel. Nantucket Memorial Airport is in the summer months New England's second-busiest airport, and on certain summer days has actually exceeded volumes seen at Logan. Air travel is a linchpin of our tourism economy, and since over 25 percent of our incoming commercial flights are vectored through Boston, the timeliness with which Logan Airport operates has a direct impact on our island. In addition, year-round residents of Nantucket rely upon air access to Boston for business, medical, and recreation needs, all of which can be fouled by delays.

The Chamber of Commerce also considers the new runway a better investment of Massport's resources than any of the stated alternatives, particularly reintroduction of a peak-period landing fee program. These programs are misguided and discriminatory, and punish the small airlines who contribute least to Logan's myriad delays. Studies have clearly shown the effectiveness of peak-pricing in delay reduction to be questionable at best. Furthermore, should a peak pricing structure be installed in Boston, it would have the potential to cripple Cape Air, the independent airline that provides our major link to Logan Airport, and the loss of which would do irrevocable damage to our island's economy.

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The Chamber recognizes local concerns about noise; noise abatement has been a major issue on Nantucket as well. However, if the proposed runway is unidirectional, and remains unidirectional in perpetuity, then the impact of air operations will be minimized by overwater takeoffs and landings. Thank you for your consideration.

Sincerely,

Maia Gaillard

Maia Gaillard
Executive Director

cc: Dan Wolf, President
Cape Air/Nantucket Airlines
Arthur Desrocher, Chairman
Nantucket Board of Selectmen
Fred Jaeger, Manager
Nantucket Memorial Airport

Letter 133
Nantucket Island Chamber of Commerce
Maia Gaillard, Executive Director

Code	Topic 1	Topic 2	Comment	Response
133.1	Alternatives	Runway 14/32	The Chamber of Commerce also considers the new runway a better investment of Massport's resources than any of the stated alternatives, particularly reintroduction of a peak-period landing fee program.	Comment noted.
133.2	Alternatives	Peak Period Pricing	...[Peak Period Pricing is] misguided and discriminatory, and punish[es] the small airlines who contribute least to Logan's myriad delays.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
133.3	Alternatives	Peak Period Pricing	...peak pricing...would have the potential to cripple Cape Air, the independent airline that provides our major link to Logan Airport, and the loss of which would do irrevocable damage to our island's economy.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

LETTER 134

April 19, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

The Nantucket Planning and Economic Development Commission ("NP&EDC") appreciates this opportunity to comment on the Draft Environmental Impact Report on the Logan Airside Improvements Planning Project, dated February, 1999.

The NP&EDC is the regional planning agency for the Island, Town, and County of Nantucket. As an Island, Nantucket faces unique transportation challenges. Nantucket is dependent on water and air transportation as critical links to the mainland. Among the most important transportation service are the air links between Nantucket and Boston's Logan Airport. The most consistent and frequent of which is provided by small carriers.

Peak Period Pricing

The NP&EDC understands that congestion of existing runways at Logan Airport is a serious concern, and threatens to erode the efficiency and margin of safety of airport operations. Among the options proposed by the DEIR is use of peak period pricing to control the demand at certain times. The NP&EDC is adamantly opposed to this method to reduce congestion. This air corridor is time-sensitive to Nantucket residents and businesses. The inevitable consequence of peak period pricing on Nantucket travelers and businesses is the absorption of additional transportation costs. Although the popular conception of Nantucket is a wealthy resort destination, this is not the reality. Businesses on Nantucket, as in any other place, must strike a balance between profit and overhead. Residents now pay over 30% more for transportation than their mainland counterparts. On Nantucket, transportation costs are already a substantial cost of living and doing business and there are escalating costs of land, rents and infrastructure. For those businesses that are forced to absorb the delays that are a consequence of peak period pricing, these delays equate to added cost for Nantucketers as well. There are virtually no reasonable alternative options available. Should peak period pricing force businesses to

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abandon air service to Boston, other modes, or combination of modes of transportation must be used which are inefficient, and time consuming. Islanders frequently require connections to Boston for medical, professional, personal, governmental and other reasons.

Unidirectional Runway 14/32

The NP&EDC believes that the proposed Unidirectional Runway 14/32 is the best solution for improving congestion at Logan. Based on the information provided in the DEIR, this runway isolates much of the small carrier traffic from major carrier traffic, and by reducing this conflict, decreases delays. The improvements add no apparent costs to air carrier services and transportation costs between Nantucket and Logan, which is of course of critical importance to Nantucket. 134.3

In conclusion, the NP&EDC appreciates this opportunity to comment on this issue of serious economic impact to Nantucket. Nantucket as a thriving, historically preserved community is a substantial contributor to the economic well being of the Commonwealth, and this fact should not be lost as you assess the impacts of these various alternatives.

Very truly yours,

Alvin S. Topham
Chairman

Cc: Senator Henri Rauschenbach
Representative Eric Turkington
Massport
Arthur Desrocher, Chairman, Nantucket Board of Selectmen
Jennie Garneau, President, Nantucket Chamber of Commerce
Dan Wolf, President, Cape Air

File: Massport: Logan Airside Improvements

Letter 134
Nantucket Planning and Economic Development Commission
Alvin S. Topham, Chairman

Code	Topic 1	Topic 2	Comment	Response
134.1	Alternatives	Peak Period Pricing	The NP&EDC is adamantly opposed to...[peak period pricing] to reduce congestion.	The Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR contain analysis of PPP as a demand management alternative at Logan Airport. See Section 4.5 of the Supplemental DEIS/FEIR.
134.2	Alternatives	Peak Period Pricing	[Implementation of peak period pricing at Logan would adversely affect Nantucket's economy.]	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
134.3	Alternatives	Runway 14/32	The NP&EDC believes that the proposed Unidirectional Runway 14/32 is the best solution for improving congestion at Logan. Based on the information provided in the DEIR, this runway isolates much of the small carrier traffic from major carrier traffic and by reducing this conflict, decreases delays. The improvements add no apparent costs to air carrier services and transportation costs between Nantucket and Logan, which is...of critical importance to Nantucket.	The benefits of Runway 14/32 are significant: (1) It provides a third runway for operations during northwest winds; (2) it reduces total annual delay by 27 to 37 percent (Preferred Alternative vs. the No Action Alternative); (3) it reduces delays during VFR conditions by 47 to 57 percent (Preferred Alternative vs. the No Action Alternative); (4) it allows controllers to separate aircraft of differing size classes during northwest winds; and (5) it increases the controllers' ability to achieve PRAS goals.

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naiop
National Association of Industrial and Office Properties

Massachusetts Chapter

April 7, 1999

LETTER 135

Jay Wickersham, Director
MEPA
100 Cambridge Street
Boston, MA 02202

RE: LOGAN DELAY REDUCTION PROGRAM

Dear Mr. Wickersham:

NAIOP strongly supports Massport's Logan Delay Reduction Program in general and the cornerstone of this proposal, a new uni-directional runway. 135.1

Logan Airport is the 17th busiest airport in the nation, and the sixth worst in terms of delays. With growing demand for its services, Logan has not had any significant runway improvements in 25 years. A new runway for Logan Airport is vital for the state's continued economic growth. Without it, delays will get much worse; with it MassPort has predicted a 25% reduction in delays.

NAIOP and the research group, Mass Insight, have produced "The Massachusetts Expansion Report" the last four years, based on interviews with senior executives in the top growth sectors in the state. Over the last two years, access and reliability at Logan Airport were singled out as significant disadvantages to Massachusetts businesses. The companies that are growing in Massachusetts engage in a great deal of air travel by employees and clients (consulting, money management, high tech, telecommunications, etc.). The frequency with which Logan is closed due to weather relative to places like Chicago, Dallas, or Atlanta, was specifically cited. These business executives and their site location consultants say Logan Airport improvements are a top priority. 135.2

Although Massport's plans also include expansion of service at other regional airports, an expanded rail service to Rhode Island, and a new high-speed rail service with New York City; alone, they are not sufficient to resolve the long term flight delay problems.

By redirecting small and mid-size planes to the planned "14-32" uni-directional runway, pressure would be taken off of the other runways, especially during the potentially crippling conditions with a northwest

wind that presently causes Logan to limit runway usage and ground flights.

The Massachusetts Chapter of NAIOP (National Association of Industrial and Office Properties) represents the commercial real estate industry through its legislative affairs efforts, educational programs, and its continual research into critical issues of business development. NAIOP is the leading voice for commercial real estate in the state and represents the interests of companies involved with the development, ownership, management, and financing of commercial properties as well as those companies providing services to this industry. Our membership consists of over 350 members who own or manage more than 85 million square feet of office, research & development, and industrial space in the Commonwealth.

Sincerely,

NAIOP, MASSACHUSETTS
National Association of Industrial and Office Properties

David I. Begelfer
Executive Director

Letter 135
National Association of Industrial and Office Properties
David I. Begelfer, Executive Director

Code	Topic 1	Topic 2	Comment	Response
135.1	General Support		NAIOP strongly supports Massport's Logan Delay Reduction Program in general and the cornerstone of this proposal, a new uni-directional runway.	Comment noted.
135.2	Purpose and Need	Delay	NAIOP and the research group, Mass Insight, have produced "The Massachusetts Expansion Report" the last four years, based on interviews with senior executives in the top growth sectors in the state. Over the last two years, access and reliability at Logan Airport were singled out as significant disadvantages to Massachusetts businesses.	Comment noted.

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LETTER 136

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20002-3557

Phone 202-408-8362
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E-mail narp@narprail.org
Web www.narprail.org

National Association of Railroad Passengers

April 23, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention: MEPA Office
Mr. Arthur Pugsley, EOEA No. 10458
100 Cambridge St., Room 2000
Boston, MA 02202

John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Re: Massachusetts Port Authority (MPA) Logan Airside Improvements Planning Project DEIS/DEIR – **EOEA No. 10458**
Boston-Logan International Airport

The National Association of Railroad Passengers, with 14,000 members nationwide, believes that the North Station-South Station Rail Link in Boston is the single most important rail passenger infrastructure investment opportunity in New England and one of the most important in the nation. For that reason, we gave our Golden Spike Award to Governor Weld and State Rep. John Businger, both of whom accepted the awards in person at our Washington reception in April, 1994. A year earlier, Senate Majority Leader George Mitchell came to accept the same award, in part for his role in securing $4 million for Amtrak for preliminary work on the Rail Link.

We are concerned that the above-captioned DEIS/DEIR does not reflect the importance of this opportunity.

1. **The Rail Link ridership diversion number shown in the Massport report is so low as to be completely lacking in credibility.** 136.1

I refer in particular to the claim that a North Station-South Station rail link would divert only 128 people a day from Logan to rail. ["The preliminary analysis conducted by project proponents indicates that the North-South Rail Link would increase 2020 intercity rail ridership on the Northeast Corridor primarily by diverting passengers from auto with only a small amount of diversion from air—approximately 46,700 passengers."]

- This figure [46,700 / 365 = 127.9] seems to completely discount improved connectivity between north-side commuter rail lines and high speed rail. In other words, it does not include people who are riding through the rail link tunnel on commuter rail but are doing so in order to connect with high speed rail at South Station.
- It clearly does not reflect operation of any trains between Maine and New York, which Amtrak certainly would run if the Rail Link existed. We understand that Amtrak is developing new numbers based on the assumption of some Portland-New York run-through service.
- It probably reflects a *very* conservative estimate of demand for the limited extensions of high-speed trains to Woburn cited.

2. **The report overstates the quality of existing New York-Washington service with respect to both frequency and speed.**

The result is to understate the ability of rail to attract ridership and market-share. In other words, existing New York-Washington market-share (about 40% of air-rail traffic, much higher if intermediate markets are included), has been achieved with fewer and slower trains than the report shows. The report therefore is misleading because it gives the reader a more pessimistic picture than the facts support regarding the amount of ridership that a given service level can attract.

The report states that "regular [non-Metroliner] trains generally take about 3 hours and 30 minutes with as many as 20 additional trains departing on weekdays in both directions." In fact, there are only 17 trips in each direction. Five of the southbound trains take between 3:35 and 3:50, a sixth takes 4:34; nine [over half!] of the northbound trains take 3:35-55.

The report states that Metroliners take "about 2:50". In fact, the fastest published time is 2:58, and is achieved by just one train (5:25 am from New York). Most trips are 2:59, a few are 3:05. [The standard weekend Metroliner running time is 3:04.]

The report states that New York-Washington trains "travel at an average speed of 100 mph." This is obviously untrue, since—as just noted—the fastest train scheduled takes 2:58, and so averages 76 mph on the 226-mile run. The *top* Metroliner speed is 125 mph. When intermediate stops and slow approaches (especially Baltimore and Philadelphia) are taken into account, a 100-mph average obviously is not possible.

[The report implies that there is more freight east of New York than west, but this also is not true. Indeed, Amtrak's freight revenues (payments by railroads running freight trains in the corridor) have been rising recently.]

3. **Similarly, by overstating existing New York-Boston frequencies and (presumably) accurately stating planned service, the report understates the degree to which the service will be improved.**

The report says there are ten Boston-New York trains a day in each direction, running times ranging from 4:10-5:00, but there are only eight realistic eastbound choices, nine westbound (including the *Twilight Shoreliner* that departs New York at 1 AM eastbound and arrives New York at 1:14 AM westbound).

The 9th and 10th eastbound trains and the 10th westbound are on the Inland Route; running-time: six hours.

- Most travelers will not take seriously the 3:55 PM Inland Route train from New York, which reaches Boston 28 minutes *after* the 4:55 from New York.
- Or the 9:40 PM from New York that arrives Boston at 3:40 AM.
- Or the 7:55 AM from Boston which reaches New York 50 minutes *after* the 8:25 AM from Boston.

In short, we believe that an accurate analysis would show that the Rail Link has far greater relevance to Boston airport requirements than is reflected in this DEIS/DEIR or the documents on which it relies. We believe this reflects a significant planning deficiency in the DEIS/DEIR and urge that these be addressed in a new Draft.

Thank you for considering our views.

Sincerely,

Ross B. Capon

Ross B. Capon
Executive Director

cc: John DeVillars, Director, Regional EPA
Robert Bartonowicy, Regional Director, FAA

Letter 136
National Association of Railroad Passengers
Ross B. Capon, Executive Director

Code	Topic 1	Topic 2	Comment	Response
136.1	Regional Transportation	Passenger Rail	The Rail Link ridership diversion number shown in the Massport report is so low as to be completely lacking in credibility.	The rail estimates are from existing, independent rail planning documents that examined total inter-city travel demand regardless of mode of travel and then predicted mode shifts that would result from implementing the rail project. Hence the rail estimates do not differ for the 37.5M and 45M Logan Airport passenger scenarios.

NASAO

LETTER 137

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April 12, 1999

Executive Office of Environmental Affairs
Attention: Mr. Arthur Pugsley
MEPA #10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Reference: EOEA #10458 Logan Airside Improvements

Dear Mr. Pugsley:

The undersigned state directors represent the following agencies that have responsibility for oversight of aeronautical activities within their respective states:

Connecticut Department of Transportation, Bureau of Aviation and Ports
Maine Department of Transportation, Office of Passenger Transportation
Massachusetts Aeronautics Commission (MAC)
New Hampshire Department of Transportation, Division of Aeronautics
Rhode Island Airport Corporation
Vermont Agency of Transportation, Division of Rail, Air, and Public Transportation

137.1

Please accept this letter as an expression of our strong support for the airside improvements and our firm opposition to the imposition of peak period pricing at Logan International Airport.

Contrary to published reports in the media, considerable planning has been done on a multi-state level to improve air service throughout New England. We have been working with the Federal Aviation Administration (FAA), the Massachusetts Port Authority (Massport), the New England Council and nine regional airports since 1994 to improve air service throughout New England. Those regional airports are:

Connecticut: Bradley International Airport and Tweed New Haven Airport
Maine: Bangor International Airport and Portland International Jetport
Massachusetts Aeronautics Commission: New Bedford Regional Airport and Worcester Regional Airport
New Hampshire: Manchester Airport

Rhode Island: T. F. Green Airport
Vermont: Burlington International Airport

In 1990, the MAC initiated a siting study commonly referred to as the Second Major Airport Study ("SMAS") to determine whether there were any suitable sites for a second major airport in Massachusetts. The SMAS started with 182 sites and eventually recommended further consideration of 2 sites at Fort Devens and in the Gardner/Winchendon area. In 1992, the MAC announced it would reevaluate air transportation demand and capacity in the context of a multi-modal, high speed transportation system and initiated a second study commonly referred to as the Strategic Assessment Report ("SAR") study. In November 1993, the final SAR report reconfirmed that the demand for air service at Logan will surpass capacity. More importantly, however, the SAR also identified several scenarios that, if implemented, could preclude the necessity for construction of a second major airport to meet that excess demand. Those scenarios include improved air service at regional airports, improved rail service, improved telecommunications technology, and airside improvements at Logan. The logic behind pursuit of these alternative solutions should be obvious given the staggering financial, environmental and social costs to construct a second major airport. Our mutual planning efforts were a natural progression from the SMAS and SAR and complement the analysis of surface transportation issues performed under the New England Transportation Initiative (NETI).

To date, we have:

- Identified existing air service levels at each regional airport.
- Estimated the degree of leakage; leakage was defined as the number of passengers in a regional airport's marketing area that used either Logan or the three New York City (NYC) Airports (LaGuardia, John F. Kennedy, and Newark).
- Analyzed potential for improved or new air service at the regional airports in New England.
- Conducted a Regional Airports Route Development Conference where representatives of the regional airports met with representatives of more than a dozen major, regional and Canadian air carriers (Air Nova, Air Ontario, American Eagle, Business Express, Cape Air, Commutair, Eastwind, Kiwi International, Northwest, Southwest, Trans World Airlines, USAir, and USAir Express).
- Assessed the potential impacts that improved air service at regional airports would have on air service at Logan.
- Designed a regional airport fare sampling methodology.
- Analyzed the results of a common fare pricing strategy at a regional airport.

In 1998, approximately 40% of the domestic destination passengers departing those regional airports and Logan departed from the regional airports, up from 35% in 1996. In that two year period, the total number of domestic enplanements at all ten airports rose by 13.4%; however, domestic

enplanements at the nine regional airports increased by more than 31% while Logan's domestic enplanements only increased by approximately 4%. Clearly, the combined efforts of the six state aviation agencies, the nine regional airports, the FAA and Massport are diverting demand away from Logan and to the regional airports. Each year, as the state directors and regional airports work with the FAA to update their respective Capital Improvement Plans, we consider both the local and the regional impacts of those proposed capital improvements. The new airport terminals, runway extensions, and other improvements at Bradley, Manchester, New Bedford, T.F. Green and Worcester are all complementary of our individual and joint efforts to improve regional air service throughout New England and they all contribute to reducing delays at Logan. 137.2

We urge you to approve the airside improvements proposed by Massport. Those improvements are necessary to ensure a safe and efficient New England airport system to serve scheduled passengers. Similarly, we object to any efforts to artificially constrain demand through the employment of peak period pricing. Notwithstanding the success of the regional airports, our communities will continue to utilize Logan for markets not served by the regional airports. 137.3 137.4

Connecticut Department of Transportation

Maine Department of Transportation

Massachusetts Aeronautics Commission

New Hampshire Department of Transportation

Rhode Island Airport Corporation

Vermont Agency of Transportation

Letter 137
National Association of State Aviation Officials New England State Directors

Code	Topic 1	Topic 2	Comment	Response
137.1	Alternatives	Preferred Alternative	The undersigned state directors represent the following agencies that have responsibility for oversight of aeronautical activities within their respective states: Connecticut Department of Transportation, Bureau of Aviation and Ports; Maine Department of Transportation, Office of Passenger Transportation; Massachusetts Aeronautics Commission (MAC); New Hampshire Department of Transportation, Division of Aeronautics; Rhode Island Airport Corporation; Vermont Agency of Transportation, Division of Rail, Air, and Public Transportation. Please accept this letter as an expression of our strong support for the airside improvements ...at Logan International Airport.	Comment noted.
137.2	Regional Transportation	Regional Airports	...the combined efforts of the six state aviation agencies, the nine regional airports, the FAA and Massport are diverting demand away from Logan and to the regional airports.	Comment noted.
137.3	Alternatives	Preferred Alternatives	We urge you to approve the airside improvements proposed by Massport. Those improvements are necessary to ensure a safe and efficient New England airport system to serve scheduled passengers.	Comment noted.
137.4	Alternatives	Peak Period Pricing	...we object to any efforts to artificially constrain demand through the employment of peak period pricing. Notwithstanding the success of the regional airports, our communities will continue to utilize Logan for markets not served by the regional airports.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

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LETTER 138

April 12, 1999

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Hawaii
Idaho
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New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Puerto Rico
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

Executive Office of Environmental Affairs
Attention: Mr. Arthur Pugsley
MEPA #10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Reference: EOEA #10458 Logan Airside Improvements

Dear Mr. Pugsley:

Reference is made to the letter dated April 12, 1999 to you regarding the subject Environmental Impact Statement/Report EOEA #10458.

This is to confirm that the National Association of State Aviation Officials has reviewed said letter and endorses the recommendations and findings contained therein. We urge you to approve the airside improvements proposed by Massport and we object to any efforts to artificially constrain demand through the employment of peak period pricing. 138.1

Sincerely,

William E. Gehman
Chairman

Henry M. Ogrodzinski
President & CEO

Letter 138
National Association of State Aviation Officials
William E. Gehman, Chairman
Henry M. Ogrodzinsk, President and CEO

Code	Topic 1	Topic 2	Comment	Response
138.1	Alternatives	Preferred Alternative	We urge you to approve the airside improvements proposed by Massport and we object to any efforts to artificially constrain demand through the employment of peak period pricing.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

NEIGHBORHOOD ASSOCIATION OF THE BACK BAY, INC.

April 23, 1999

LETTER 139

Mr. Arthur Pugsley
Executive Office of Environmental Affairs
MEPA Unit
EOEA #14508
100 Cambridge Street
Boston, Massachusetts 02202

Dear Mr. Pugsley:

The Neighborhood Association of the Back Back is writing to request that MEPA reject the draft Environmental Impact Report (EIR) submitted by the Massachusetts Port Authority (Massport) relative to the proposed Runway 14/32. We firmly believe that the EIR insufficiently addressed environmental impacts of Runway 14/32. Specifically, the EIR fails to adequately address (1) landside environmental impacts and (2) the necessity to regionalize airline traffic. In addition, the EIR utilizes inconclusive data relative to delays at Logan International Airport (Logan).

Landside Impacts

The EIR fails to address landside impacts of the proposed Runway 14/32. Massport has stated that the new runway will increase the number of annual passengers from the current 26 million to more than 37 million by 2010. These increases in passengers and airline traffic will have dramatic impacts on residents in and around Boston. 139.1

The added capacity and the resulting increased use of Runways 9/27 and 15/33 will inflict heavy noise impacts on Boston neighborhoods including East Boston, Charlestown, South Boston, Beacon Hill, Roxbury, Jamaica Plain and the Back Bay, and potentially areas such as Hyde Park, Roslindale and West Roxbury. In addition, the impacts on the streets and neighborhoods of Boston will be substantial. Such impacts include additional traffic caused by the increase in cars, trucks and shuttle buses serving the increase in passengers at Logan. 139.2 139.3

MEPA should reject the draft EIR because substantial landside impacts such as noise, traffic, productivity and general quality of life for Boston's neighborhoods have not been adequately addressed. 139.4

Lack of Regional Planning

The EIR fails to adequately address the necessity to regionalize airline traffic or to plan for another major airport. The EIR demonstrates that there has been no real planning by 139.5 139.6

Massport to promote the use of the region's other major airports in Massachusetts, New Hampshire and Rhode Island. In fact, growth at Green and Manchester airports has not been the result of planning, but from market forces related to cheaper airfares and easier traffic and commuter access. The EIR fails to address important issues such as planning for the provision of rail service to Green Airport, diversions to Manchester and Worcester airports and the effect of high speed rail service in the eastern corridor, among others.

In addition, even if Runway 14/32 is approved and built, Logan will soon reach its new capacity and Massport will seek additional runways to handle more airline traffic. Massport and the state should conduct a study of a second major airport that may serve the region in the next decade. Such a study in the 1980s included a potential site at the decommissioned Fort Devens. The study's recommendations, however, were never acted upon. Certainly, the EIR continues this failure to address the real need for a second major airport in the region. 139.7 139.8

MEPA should require that the EIR adequately address the regionalization of airline traffic and the need for a second major airport.

Inconclusive Data

The data upon which Massport has relied in preparing the EIR is inconclusive at best. There are significant discrepancies in the EIR relative to the rate of delay at Logan used by Massport and those of the FAA and others, calling the reliability of the entire EIR into question. 139.9

The EIR also fails to adequately discuss factual data regarding delays and the actual causes of those delays. First, use of 1993 as a base year is deceiving. In 1993 Logan had a year of severe delays that has not been matched since. In fact, currently less than four percent of flights are delayed at Logan. Second, the EIR fails to address what portion of the delays were caused by wind and weather that would have closed runways or the entire airport regardless of the existence of Runway 14/32. 139.10 139.11

MEPA should require Massport to withdraw its EIR until it can confirm this critical delay data.

For all of the above reasons, we respectfully request that MEPA reject the draft EIR submitted by Massport relative to Runway 14/32.

Sincerely,
NEIGHBORHOOD ASSOCIATION OF THE BACK BAY

Peter Y. Flynn
Vice Chairman

Peter Sherin
Vice President

Letter 139
Neighborhood Association of the Back Bay, Inc.
Peter Y. Flynn, Vice Chairman

Code	Topic 1	Topic 2	Comment	Response
139.1	Cumulative Impacts	Landside Improvements	The EIR fails to address landside impacts of the proposed Runway 14/32.	The proposed improvements analyzed in the Supplemental DEIS/FEIR involve both construction and administrative actions that will facilitate aircraft operations (landings, takeoffs and taxiing). None of the improvements involve landside facility improvements (*e.g.*, terminals and roadways) or related operations. The Supplemental DEIS/FEIR analyzes in detail the impacts from aircraft operations, including analysis of noise and air quality impacts during the years 1993, 1998 and under future forecast scenarios as well as environmental benefits from certain of the improvement concepts under review. In this respect, the Supplemental DEIS/FEIR conforms with scoping directives from the lead federal agency (the FAA) and with applicable FAA environmental orders, all issued in accordance with NEPA, and with directives from EOEA issued under MEPA. The various GEIR documents, including the *Logan Airport 1998 Annual Update* and the *1999 Environmental Status and Progress Report* (previously GEIR), provide additional analytic context by examining cumulative impacts from airside (*i.e.*, aircraft) operations and landside (*e.g.*, vehicular traffic, terminal service vehicles) operations at Logan Airport as well as Massport's comprehensive mitigation program. The ESPR/GEIR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR as a background document. Each GEIR/ESPR submission is subject to public review and comment. The *Logan Airport 1998 Annual Update* and the *1999 ESPR* analysis is based on the same forecast levels used in the Supplemental DEIS/FEIR. The GEIR/ESPR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Supplemental DEIS/FEIR. Consistent with past practice, Massport expects that the FAA will take the GEIR/ESPR analysis into account during its deliberations and ultimate decision on the Supplemental DEIS/FEIR.
139.2	Noise	Impacts	The added capacity and the resulting increased use of Runways 9/27 and 15/33 will inflict heavy noise impacts on Boston neighborhoods....	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
139.3	Ground Transportation	Traffic	[The proposed project will result in increased traffic in Boston.]	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
139.4	Environmental Review Process	MEPA	MEPA should reject the draft EIR because substantial landside impacts such as noise, traffic, productivity and general quality of life for Boston's neighborhoods have not been adequately addressed.	Refer to response to Comment 139.1.
139.5	Environmental Review Process	MEPA	The EIR fails to adequately address the necessity to...plan for another major airport.	Comment noted.
139.6	Regional Transportation	Regional Airports	...there has been no real planning by Massport to promote the use of the region's other major airports in Massachusetts, New Hampshire and Rhode Island.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
139.7	Alternatives	Runway 14/32	...even if Runway 14/32 is approved and built, Logan will soon reach its new capacity and Massport will seek additional runways to handle more airline traffic.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport.
139.8	Environmental Review Process	MEPA/NEPA	Massport and the state should conduct a study of a second major airport that may serve the region in the next decade.	Comment noted.
139.9	Delay	Model	There are significant discrepancies in the EIR relative to the rate of delay at Logan used by Massport and those of the FAA and others, calling the reliability of the entire EIR into question.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
139.10	Analysis Assumptions/ Methodologies	Base Year	...use of 1993 as a base year is deceiving.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
139.11	Delay	Model	...the EIR fails to address what portion of the delays were caused by wind and weather that would have closed runways or the entire airport regardless of the existence of Runway 14/32.	The delay reductions presented in Chapter 4 of the Supplemental DEIS/FEIR are the result of the Airside Project alternatives. The remaining delays are largely due to wind and weather conditions that are not helped by Runway 14/32.

THE
NEW ENGLAND
COUNCIL

TESTIMONY OF JAMES T. BRETT
PRESIDENT & CEO
THE NEW ENGLAND COUNCIL
April 21, 1999

LETTER 140

MY NAME IS JAMES T. BRETT AND I AM THE PRESIDENT AND CEO OF THE NEW ENGLAND COUNCIL, A REGION-WIDE BUSINESS GROUP THAT PROMOTES POLICIES TO STIMULATE ECONOMIC GROWTH THROUGHOUT OUR SIX STATE NEW ENGLAND REGION. THANK YOU FOR THE OPPORTUNITY TO PRESENT COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND DRAFT ENVIRONMENTAL IMPACT REPORT ON THE LOGAN AIRSIDE IMPROVEMENTS PLANNING PROJECT.

TEN YEARS AGO, THE NEW ENGLAND COUNCIL JOINED AN ELUSIVE, AND ULTIMATELY FUTILE SEARCH FOR A SITE FOR A SECOND MAJOR AIRPORT FOR NEW ENGLAND. WE WERE MOTIVATED BY TWO FACTORS: THE INCREASING IMPORTANCE OF AIR TRAVEL FOR OUR REGION'S BUSINESSES AND FUTURE ECONOMIC GROWTH, AND THE LIKELY INABILITY OF THE REGION'S DOMINANT AIRPORT, BOSTON'S LOGAN INTERNATIONAL AIRPORT, TO ACCOMMODATE EVEN CONSERVATIVE ESTIMATES OF INCREASE IN DEMAND.

IN 1993, THE COUNCIL HELPED ESTABLISH A COALITION THAT GREW TO INCLUDE THE SIX STATE AVIATION DIRECTORS FROM NEW ENGLAND, MASSPORT, THE MANAGERS OF THE MAJOR JET SERVICE AIRPORTS IN THE REGION, AND THE FEDERAL AVIATION ADMINISTRATION. OUR SHARED GOAL WAS THE GREATER UTILIZATION OF THE REGIONAL AIRPORTS, BOTH AS A MEANS OF STIMULATING ECONOMIC ACTIVITY IN THE AREAS CLOSEST TO THOSE AIRPORTS AND TO RELIEVE THE OVERWHELMING BURDEN ON LOGAN AIRPORT. A TWO-YEAR STUDY YIELDED SOME FASCINATING INFORMATION AND HELPED POINT THE WAY FOR ACHIEVING THESE GOALS.

WE FOUND:

- MORE THAN 5 MILLION OF LOGAN'S PASSENGERS—ABOUT 25% OF LOGAN'S TOTAL TRAFFIC—LIVE CLOSER TO ONE OR MORE OF NEW ENGLAND'S REGIONAL AIRPORTS;

- NONE OF THE REGIONAL AIRPORTS IS FULLY ACHIEVING THEIR TRAFFIC POTENTIAL;

- WITH REASONABLE IMPROVEMENTS IN SERVICE LEVELS AND COMPETITIVE FARES, OUR STUDY FOUND THAT THE REGIONAL AIRPORTS COULD "RECAPTURE" 50% OF THE PASSENGERS IN THEIR MARKETS.

NOW, SOME TEN YEARS AFTER OUR UNSUCCESSFUL ATTEMPT TO SITE A SECOND AIRPORT IN THE REGION, AND WITHOUT MOVING AN OUNCE OF DIRT, NEW ENGLAND HAS ITS SECOND AIRPORT—IT'S JUST NOT ALL IN ONE LOCATION OR EVEN ONE STATE!

T.F. GREEN AIRPORT IN RHODE ISLAND HAS INCREASED ITS PASSENGER BASE FROM 2.5 MILLION IN 1996 TO 4.6 MILLION LAST YEAR, MAKING IT THE SECOND FASTEST GROWING AIRPORT IN THE NATION. MANCHESTER, NEW HAMPSHIRE'S AIRPORT HAS DOUBLED ITS PASSENGER LOAD FROM 1 MILLION IN 1996 TO 2 MILLION LAST YEAR. AND WITH MASSPORT ENGAGED IN NEGOTIATIONS TO TAKE OVER THE DAY TO DAY OPERATIONS AT WORCESTER AIRPORT—AN AIRPORT THAT ONLY A DECADE AGO WAS SERVICING NEARLY 400,000 PASSENGERS A YEAR, BUT THAT NOW IS STAGGERING—AND COMMITTED TO BRINGING COMMERCIAL, CARGO, AND CHARTER FLIGHTS BACK TO CENTRAL MASSACHUSETTS, THE POTENTIAL EXISTS TO ACCOMMODATE THE 1.7 MILLION PASSENGERS WHO LIVE CLOSEST TO THAT FACILITY. COLLECTIVELY, THESE FACILITIES ARE, IN FACT, NEW ENGLAND'S SECOND AIRPORT.

THESE ACTIONS WILL CERTAINLY HELP RELIEVE A BURDEN ON LOGAN, AN AIRPORT THAT CONSISTENTLY RANKS AMONG THE NATION'S LEADERS IN DELAYS—AND THE ECONOMIC COSTS ASSOCIATED WITH THOSE DELAYS. BUT MORE NEEDS TO BE DONE. THAT'S WHY THE RECENT ANNOUNCEMENT BY AMTRAK THAT THEY WILL BEGIN HIGH SPEED RAIL SERVICE BETWEEN BOSTON AND NEW YORK CITY THIS FALL, REDUCING THE TRAVEL TIME BETWEEN THOSE CITIES TO THREE HOURS, IS SUCH WELCOME NEWS. AND WHY MASSPORT'S PLANS TO CONSTRUCT A NEW UNIDIRECTIONAL RUNWAY THAT WILL ONLY OPERATE OVER WATER, HAS BEEN HERALDED BY LEADERS OF BUSINESS AND GOVERNMENT.

THE ABILITY TO TRAVEL TO MIDTOWN MANHATTAN IN THREE HOURS WILL ATTRACT A SIGNIFICANT NUMBER OF PASSENGERS NOW FLYING TO NEW YORK'S LAGUARDIA AIRPORT ON LONG ISLAND AND TAKING CABS INTO MANHATTAN. THIS WILL RESULT IN A REDUCTION OF LANDSIDE CONGESTION THAT OFTEN MAKES LOGAN SO DIFFICULT TO NAVIGATE. FEWER CARS ENTERING LOGAN ALSO MEAN CLEANER AIR.

THE CONSTRUCTION OF A NEW RUNWAY, DESIGNATED 14/32, SIMILARLY WILL DIRECTLY ADDRESS THE PROBLEM OF DELAYS WHICH DISPROPORTIONATELY AFFECTS THIS AIRPORT AND THE PEOPLE WHO USE IT. IN 1998, LOGAN EXPERIENCED OVER 143,000 HOURS OF DELAYS, FIVE TIMES THE FAA THRESHOLD FOR CONGESTION. ACCORDING TO MASSPORT, DELAYS AT LOGAN COST AIRLINES AND THEIR PASSENGERS APPROXIMATELY $310 MILLION LAST YEAR. IF NO ACTION IS TAKEN, IT IS ESTIMATED THAT BY 2010 THERE WILL BE 596,000 HOURS OF DELAYS. TO PUT THIS IN MORE PERSONAL TERMS, PASSENGERS COULD EXPECT AN AVERAGE DELAY OF 54 MINUTES EVERY TIME THEY FLY IN OR OUT OF LOGAN AIRPORT.

MOST DELAYS ARE CAUSED BY WIND AND WEATHER CONDITIONS AT LOGAN. A STRONG NORTHWEST WIND CAN REDUCE THE NUMBER OF OPERATIONAL RUNWAYS FROM THREE TO TWO OR EVEN ONE. UNDER NORMAL WEATHER CONDITIONS, LOGAN CAN ACCOMMODATE 120 OPERATIONS PER HOUR; WITH TWO RUNWAYS, LOGAN'S OPERATIONS DROP TO 90 PER HOUR AND WITH ONE RUNWAY, LOGAN'S OPERATIONS PLUNGE TO 60 PER HOUR.
RUNWAY 14/32 WOULD REDUCE ANNUAL DELAYS AT LOGAN BY 21% AND VIRTUALLY ELIMINATE ANY DELAYS RESULTING FROM NORTHWEST WIND CONDITIONS.

AS A RESULT, CURRENT AND PROJECTED FLIGHT ACTIVITY AT LOGAN DOES NOT EXCEED THE CAPACITY OF THE FACILITY. THAT'S WHY THE NOTION OF "PEAK HOUR PRICING" IS NOT A REASONABLE ALTERNATIVE—AND PERHAPS WHY NO AIRPORT IN THE NATION UTILIZES THAT PRICING SYSTEM. PEAK HOUR PRICING WOULD SIMPLY REDUCE THE NUMBER OF AIRCRAFT USING LOGAN BY MAKING IT UNECONOMICAL TO DO SO—AND CAUSE ENORMOUS HARM TO THOSE FROM OTHER NEW ENGLAND STATES WHO HAVE NO CHOICE BUT TO USE LOGAN AS THE CONNECTING AIRPORT FOR THEIR ULTIMATE DESTINATION. WE HAVE STUDIED THIS ISSUE AND DETERMINED THAT IT ADDRESSES A PROBLEM THAT LOGAN IS NOT EXPERIENCING. 140.1

MASSPORT HAS MADE AN IMPORTANT COMMITMENT TO USE THE NEW RUNWAY FOR ONLY OVER WATER TAKE-OFFS AND LANDINGS. AS A RESULT, 75,000 OPERATIONS—FULLY 15% OF TOTAL AIRPORT OPERATIONS—WOULD SHIFT FROM PATHS OVER COMMUNITIES TO FLIGHT PATHS OVER WATER. THOSE COMMUNITIES CURRENTLY EXPERIENCING THE MOST SEVERE NOISE IMPACT WOULD SEE SIGNIFICANT BENEFITS. IT IS TRUE THAT SOME COMMUNITIES WOULD SEE A SLIGHT INCREASE IN NOISE; MASSPORT HAS COMMITTED TO PROVIDING SOUNDPROOFING FOR THESE COMMUNITIES.

NEW ENGLAND IS FAST DEVELOPING A REGIONAL TRANSPORTATION SYSTEM CAPABLE OF SERVING THE NEEDS OF A GROWING ECONOMY-- A SYSTEM THAT WILL SOON INCLUDE HIGH SPEED RAIL TO NEW YORK CITY, A THRIVING GROUP OF REGIONAL AIRPORTS THROUGHOUT NEW ENGLAND, IMPROVED ACCESS TO THOSE AIRPORTS AND STEPS TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF LOGAN AIRPORT. TOGETHER, THESE ACTIONS ARE ALLOWING NEW ENGLANDERS TO APPROACH THE 21ST CENTURY WITH BOTH OPTIMISM AND PRIDE THAT WE HAVE LEADERS WITH VISION AND COURAGE CHARTING THE COURSE FOR SUSTAINED ECONOMIC GROWTH. THEY DESERVE OUR FULL SUPPORT. 140.2

THANK YOU FOR THE OPPORTUNITY TO CONTRIBUTE MY VIEWS ON THIS IMPORTANT ISSUE.

Letter 140
New England Council
James T. Brett, President and CEO

Code	Topic 1	Topic 2	Comment	Response
140.1	Alternatives	Peak Period Pricing	Peak period pricing would simply reduce the number of aircraft using Logan by making it uneconomical to do so—and cause enormous harm to those from other New England states who have no choice but to use Logan as the connecting airport for their ultimate destination.	Refer to Section 4.5 of the Supplemental DEIS/FEIR for an expanded discussion of PPP. An exemption program designed to protect services to small communities most reliant on Boston for access to the national air transport system is described in Section 4.5.3 of the Supplemental DEIS/FEIR. The section provides an illustrative exemption program and its impact on the delay reduction potential of PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.
140.2	Alternatives	Preferred Alternatives	...[The proposed project] deserve[s] our full support.	Comment noted.

LETTER 141

N.E.E.D. Logan

New England's Economy Depends on Logan
P.O. Box 131, Cummaquid, MA 02637
(508) 362-3981/ Fax (508) 362-4812
fgibson@capecodjournal.com

April 23, 1999

MEPA Office
FAX (617) 727-1598
Attention: Mr. Arthur Pugsley
Re: EOEA #10458
13 pages including this one

Attached is a copy of a copy of my testimony at your FAA/MEPA hearing on April 7, 1999.

Also attached is my testimony to the Joint Transportation Committee in regard to House Bills No/ 1676 and 1678 on March 23, 1999.

I'd like to add that flying to Logan from Hyannis in a Cape Air Cessna 402 to attend your April 7 hearing was a perfect example of what 14/32 could do to alleviate delays at Logan. We were approaching Logan about 5:00 p.m. and were advised that there would be approximately a 30 minute delay for runway 33L. If we could use 33R there would be no delay. We used 33R, straight in over the water.

Also attached are two opinion pieces from the Cape Cod Journal, "Massport Quiz," from the March 17, 1999 issue and "Time to Squeak," from the April 11, 1999 issue. I would like to add them as comments.

Thank you

Fran Gibson

N.E.E.D. Logan

New England's Economy Depends on Logan
P.O. Box 131, Cummaquid, MA 02637
(508) 362-3981/ Fax (508) 362-4812
fgibson@capecodjournal.com

Testimony at FAA/MEPA hearing, April 7, 1999

My name is Frank Gibson. I live in Cummaquid, on Cape Cod, an area which depends upon air service to and from Boston.

I am a strong believer in the need to complete Runway 14/32 and the centerfield taxiway.

Back when a former Massport board proposed PACE -- its Program for Airport Capacity Efficiency -- I organized a grass roots citizens group called **N.E.E.D. Logan** -- New England's Economy Depends on **Logan** -- to oppose PACE, a program extremely detrimental to the airlines serving Cape Cod and the islands.

Thankfully, the FAA determined that PACE was ill advised and it was stopped. With regard to the current talk about peak period pricing and slots, there is no question that financial deterrents to limit access to Logan are not the answer to delays at Logan caused by weather. Do not be fooled by the comments made by Massport's then-executive director Dave Davis that PACE was effective in reducing delays. Delays were reduced at Logan during the period PACE was in effect but the record will show that during that same time period similar reductions in delays were experienced at all major airports monitored by the FAA. The reason for these reductions across the board was quite simple. The airlines adjusted their schedules by adding minutes to their scheduled flight times. This meant more flights arrived on time, or even ahead of schedule. Since none of the other airports were using financial deterrents such as PACE, it is obvious that the schedule changes, not financial deterrents, were responsible for the reduction in delays.

141.1

The important factor for any airport is its physical capacity to handle all the flights

-more-

scheduled by its users to arrive and depart as scheduled. And, as I understand it, when all of Logan's runways are available for safe use, Logan has the capacity to handle all the traffic scheduled by the airlines using it.

Using all its current runways, Logan can handle 120 operations per hour. However, when there are strong winds from the northwest, Logan is limited to one runway, 15/33, and operations are reduced to 60 per hour. Runway 14/33 is not meant to increase the number of aircraft using Logan. It is simply to allow the aircraft currently using Logan to arrive and depart with out delays. 141.2

The completion of runway 14/32 for use in strong northwest wind conditions would give Logan much needed relief during the times when it is currently limited to operations on 15/33.

The completion of 14/32 would also enhance utilization of Logan at all times. By eliminating the need for the smaller aircraft that represent almost half of Logan's operations to have a six-mile separation behind large aircraft, Logan's operational efficiency to handle both large and small aircraft is increased.

Since aircraft arrivals and departures on 14/32 would be over water aircraft noise would be negligible. For those skeptical of this statement, I invite you to visit Barnstable Municipal Airport Standing in the Airport Plaza parking lot, directly across Route 28 from the end of runway 24, you can see the airplanes approach and land as if you were standing in front of the Harborside Hotel. I say you can *see* them. Note that I did not say you can *hear* them, because you can't hear them over the normal ambient noise of Hyannis. Using 14/32 the airplanes would be like polite children -- seen but not heard.

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New England's Economy Depends on Logan. Logan's future depends on 14/32.
I ask that those who oppose 14/32 listen to the facts rather than react emotionally to misrepresentations of the facts.
They would discover that 14/32 is a win-win proposition for everyone.

N.E.E.D. Logan

New England's Economy Depends on Logan
P.O. Box 131, Cummaquid, MA 02637
(508) 362-3981/ Fax (508) 362-4812
fgibson@capecodjournal.com

Testimony at Joint Transportation Committee hearing, 3-23-99

My name is Frank Gibson. I live in Cummaquid, on Cape Cod, an area which depends upon air service to and from Boston.

I am a strong believer in the need to complete Runway 14/32 and the centerfield taxiway. I am here to oppose House Bills No. 1676 and 1678.
Back when a former Massport board proposed PACE -- its Program for Airport Capacity Efficiency -- I organized a grass roots citizens group called **N.E.E.D. Logan** -- New England's Economy Depends on **Logan** -- to oppose PACE, a program extremely detrimental to the airlines serving Cape Cod and the islands.

Thankfully, the FAA determined that PACE was ill advised and it was stopped. With regard to the current talk about peak period pricing and slots (House Bill 1679), there is no question that financial deterrents to limit access to Logan are not the answer to delays at Logan caused by weather. Do not be fooled by the comments made by Massport's then-executive director Dave Davis that PACE was effective in reducing delays. Delays were reduced at Logan during the period PACE was in effect but the record will show that during that same time period similar reductions in delays were experienced at all major airports monitored by the FAA. The reason for these reductions across the board was quite simple. The airlines adjusted their schedules by adding minutes to their scheduled flight times. This meant more flights arrived on time, or even ahead of schedule. Since none of the other airports were using financial deterrents such as PACE, it is obvious that the schedule changes, not financial deterrents, were responsible for the reduction in delays.

-more-

The important factor for any airport is its physical capacity to handle all the flights scheduled by its users to arrive and depart as scheduled. And, as I understand it, when all of Logan's runways are available for safe use, Logan has the capacity to handle all the traffic scheduled by the airlines using it.

Using all its current runways, Logan can handle 120 operations per hour. However, when there are strong winds from the northwest, Logan is limited to one runway, 15/33, and operations are reduced to 60 per hour. Runway 14/33 is not meant to increase the number of aircraft using Logan. It is simply to allow the aircraft currently using Logan to arrive and depart with out delays.

The completion of runway 14/32 for use in strong northwest wind conditions would give Logan much needed relief during the times when it is currently limited to operations on 15/33.

The completion of 14/32 would also enhance utilization of Logan at all times. By eliminating the need for the smaller aircraft – that represent almost half of Logan's operations -- to have a six-mile separation behind large aircraft, Logan's operational efficiency to handle both large and small aircraft is increased.

Since aircraft arrivals on 14/32 would be approaching over water aircraft noise would be negligible. For those skeptical of this statement, I invite you to visit Barnstable Municipal Airport.

Standing in the Airport Plaza parking lot, which is directly across Route 28 from the end of runway 24, you can see the airplanes approach and land as if you were standing in front of the Harborside Hotel. I say you can *see* them. Note that I did not say you can *hear* them, because you can't hear them over the ambient noise of the Hyannis streets. Using 14/32 the airplanes would be like polite children – seen but not heard.

New England's Economy Depends on Logan.

Logan's future depends on 14/32.

I ask that those who oppose 14/32 listen to the facts rather than react emotionally to misrepresentations of the facts.

They would discover that 14/32 is a win-win proposition for everyone.

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The Cape Cod Journal
AHEAD OF THE TIMES

Friday, April 23, 1999, Volume 2, Issue 4

Frank Gibson

THE ISSUE
SUBMIT COMMENTS
READER COMMENTS

Wednesday, March 17, 1999

Massport Quiz

THE ISSUE

Fact: Airplanes take-off and land into the wind.

Fact: Boston's Logan International Airport has four runways. Two parallel runways are aligned in a northeast/southwest direction, one is aligned east/west and one is aligned northwest/southeast.

Fact: Under normal circumstances Logan can handle 120 aircraft operations (take-offs and landings) per hour, enough capacity to handle the schedules of all the airlines utilizing Logan.

Fact: When there are very strong winds from the northwest, crosswinds make three of the four runways unfit for safe operations. This reduces the capacity of the airport to 60 operations per hour and causes delays.

Fact: Massport proposes to build a second runway aligned in a northwest/southeast direction to increase Logan's capacity when strong winds blow from the northwest.

Question 1: Does this seem like a logical idea?

Fact: The landing approach to the proposed second northwest runway would bring aircraft in over the water, avoiding residential areas.

Question 2: Does this seem like a logical idea?

Unfortunate Fact: There are people who do not want the second runway built. Their answer to the delays caused by winds that limit Logan to one runway is to charge landing fees that would limit access to the airport, their idea being that if Logan's capacity becomes weather-restricted to 60 aircraft per hour instead of its normal 120, 60 aircraft will be priced out of landing.

Question 3: Does this seem like a logical idea?

Misconception: The people who do not want the second runway say that having another runway will increase the traffic at Logan.

Fact: Massport points out that the second runway would simply allow the planes currently scheduled to operate at Logan to do so with a minimum of delays.

Question 4: Does Massport's explanation sound logical?

We ask these questions because to us the answers to questions 1, 2 and 4 are obviously yes and the answer to question 3 is just as obviously no. The problem is that there are a lot of people in the Logan neighborhoods whose answers are just the opposite and they have been successfully fighting construction of the runway for 25 years.

Why? Because they don't trust Massport.

Here is what Massport has to say about the situation at Logan:

> *In 1998, Logan experienced over 120,000 hours of delay, compared to the 20,000 hours of delay that is the annual congestion threshold established by the FAA. Delays at Logan are consistently among the worst in the U.S., ranking sixth in the U.S. for total delays. And the problem has worsened dramatically -- delays rose more than 20 percent over the past year alone.*
>
> *Since 1970, about the time the second northwest/southeast runway was proposed, annual passenger volumes at Logan have increased by 277 percent and annual operations have increased by 156 percent.*
>
> *Logan's disproportionately high ranking in aircraft activity reflects the uniquely high levels of regional carrier flights operated with smaller, non-jet aircraft, such as CapeAir/Nantucket Airlines Cessnas. Roughly half of Logan's operations are by regional air carriers, making Logan the U.S. airport with the highest amount of regional carrier activity. Such regional carriers are significant contributors to the vitality of the New England economy. Most of New England's regional carriers have code-sharing relationships with different national and international airlines.*
>
> *The smaller planes further influence operational activity because they must have a greater separation distance from a larger jet. When a small plane follows a larger jet, there must be a separation distance of up to six miles between the two. The smaller planes are not heavy enough to withstand the turbulence of a leading jet. When the percentage of regional carriers increases, the need to provide greater separation between aircraft increases. This necessary "stretching out" of the arrival stream, while easily accommodated on a "normal" day, has a dramatic impact on congestion and delay in bad weather conditions.*
>
> *The proposed unidirectional commuter runway would allow commuter planes, which account for up to 54 percent of Logan's daily operations, to arrive and depart over water on a*

separate runway. By separating the commuter flights, the Tower would would be able to use the other runways for larger jets, allowing for the optimal number of (but not increasing) take offs and landings for both commuter planes and jets.

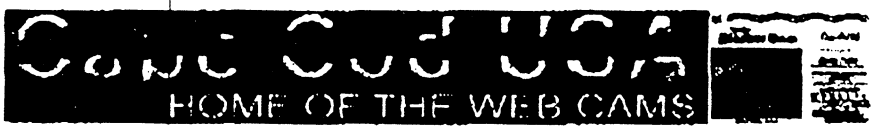
This runway would reduce annual delays in all conditions by more than 27 percent, increase the ability to meet community noise goals, and would result in a reduction of odor by 16 percent and ozone by 6 percent. Overall there would be a reduction in noise impacts for the majority of surrounding communities.

Question 5: Does Massport's proposal for the new runway sound logical?

Unfortunately, logic does not always prevail over politics, and for a quarter of a century the completion of the proposed runway (it was started in 1973) has been blocked by strong local politics.

To overcome the local politics the runway must have stronger support from the rest of Massachusetts and New England. Support from Cape Cod and the islands will be vital. Governor Cellucci is behind the runway. If you believe the runway is a logical solution to delays at Logan, it would help if you send him a message of support. It would help if you tell your state representative and it would be particularly helpful to tell Falmouth Representative Eric Turkington who is a member of the Joint Transportation Committee.

-- Written by Frank Gibson
THE CAPE COD JOURNAL



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Shortness of breath?

The Cape Cod Journal
AHEAD OF THE TIMES
Friday, April 23, 1999, Volume 2, Issue 4

THE ISSUE
SUBMIT COMMENTS
READER COMMENTS

Frank Gibson

Sunday, April 11, 1999

Time to Squeak

THE ISSUE

No doubt you have heard about or read about the runway that Massport is proposing to build at Boston Logan International Airport.

Why should Cape Codders care about what is happening at Logan?

Because Logan is our doorway to the world and Logan is the world's doorway to Cape Cod.

Why does Massport want to build the runway?

To relieve delays caused by adverse wind conditions; delays that make Logan one of the worst airports in the country in terms of delays. Last year Logan experienced 120,000 hours of delays, delays estimated to have cost the airlines and their passengers over $300 million.

How would the proposed runway reduce delays?

Aircraft take off and land into the wind. Logan has three sets of runways. Two parallel runways are aligned in a northeast/southwest direction, one is aligned in an east/west direction and one is aligned in a northwest/southeast direction. Under normal wind conditions that allow the use of all three of its available runway directions, Logan can handle 120 operations an hour. However, when there are strong winds from the northwest, the parallel NE/SW runways are not usable reducing operations to 90 per hour. In the worst case scenarios, when the E/W runway also becomes unusable, operations are reduced to 60 per hour. The proposed Runway 14/32 would give Logan a second NW runway which would alleviate the delays.

It should be noted that Runway 14/33 is not meant to increase the number of aircraft using Logan. It is simply to allow the aircraft currently using Logan to arrive and depart with out delays during adverse wind conditions.

However, the addition of 14/32 would enhance utilization of Logan at all

times. Currently, when on the approach for the same runway the smaller aircraft that represent almost half of Logan's operations have to maintain a six-mile separation behind large aircraft due to turbulence. 14/32 would provide separate approach paths for the large and small aircraft, increasing Logan's operational efficiency.

As Runway 14/32 is designed to bring aircraft in over the water rather than residential areas, the addition of 14/32 to Logan this would seem to be a win-win solution for Massport and its neighbors.

But the neighbors have mounted strong opposition to the runway. The neighbors have support from their local legislators and Congressman Joe Moakley has written to Jane Garvey, the FAA director, opposing Massport's plans. Congressman Michael Capuano has written to John DeVillars, Regional Administrator of the New England Environmental Protection Agency expressing "strong opposition" to Massport's plan for the runway.

I believe this opposition is a classic example of "Don't confuse me with the facts. My mind is made up."

The facts are simple. The runway is not designed to bring more aircraft into Logan, a misconception its opponents are spreading as gospel. It will not bring more noise to Boston's neighborhoods. The runway itself should reduce noise and any change in traffic patterns will simply redistribute the current noise.

At the FAA/MEPA hearing last Wednesday night to hear public comments on the proposed Environmental Impact Study for the runway and other airside improvements at Logan there were many public officials who spoke against the runway.

But there were also a number of businesses and associations who spoke in favor of it. They recognize that the economic future of Boston, Massachusetts and New England depend on a viable Logan Airport. These included Arthur D. Little, Associated Industries of Massachusetts, Boston Edison, Cape Air, Fidelity, Greater Boston Convention & Visitors Bureau, Hampshire House, Lily Truck Leasing, Massachusetts Business Roundtable, Massachusetts High Technology Council, Mass Insight, The New England Council, State Street Bank and the South Shore Chamber of Commerce.

At the Cape Cod Chamber of Commerce's Legislative Breakfast Friday morning, Senator Henri Rauschenbach stressed the importance of Runway 14/32 and urged all to contact Governor Cellucci and Peter Blute, executive director of Massport, to express support for the runway.

The voices against the runway are organized and loud. And, as the old saying goes, "The squeaky wheel gets the grease." It's time for the rest of us to squeak.

In addition of words of support to Cellucci and Blute, your written support of Massport's plans to the FAA and MEPA by the April 23 deadline for comments on Environmental Impact Study the would be appreciated.

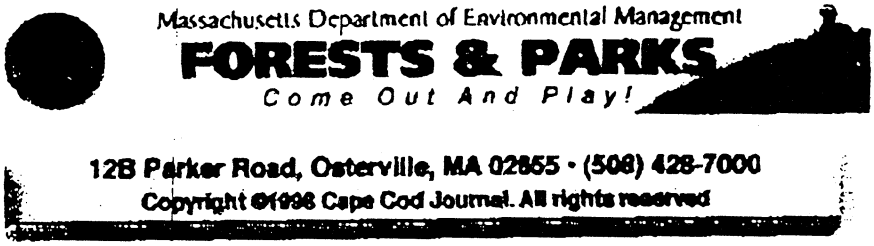
Write to:

Airports Division
FAA New England Region
12 NE Executive Park
Burlington, MA 01083

and

MEPA Office
Arthur Pugsley
EOEA #10458
100 Cambridge Street, 20th Floor
Boston, MA 02202.

-- Written by Frank Gibson
THE CAPE COD JOURNAL



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Letter 141
New England's Economy Depends on Logan
Frank Gibson and testimony

Code	Topic 1	Topic 2	Comment	Response
141.1	Alternatives	Peak Period Pricing	...there is no question that financial deterrents to limit access to Logan are not the answer to delays at Logan caused by weather.	Comment noted.
141.2	Alternatives	Runway 14/32	Runway 14/33 is not meant to increase the number of aircraft using Logan. It is simply to allow the aircraft currently using Logan to arrive and depart without delays.	Comment noted.

NEW ENGLAND GUATEMALAN ALLIANCE

LETTER 142

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, MA 02202

4/7/99

Dear Mr. Durand,

As an active member of Boston's Hispanic community and president of the New England Guatemalan Alliance (a network of Guatemalan people and organizations established in 1995), I urge you to reject Massport's EIS regarding runway 14/32 because it is biased, inadequate and uses out-dated figures from 1993, when the 1998 data (available on www.ASC.FAA.gov) clearly shows that delays at Logan have gone down significantly since 1992. MEPA regulations require the EIS to be clearly and concisely written in order to inform the public and policy makers of proposed development and various alternatives. This is where the EIS fails miserably. 142.1

The four-volume (600 pages plus per volume!) study is not clear or concise but terribly confusing and technical even for native English speakers. It does not adequately discuss viable alternatives to runway 14/32, such as peak hour pricing or land banking for a second airport and doesn't even *mention* the obvious alternative of sending all small planes to nearby Hanscom Airport. It doesn't discuss the "conservation potential" (as required in MEPA regulations) of these alternatives on humans, nature and natural resources. Massport's EIS shows two scenarios: "Logan with the runway" and "without the runway." In the name of fairness, the EIS should explain the benefits of other alternatives. 142.2

Most importantly, Massport's EIS does not consider the devastating environmental impacts on the **populations that will be most harmed by this runway - the majority of whom are inner city, lower-income and working class people - a significant proportion of whom are people of color.** Chelsea has one of the largest Puerto Rican and Hispanic populations in the region. East Boston is presently home to the largest Central American population in Boston. Jamaica Plain, Roxbury, Dorchester and the South End also house large Hispanic, Caribbean and African populations. Aren't MEPA and other Federal and State regulations supposed to protect against transportation development that adversely impacts a disproportionate number of minority and lower income people? 142.3

Please reject Massport's EIS because of these and other inadequacies. Runway 14/32 is a short-sighted and unfair proposal. Massachusetts needs long-term regional transportation planning that will equitably distribute airplane noise, air pollution and auto congestion throughout various areas of the state, rather than supersaturate populations who already bear the lion's share of negative environmental impacts from regional transportation including but not limited to Logan Airport, three tunnels, highways, mass transit and hazardous oil tanks. This is not NIMBY, but rather a simple case of when is enough *enough* for inner city neighborhoods? Thank you. 142.4

Ignacio W. Ochoa

Ignacio W. Ochoa, President
New England Guatemalan Alliance

Letter 142
New England Guatemalan Alliance
Ignacio W. Ochoa, President

Code	Topic 1	Topic 2	Comment	Response
142.1	Analysis Assumptions/ Methodologies	Base Year	...Massport's EIS regarding runway 14/32 [should be rejected] because it is biased, inadequate and uses out-dated figures from 1993, when the 1998 data...clearly shows that delays at Logan have gone down significantly since 1992.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent and continued to increase in 2000. In 2000, Logan Airport was second most delayed in the United States for arrivals. This represents the worst rank in Logan Airport's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
142.2	Environmental Review Process	MEPA	[The DEIR does not satisfy MEPA because it does not study a full range of alternatives.]	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
142.3	Environmental Justice	Impacts	...Massport's EIS does not consider the devastating environmental impacts on the populations that will be most harmed by this runway—the majority of whom are inner city, lower-income and working class people—a significant proportion of whom are people of color.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
142.4	Environmental Justice	Impacts	Massachusetts needs long-term regional transportation planning that will equitably distribute airplane noise, air pollution and auto congestion throughout various areas of the state, rather than supersaturate populations who already bear the lion's share of negative environmental impacts....	Regional initiatives to improve the efficiency of the region's inter-city transportation network have been studied since 1989. Section 2.1 of the Supplemental DEIS/FEIR summarizes relevant planning studies and their major conclusions. A regional transportation strategy that includes the expansion of regional airports, the development of high-speed rail, and the construction of Runway 14/32 and other infrastructure improvements at Logan Airport has evolved from these important studies. All the major improvements to the regional transportation system have been implemented except for improvements to Logan Airport's airfield. The regional airports have been experiencing tremendous growth in services and passenger traffic since 1996 and Amtrak introduced its high-speed Acela train service between Boston and New York in December 2000. Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. While greater use of the regional airports and high-speed rail will provide relief to Logan Airport, the proposed Airside Project provides clear benefits at current, as well as future, traffic levels. The benefits will only increase in the future, even as regional transportation developments act to reduce the rate of future growth at Logan Airport.

EOEA #10453

NPC Noise Pollution Clearinghouse

LETTER 143

Protecting the Commons:

Our effort to control second-hand noise is part of a greater effort to protect that which is held in common by the public from exploitation, abuse, and degradation. Other efforts to protect the commons are concerned with protecting our public lands and parks; air, airways, water, and waterways; habitat, species, and bio-diversity. What these efforts share is the recognition that our well-being is enhanced when the commons is used to maximize opportunities for everyone, and degraded when the commons is used to maximize profits or opportunities for a few, or to maximize only a few opportunities.

Some individuals and businesses feel that they have a right or the freedom to use a common resource in any way they see fit. Perhaps these people are mistakenly extending their own private property rights to that which is publicly owned or cared for and not exclusively their own. Perhaps they do not realize what most of us learned on the school yard years ago: "that my right to swing my fist ends at your nose." Or, perhaps they do not recognize the soundness of our parallel claim "that my right to create noise ends at your ear." In any case, these people are acting as bullies, claiming rights and freedoms that are not theirs while degrading resources that are ours.

Polluting the commons is not a right. Our effort to reduce noise pollution is similar to other efforts to reduce pollution and reassert our collective stewardship over the commons. Whether the issue is second-hand smoke, elevated mercury levels, or ground level ozone, the strategy is to protect the environment and our health and well-being by creating an ethic of the commons.

In seeking to advance an ethic of the commons, we first need to recognize that competing uses that exclude other uses of the commons or damaging uses that detract from other uses are not wise uses of a public good. The commons should be used in as many non-competing, non-damaging ways as possible. Noise, like many other pollutants, precludes many enjoyable uses of the commons and is not a wise use of the commons: loud late night parties, early morning garbage pick-up, or aircraft take-offs trump sleeping, reading, working, or listening to music.

We are seeking to improve human well-being by establishing an ethic for the commons that allows for as many non-consumptive and non-rival uses of the commons as possible. Human well-being is enhanced when individuals or groups such as the Noise Pollution Clearinghouse succeed in two ways: first, by minimizing damaging uses of the commons, and second, by maximizing the opportunities for non-competing uses. With respect to noise, help us by spreading the message that good neighbors keep their noise to themselves.

Subject: Noise protection in communist Hong Kong
From: "Ron Steinbach" <RonSteinbach@prodigy.net>
Date: 4/14/99 6:52 PM Pacific Daylight Time
Message-id: <7f3rd2$15ko$1@newssvr01-int.news.prodigy.com>

The following excerpt is from the South China Morning Post, October 14, 1998:

Residents urge 11pm flight ban

Noise from overnight flights has exceeded acceptable levels in Eastern District . . .

Residents have succeeded in getting flights rerouted from midnight until 7am starting from next Sunday,

but now they want rerouting to start from 11pm.

Provisional Urban Councillor Wong Kwok-hing, who represents Eastern District, has been measuring

noise from the flight path between 11pm and midnight.

It was found that noise from eight planes flying over the Wharf Centre in North Point on Monday exceeded the 55 decibels recommended by the Environmental Protection Department.

The average noise level was 66.3 decibels, with the highest level reaching 70.4, Mr Wong said.

My question is why the communist government in Hong Kong appears to be more sensitive to aircraft noise experienced by its citizens than the democratic government in the United States? 143.1

Subj: **Ky. Homeowners Flee Airport Noise**
Date: 4/18/99 11:38:46 PM Pacific Daylight Time
From: AOL News
`CC: Mooptdo

.y. Homeowners Flee Airport Noise

.c The Associated Press

By STEVE BAILEY

LOUISVILLE, Ky. (AP) – Pat Philpott has lived in the same home for more than three decades. Naturally, she felt anxious when she leamed she would have to move to make room for an airport's expansion.

That was until she found out she could take everything with her: her sofa, her television, her antique dresser – and all her neighbors.

Mrs. Philpott, 58, is among nearly 300 homeowners in Minor Lane Heights who over the next several years will pack up and move about 8 miles to the southeast.

It's part of an ambitious relocation plan that will keep their tiny incorporated community of about 1,700 residents at the southern edge of suburban Louisville from being dissolved.

``This community does a lot of things together – Easter egg hunts, senior citizen dinners, picnics and festivals," Minor Lane Heights Mayor Fred Williams said. ``Why let go of all of that if you don't have to?"

On one side of Mrs. Philpott's new home will be the family she's lived beside for nearly 30 years. On the other side will be a woman who's lived across the street for 26 years. Other current neighbors will be across the street.

first, I didn't want to move, not at all," Mrs. Philpott said. ``I've lived here a long time and raised my sons here and made some .t friends. I didn't want to give all that up."

Neither did many other residents, who banded together to make sure long-standing relationships would not be razed in the same fashion as their homes.

``We've lived here for 14 years and my parents live right next door," said 43-year-old Gerald Jackson, who along with his wife and two children will be among the first 50 families to have moved into their new homes by Thanksgiving.

``Everybody here looks out for each other like family. I couldn't imagine relocating anywhere away from a lot of these people, especially my folks," he said.

A groundbreaking ceremony for the new community was held March 28, but the process began more than five years ago when Louisville International Airport announced plans to open two new runways. That sparked outcries that the added noise would further burden thousands of already frazzled homeowners below the airport's flight path.

``From about 10 p.m. to 7 a.m., the roar is constant," Williams said. ``But it's not just the noise. The airport here has a great track record, but what goes up must come down. Eventually, there's going to be some kind of disaster."

A solution was proposed: a $285 million federal and state grant program to buy out more than 3,700 area property owners so they could purchase homes in other locations.

To those who had lived in Minor Lane Heights for years, however, that wasn't good enough. They told airport officials they would agree to move on the condition that residents could move together.

`` n this whole situation came up about five years ago, the phones were ringing off the hook with people asking, `Where am I

going to go?' and `What am I going to do,"' Williams said.

``Someone proposed the idea of moving together. Right away, people started saying it couldn't be done. But our attitude was `Why ?' These days, you can do just about anything you want if you put your mind to it."

me residents have taken the buyout money and moved elsewhere. But most, about 300 of 440 homeowners, have chosen to relocate to the new city, called Heritage Creek.

``Everybody is tickled to death with this," said city Clerk Jan Skeeters. ``And the excitement really picked up when people started picking their lots. Even though they just see their names on a colored dot on a layout board, it's become reality."

The Federal Aviation Administration spends millions of dollars annually to help people living near airports cope with the unsettling problem of jet noise, soundproofing some houses and buying and tearing down others. The budget for the program was $200 million last year.

In this situation, the agency and the airport each chipped in $10 million to help purchase 287 acres of land at the new site.

Residents will be able to sell their property to the program to buy land in the new community, where they will move into a home comparable to the one they sold.

About 350 houses will be built in the first phase of construction with more planned over the next several years. Williams said the three-bedroom, one-bath homes will average about 1,000 square feet, although residents will be allowed to pay more for larger lots or amenities their current homes lack.

The new city hall will be a 100-year-old building already on the property, which officials plan to begin renovating as soon as the first residents move into their new homes.

``A few people have asked me about the downside to this situation," Skeeters said. ``Other than the fact they've got a lot of fond memories in those old houses, what possible downside is there?"

vY-04-19-99 0238EDT

EOEA #10458

[Archive: 28 March 1998]

news

Something in the air

By Harvey Black

the health of people who service jet aircraft could be harmed by aerosols of the fuel. At a meeting next week in San Antonio, Texas, researchers will describe animal studies suggesting that these aerosols damage the lungs and have subtle neurological effects.

Most military and commercial jets use a kerosene-rich fuel called JP-8 or Jet A, which has always been considered safe. But scientists are now starting to investigate the risks of breathing the aerosols of unburnt fuel that shoot into the air when an aircraft starts its engines.

Mark Witten, a respiratory physiologist at the University of Arizona in Tucson, has exposed rodents to aerosols of JP-8 containing droplets between 1·5 and 1·8 micrometres across--similar to those created by jet engines.

Even a single, hour-long exposure to an aerosol containing 50 milligrams of JP-8 per cubic metre increased lung permeability in mice and caused the loss of cilia, the hair-like projections that waft dirt out of bronchial tubes. "This will allow dust, pollen and other stuff in the lungs to set up a chronic inflammatory state," says Witten.

Other researchers are studying the effects of repeated exposure to JP-8. Carol Baldwin of the University of Arizona exposed five rats to aerosols containing 1000

and they said they seem to have more colds, more bronchitis, more chronic coughs than the people not exposed to jet fuel," says Witten.

At next week's meeting, sponsored by the US Air Force, the Environmental Protection Agency and the National Institute of Occupational Safety and Health, officials hope to lay down a plan for future epidemiological studies.

"What we're trying to do is develop exposure standards for anyone who works around an aircraft," says Major Les Smith of the Brooks Air Force Base in San Antonio, who chairs an Air Force committee looking at the health and environmental effects of JP-8.

CORNELL UNIVERSITY NEWS

Airport noise is harmful to the health and well-being of children and may cause lifelong problems, Cornell study shows

FOR RELEASE: March 4, 1998
Contact: Susan S. Lang
Office: (607) 255-3613
email

ITHACA, N.Y. -- The constant roar from jet aircraft can seriously affect the health and psychological well-being of children, according to a new Cornell University study. The health problems resulting from chronic airport noise, including higher blood pressure and boosted levels of stress hormones, the researchers say, may have lifelong effects.

143.2

"This study is probably the most definitive proof that noise causes stress and is harmful to humans," says Gary Evans, a professor of design and environmental analysis in Cornell's College of Human Ecology. This is, he says, the first longitudinal study of noise and human beings to look at the same group of individuals before and after noise pollution.

Other studies have been cross sectional, comparing people exposed to noise to well-matched controls who were not subjected to noise. Evans, an environmental psychologist and an international expert on environmental stress (such as noise, crowding and air pollution) and his German and Swedish colleagues, Monika Bullinger and Staffan Hygge, respectively, reported their findings in the January issue of Psychological Science, published by the American Psychological Association.

The researchers looked at 217 third- and fourth-grade children in rural areas 22 miles from Munich, Germany, before and after the opening of a new airport.

About half the children live in an area under the flight path of the new international airport; the others, who were matched for age, parental jobs, family size and socioeconomic status, live in quiet areas. The children were tested for blood pressure, stress hormone levels and quality of life six months before the airport was completed as well as six and 18 months after it opened.

The children in the chronic noise group experienced modest but significant increases in blood pressure and significant increases in stress hormones (epinephrine, norepinephrine and cortisol) while the children in the quiet areas experienced no significant changes. Eighteen months after the airport opened, the children exposed to the chronic aircraft noise also reported a significant decline in their quality of life.

"Although the increases in blood pressure were modest in the children living

under the flight path, they may predict a greater likelihood of having higher blood pressure throughout adulthood," says Evans. There are indications, he says, that elevated blood pressure in childhood predicts higher blood pressure later in life.

Boosts in stress hormones also are of concern because they indicate that noise induces physiological stress. These hormones are linked to adult illnesses, some of which are life-threatening, including high blood pressure, elevated lipids and cholesterol, heart disease and a reduction in the body's supply of disease-fighting immune cells.

Evans' and his colleagues' new study adds powerful evidence to cross- sectional and animals studies which have shown higher stress levels in children and adults working and living in chronically noisy environments.

Evans also reported last year that New York children living near an international airport tended to be poor listeners and did not read as well as matched children in quiet schools. Later this year, Evans hopes to report on how chronic noise affects reading, learning and mental health in the Munich study group.

The study was supported, in part, by the Society for the Psychological Study of Social Issues, the National Institutes of Health, the Nordic Scientific Group for Noise Effects, the Swedish Environmental Protection Agency and the German Research Foundation.

Letter 143
Noise Pollution Clearing House

Code	Topic 1	Topic 2	Comment	Response
143.1	Noise	Nighttime Noise	[Why does Hong Kong have a lower allowable decibel level (55) than Logan?]	The comment is unclear and difficult to interpret. Hong Kong's noise standards for its new Chek Lap Kok (CLK) Airport utilize a totally different noise metric (the Noise Exposure Forecast (NEF)) than is used at airports in the United States, and the allowable level is not 55 dB. Also, it is the FAA, not Massport, that establishes guidelines for land use compatibility in the United States. It should not be surprising that rule making agencies of two such widely different countries and cultures have differing needs and objectives.
143.2	Public Health	Effects	The constant roar from jet aircraft can seriously affect the health and psychological well-being of children, according to a new Cornell University study.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Fax Cover Sheet

LETTER 144

DATE: April 22, 1999 TIME:

TO: Robert Durane PHONE:

COMPANY: Exec. Office of Env. Affairs FAX: 727-1598

FROM: John Mahony PHONE: (617) 989-1212

Nuestra CDC FAX: (617) 989-1218

RE: Runway expansion at Logan

Number of pages including cover sheet: [2]

Message:

I am writing to express my strong opposition to the runway expansion at Logan. In expressing this opposition, I want to make it clear that I am not an anti-growth fanatic but someone who sees that this is another example of the State taking a bandaid solution to a problem that will not address the real problem over the long term and will, as usual, impose its burden primarily on those of lower income.

Twenty-five years ago the State made a commitment to find an alternative to help relieve the congestion at Logan that would result from the expected growth of air traffic. Since that time, the State and its politicians have continually let opportunities pass to help address this issue. This has included letting Weymouth air strip go as a possible alternate, failed to move on making Worcester a viable alternative and failing to push for Hanscom to provide some relief.

Now you are hypocritically hiding behind some screen that you are pursuing alternatives in Manchester and Warwick. Who are you kidding with this approach of having your cake and eating it too? The main reason these alternatives are expanding so much has nothing to do with your actions or any other actions of politicians in this State. It is simply the marketplace. This is happening because Logan is such a mess and the State has failed to fix this situation. The other reason is that Southwest Airlines has provided very inexpensive reliable service out of these airports. It is for these reasons that I, who live in Roslindale, go to Rhode Island. It is not because of your efforts. Using this as evidence that you are seeking alternative solutions really only illustrates your willingness to pass the buck politically to other States to solve a Massachusetts problem.

I am opposed to the runway expansion at Logan for the following reasons:

- As mentioned above, this is only a short-term band-aid solution and in another five years we will have even fewer options available to help solve the problems that will exist. 144.1
- It places an undue and unfair burden of noise pollution on areas already bearing too much of the burden for the entire State. I can appreciate the argument of people in the Lexington and Concord areas that people don't want all the noise pollution over those historic areas (that are just as much my areas as theirs). However the Arnold Arboretum, Mt Auburn Cemetery, and the Emerald Necklace are also historic areas that draw 144.2

hundreds of tourists who would appreciate more peace and quiet. For many years Hanscom was a viable airport with a considerable amount of traffic from large military planes so a small increase of corporate and small jets is not unfair. I am willing to take 80% of the burden of noise pollution while I am sitting on my porch, but I am unwilling to take 100%.

- As proven by their unwillingness to provide for a solution for the last 20 years as well as countless other broken promises, Massport can't be trusted in their promise that this will only be used to provide an alternate landing route to minimize delays, not to increase landings. In five years when the burden on Logan is even greater this promise will fall by the wayside. 144.3

- Logan and the area around it simply cannot handle any more vehicular traffic. Logan is on a peninsular with vehicular access through pushing on residential neighborhoods. It cannot take any more. This comes at a time when public health officials are increasingly concerned about the epidemic in childhood asthma. 144.4

- There is inadequate space at Logan to provide storage and ancillary facilities for shippers and the situation will only get worse with the construction of a new runway. This will increasingly force trucks and storage spaces into residential and retail areas. This was recently illustrated by one developer recently announcing plans to develop more than 100,000 square feet of warehouse space miles away from the airport. 144.5

Until such time as the State takes the following actions, I will be fully opposed to the expansion at Logan:

- Worcester Airport is built up as a viable alternative. This would include the State providing a direct access highway and the State pushing airlines, shippers, and corporate jets to use Worcester as an alternative. 144.6

- Pursue "peak-time" pricing to force corporate jets out as a cause of delays. 144.7

- Develop Hanscom as an alternate for corporate jets. This would not radically increase noise or vehicular traffic in the area but it would be another cog in the effort to reduce delays at Logan. Many of these jets are servicing clients in the Rte 128 area anyway so it would be in their best interest. 144.8

- Further pursue Manchester and Warwick as alternatives. This would include establishing train service to T.F. Green. 144.9

Letter 144
Nuestra, CDC
John Mahoney

Code	Topic 1	Topic 2	Comment	Response
144.1	Alternatives	Runway 14/32	...this is only a short-term band-aid solution and in another five years we will have even fewer options available to help solve the problems that will exist.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
144.2	Noise	Impacts	It places an undue and unfair burden of noise pollution on areas already bearing too much of the burden for the entire state.	Projected changes in flight patterns and associated noise shifts are consistent with the PRAS goals, which were studied and approved by the community when established. Activity increases over certain communities are offset by activity reductions over other severely impacted communities and by activity increases over water.
144.3	Alternatives	Runway 14/32	Massport can't be trusted in their promise that this [runway 14/32] will only be used to provide an alternate landing route to minimize delays, not to increase landings.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport.
144.4	Ground Transportation	Access to Logan	Logan and the area around it cannot handle any more vehicular traffic.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
144.5	Cumulative Impacts	Landside Improvements	There is inadequate space at Logan to provide storage and ancillary facilities for shippers and the situation will only get worse with the construction of a new runway.	Logan Airport's real estate is admittedly less than the desirable size. Since the existing area cannot be expanded, Massport proposed the Airside Project and is investigating other redevelopments to maximize efficiency, including relocating non-essential facilities off-airport. Runway 14/32 will be located on fill that was prepared for this purpose 25 years ago. The runway will not increase airfield capacity, but will dramatically reduce aircraft and passenger delays during northwest wind conditions.

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Code	Topic 1	Topic 2	Comment	Response
144.6	Regional Transportation	Regional Airports	[Improve] Worcester Airport...as a viable alternative.	Massport has a long-standing relationship with the City of Worcester to aid Worcester Regional Airport in reaching its full potential, thereby improving the efficiency of the New England air transportation network. Massport assumed operational control of the Worcester Regional Airport on January 15, 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of Massport's efforts to promote increased utilization of Worcester Regional and the other regional airports.
144.7	Alternatives	Peak Period Pricing	Pursue "peak-time" pricing to force corporate jets out as a cause of delays.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport. See Section 4.5 of the Supplemental DEIS/FEIR.
144.8	Regional Transportation	Regional Airports	Develop Hanscom as an alternate for corporate jets.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
144.9	Regional Transportation	Regional Airports	Further pursue Manchester and Warwick as alternatives. This would include establishing train service to T.F. Green.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Pilot Block Neighborhood Association

LETTER 145

Pilot Block Neighborhood Assoc.
93 Pembroke St.
Boston, MA 02118
April 9, 1999

The Honorable Argeo Paul Cellucci
Governor Commonwealth of Massachusetts
State House - Rm 360
Boston, MA 02133

Dear Governor Cellucci:

I am writing on behalf of Pilot Block Neighborhood Association to urge you to reconsider your position on expanding Logan Airport with Runway 14/32. Very few cities have airports which are as close to their large population center as Boston. Boston and many surrounding towns and cities have long suffered from considerable noise and air pollution from the airport. The South End has had a dramatic increase in noise in the last year and the new runway will only make this worse. We all know that Logan Airport is here to stay and that we will have to continue to work to minimize the impact on its neighbors. But it is time to share the burden with other parts of this state. 145.1

Almost all major cities are served by more than one airport. With 57% of Logan's passengers coming from outside Rte. 128, we need to develop another airport to take the overload from Logan . And we need to develop a regional plan that will take us into the future, not settle for a stop gap measure that will help, at most, for five years and will place an increased burden on local communities. There are several options already in existence, Hanscom field (already underutilized), Worcester (which could be connected by a high speed rail line), and Ft. Devens. Not only would these airports decrease traffic and delays at Logan, but they could lighten the traffic on some of the most congested highways in Boston and give much easier access to air transportation to many of the 57% who live outside 128. And we need to look further afield to consider what makes sense in terms of other regional airports like Manchester and Providence. 145.2 145.3 145.4

Increasing air traffic at Logan is not good for business. Nobody wants to be in a city with so much airplane noise that you can't carry on a conversation. Nobody wants to endure the traffic congestion on the Central Artery and the lack of infrastructure to support increased air traffic. Nobody wants an unhealthy city, and the areas affected by the airport have elevated levels of respiratory problems and cancer. These need to be studied further. We shall urge the office of environmental affairs to do careful studies of these health risks. 145.5 145.6

We can develop this city in ways that don't sacrifice our quality of life, if we are ready to put the thought and committment into this goal. We need to have a Massport that makes good on its past commitments and that involves the communities it serves, not one that goes off and does its own thing regardless.

Please reconsider your position. Pilot Block Neighborhood Association voted unanimously to oppose the new runway 14/32.

Yours truly,

Cynthia J. Steil
President Pilot Block Neighborhood Assoc.

Letter 145
Pilot Block Neighborhood Association
Cynthia J. Steil, President

Code	Topic 1	Topic 2	Comment	Response
145.1	Alternatives	Runway 14/32	The South End has had a dramatic increase in noise in the last year and the new runway will only make this worse.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
145.2	Regional Transportation	Regional Airports	With 57% of Logan's passengers coming from outside Rte. 128, we need to develop another airport to take the overload from Logan.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport.
145.3	Regional Transportation	Regional Airports	....we need to develop a regional plan that will take us into the future, not settle for a stop gap measure that will help, at most, for five years and will place an increased burden on local communities.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. While regional alternatives will relieve traffic growth pressures at Logan Airport, the proposed airside improvements are necessary and provide clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail services act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
145.4	Regional Transportation	Regional Airport	...Hanscom field... Worcester... and Ft. Devens. ....decrease traffic and delays at Logan... [and] they could lighten the traffic on some of the most congested highways in Boston and give much easier access to air transportation to many of the 57% who live out side 128.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 19991999 and is in the process of preparing a Draft EIS/EIR, which is expected to be filed in October 2001.
145.5	Purpose and Need	Delay	Increasing air traffic at Logan is not good for business. Nobody wants to be in a city with so much airplane noise that you can't carry on a conversation. Nobody wants to endure the traffic congestion on the Central Artery and the lack of infrastructure to support increased air traffic.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

Code	Topic 1	Topic 2	Comment	Response
145.6	Public Health	Effects	...the areas affected by the airport have elevated levels of respiratory problems and cancer. These need to be studied further. We shall urge the office of environmental affairs to do careful studies of these health risks.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

LETTER 146

PRI Automation

April 7, 1999

PRI Automation, Inc., headquartered in Billerica, Massachusetts, is a leading global supplier of advanced factory automation systems and wafer-handling solutions that enhance the competitiveness of semiconductor manufacturers and OEM equipment suppliers. PRI is a member of The Massachusetts High Technology Council, Inc.

PRI Automation, Inc. has been in Massachusetts since it was originally founded in 1982 and currently employs over 500 Massachusetts residents out of a total of 1200 worldwide. We are a global company with a customer revenue base and operations at numerous locations in the U.S., Europe and Asia.

PRI spends on average $2.3 million in airfare traveling throughout the United States, Canada, Asia and Europe, installing and servicing customers' equipment and traveling between our facilities in California, Toronto, Europe and Asia. PRI's travel has increased at a rate of 20% annually and is expected to continue at that rate.

PRI employees take 2100 trips per year, most on short notice, leaving at all times of the day and night. In our business it is vital to meet the customers' demands all of which include arriving on time for sales meetings, and installing and servicing the equipment when the customer needs us there. Arriving too late could mean the loss of a potential contract. Efficiency is critical to our economic competitiveness. As PRI continues to strive for global presence, access to customers around the country and around the world is becoming increasingly important in order to remain a contender.

Delays at Logan Airport have been a constant loss to PRI in business time, and labor and travel costs as well as frustration to PRI travelers and inconvenience to customers visiting PRI headquarters. The proposed runway will alleviate the aircraft arrival and departure delay problem at Logan. Alternative airports will reduce congestion at Logan but not the delays, which will continue as a result of any wind related problem. New England weather is bad enough without adding wind direction to the list of delaying factors. 146.1

Another concern of PRI's is our employee's safety. The proposed changes will lower approach minimums for Logan's remaining four runways to industry standards. The lower minimums will give the pilots more time to decide whether to abort a landing. Reduced minimums will enhance safety and ease delays while giving air traffic controllers a choice of runways under poor weather conditions.

PRI employees have supported the use of regional airports such as Providence and Manchester but those airports do not meet the needs of all PRI travelers, nor do these regional airports meet the needs of our customer base who are worldwide. Traveling from Manchester and Providence is often more expensive, requires connections and flight options are insufficient. We support the use of these alternative airports but Logan will continue to be our major airport. 146.2

PRI's preferred airline carrier, United Airlines, will be spending $50 million to expand their operations at Logan Airport. According to the statistics, Logan Airport, the 17th busiest in the country had 120,000 hours of delays in 1998 and is the sixth worse airport for delays in the nation. The delays have been estimated to cost $310 million to airlines and passengers. For the second time in two months, all the major U.S. airlines have increased ticket prices by 7%. Preventable delays at Logan will only impact negatively on ticket prices. For an airline, time on the ground is money lost.

While remaining sympathetic to the needs of the neighboring towns of Logan Airport, PRI Automation, Inc. supports the proposed "delay-reduction runway" plan. The plan is a reasonable solution that will help the airport operate closer to its full potential while balancing the interests of the surrounding communities. 146.3

Sincerely,

Wendy Peters

Wendy Peters
Travel Manager

PRI Automation, Inc.
805 Middlesex Turnpike
Billerica, MA 01821
(978) 670-4270

Letter 146
PRI Automation
Wendy Peters, Travel Manager

Code	Topic 1	Topic 2	Comment	Response
146.1	Purpose and Need	Delay	Delays at Logan Airport have been a constant loss to PRI in business time, and labor and travel costs as well as frustration to PRI travelers and inconvenience to customers visiting PRI headquarters.	Comment noted.
146.2	Regional Transportation	Regional Airports	PRI employees have supported the use of regional airports such as Providence and Manchester but those airports do not meet the needs of all PRI travelers, nor do these regional airports meet the needs of our customer base who are worldwide. Traveling from Manchester and Providence is often more expensive, requires connections and flight options are insufficient. We support the use of these alternative airports but Logan will continue to be our major airport.	Comment noted.
146.3	Alternatives	Runway 14/32	While remaining sympathetic to the needs of the neighboring towns of Logan Airport, PRI Automation, Inc. supports the proposed "delay-reduction runway" plan.	Comment noted.

Provincetown Business Guild
P.O. Box 421-94
115 Bradford Street
Provincetown, MA 02657
(508) 487-2313

LETTER 147

22 April, 1999

BY OVERNIGHT MAIL

Secretary of Environmental Affairs
Attn. MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

Dear Mr. Pugsley:

Attached please find a petition is support of runway 14/32 and in opposition to the establishment of peak period pricing at Logan Airport. This petition was circulated at the Provincetown Business Guild meeting held on April 14, 1999 and signed by every member present. In addition many non Provincetown Business Guild members have have sought me out to sign the petition.

The Provincetown Business Guild is an association comprised of two hundred seventy five (275) businesses located in Provincetown and the lower cape. The Provincetown Business Guild opposes peak pricing because it would end year round air service to Provincetown and the region. The majority of our members depend on Cape Air for year round air service. It is a vital link to Boston providing: (a) service in the case of medical emergencies; (b) convenient air travel for tourists traveling to Provincetown (our local economy is tourist driven); and (c) year round transportation for many individuals whose businesses are located in Provincetown with clients and customers located elsewhere in the country.

The Provincetown Business Guild supports the construction of proposed runway 14/32 and strongly urges you to prevent the implementation of peak period pricing at Logan now and at any time in the future. It is time to permanently shelve this idea that will have such a detrimental effect on the health safety and welfare of the region. 147.1

Sincerely yours,

Gary Reinhardt, President
Provincetown Business Guild

cc:. John C. Silva
Manager Environmental Programs
Airports Division, ANE-600
12 New England Executive Park
Burlington, MA 01803

Senator Henri Rauchenbach
State House Room 315
Boston, MA 02133-0154

State Representative Shirley Gomes
State House Room 156
Boston, MA 02133-1056

Hon. William Delahunt
146 Main Street
Hyannis, MA 02601

Petition in Support of Runway 14/32 and in Opposition to Increased Peak Period Pricing

Whereas, Provincetown relies on air service between Boston and Provincetown for (a) service for medical needs: (b) convenient air travel for tourists visiting Provincetown where tourism is the primary industry; and (c) year round transportation for many Provincetown and lower cape residents whose businesses are based in Provincetown with clients and customers located elsewhere in the country or abroad: and

Whereas, proposed runway 14/32 for small aircraft will increase efficiency and safety at Logan Airport without increasing either noise or air pollution over any Boston neighborhoods: and

Whereas, increased peak period pricing will make it economically impossible to continue the Boston/Provincetown route to the detriment of Provinctown's safety and economy,

WE THE UNDERSIGNED, support the development of runway 14/32 and oppose any increase in peak period pricing.

	Name	*Address*
1.	Sarah K. Peake	7 Center St Ptown, MA 02657
2.	[illegible]	11 STANDISH WAY P-TOWN MA 02657
3.	[illegible]	14W-Vine St. P'Town Ma 026
4.	[illegible]	15 Center St Provincetown MA 02657
5.	[illegible]	8 Cottage St. Provincetown MA 026
6.	[illegible]	27B Conwell St #3 PTown MA 0265
7.	[illegible]	PO Box Provincetown MA 02657
8.	BC Mullaney	Box 923 Ptown MA 02657
9.	[illegible]	PO Box 532 Provincetown 02657
10.	[illegible]	757 Bradford St. Provincetown 02657
11.	[illegible]	15 STANDISH WAY PROVINCETOWN MA 026
12.	[illegible]	188 Commercial St, Provincetown MA 0265

Petition in Support of Runway 14/32 and in Opposition to Increased Peak Period Pricing

Whereas, Provincetown relies on air service between Boston and Provincetown for (a) service for medical needs: (b) convenient air travel for tourists visiting Provincetown where tourism is the primary industry; and (c) year round transportation for many Provincetown and lower cape residents whose businesses are based in Provincetown with clients and customers located elsewhere in the country or abroad: and
Whereas, proposed runway 14/32 for small aircraft will increase efficiency and safety at Logan Airport without increasing either noise or air pollution over any Boston neighborhoods: and
Whereas, increased peak period pricing will make it economically impossible to continue the Boston/Provincetown route to the detriment of Provinctown's safety and economy,
WE THE UNDERSIGNED, support the development of runway 14/32 and oppose any increase in peak period pricing.

	Name	*Address*
1.	Stanley Wilson	6 Webster Place Ptown MA 026
2.	GEORGE FROST	104-B COMMERCIAL ST. PTOWN MA 026
3.	Peter J Ward	16 COURT ST Ptown 026
4.	Tom Watson	40 Bradford St. Ptown 02657
5.	Adam Frenkel	83 Bradford St Ptown 02657
6.	Jen Borisen / Harborside Realty	15b Court St " "
7.	Howard Weiner	5 Winslow St Provincetown, Ma 02657
8.	Kathy Lyons	9 Nelson Avenue Provincetown 026
9.	Richard Baum	140 Bradford St. Provincetown 026
10.	Tim Richmond	140 Bradford St., Provincetown 026
11.	Thomas D. Hollis	23 Mechanic St. Provincetown, MA 02
12.	Andrew Hamer	23 Mechanic St Ptown, MA 026

Petition in Support of Runway 14/32 and in Opposition to Increased Peak Period Pricing

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WE THE UNDERSIGNED, support the development of runway 14/32 and oppose any increase in peak period pricing.

	Name	*Address*
1.	Sharon Barber	5 Winthrop St, Provincetown
2.	DuAyne Raymond-Prickett	54 Bradford ST Sts 1-3 Provincetown
3.	[illegible]	11 Johnson St Provincetown
4.	[illegible]	7 Winthrop St Provincetown
5.	JENNIS Rhodes	30 WEST VINE P'TOWN
6.	[illegible]	226 Bradford St
7.	[illegible]	15 Court St Provincetown
8.	[illegible]	11 Shore RD. Truro, MA
9.	Laurence Munay	234 Commercial St. Provincetown
10.	[illegible]	P.O. Box 186 P-Town 02657
11.	[illegible]	234 Commercial St #3 02657
12.	[illegible]	25 Com. ST P-Town 02657

Petition in Support of Runway 14/32 and in Opposition to Increased Peak Period Pricing

Whereas, Provincetown relies on air service between Boston and Provincetown for (a) service for medical needs: (b) convenient air travel for tourists visiting Provincetown where tourism is the primary industry; and (c) year round transportation for many Provincetown and lower cape residents whose businesses are based in Provincetown with clients and customers located elsewhere in the country or abroad: and

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WE THE UNDERSIGNED, support the development of runway 14/32 and oppose any increase in peak period pricing.

	Name	*Address*
1.	[illegible]	41 Bradford St Provincetown, MA
2.	[illegible]	7 Cook St Provincetown MA
3.	[illegible]	67 Harry Kemp Way Provincetown, MA.
4.	Jack Kelly	87 BRADFORD ST. PROVINCETOWN, MA
5.	[illegible]	POB 350 (Commercial) Provincetown
6.	[illegible]	7 Cook St. Provincetown.
7.		
8.		
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12.		

Petition in Support of Runway 14/32 and in Opposition to Increased Peak Period Pricing

Whereas, Provincetown relies on air service between Boston and Provincetown for (a) service for medical needs: (b) convenient air travel for tourists visiting Provincetown where tourism is the primary industry: and (c) year round transportation for many Provincetown and lower cape residents whose businesses are based in Provincetown with clients and customers located elsewhere in the country or abroad: and

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WE THE UNDERSIGNED, support the development of runway 14/32 and oppose any increase in peak period pricing.

	Name	*Address*
1.	[illegible]	P.O. Box 933 So Wellfleet, MA 02663
2.	Sally Rose	P.O. Box 255 Provincetown, MA
3.	Susan Kenny	180 MAIN ST ANDOVER, MA 01810
4.		
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Letter 147
Provincetown Business Guild
Gary Reinhart, President

Code	Topic 1	Topic 2	Comment	Response
147.1	General Support		The Provincetown Business Guild supports the construction of proposed Runway 14/32 and strongly urges you to prevent the implementation of peak period pricing at Logan now and at any time in the future.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

Provincetown AIDS Support Group
96 Bradford Street
Provincetown, MA 02657
(508) 487-9445

LETTER 148

22 April, 1999

BY OVERNIGHT MAIL

Secretary of Environmental Affairs
Attn. MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

Dear Mr. Pugsley:

148.1

The Provincetown AIDS Support Group wishes to express its support of runway 14/32 and opposition to the establishment of peak period pricing at Logan Airport.

The Provincetown AIDS Support Group has over 260 clients, many of whom depend on Cape Air for fast transportation to Boston Medical services. We oppose peak pricing because it would end year round air service to Provincetown and the region. It is a vital link to Boston providing air service in the case of medical emergencies. There is no substitute service available to our clients.

148.2

The Provincetown AIDS Support Group supports the construction of proposed runway 14/32 and strongly urges you to prevent the implementation of peak period pricing at Logan now and at any time in the future. It is time to permanently shelve this idea that will have such a detrimental effect on the health safety and welfare of the region.

Sincerely yours,

Gary Reinhardt, President
Board of Directors, PASG

cc:. John C. Silva
Manager Environmental Programs
Airports Division, ANE-600
12 New England Executive Park
Burlington, MA 01803

Senator Henri Rauchenbach
State House Room 315
Boston, MA 02133-0154

State Representative Shirley Gomes
State House Room 156
Boston, MA 02133-1056

Hon. William Delahunt
146 Main Street
Hyannis, MA 02601

Letter 148
Provincetown AIDS Support Group
Gary Reinhart, President

Code	Topic 1	Topic 2	Comment	Response
148.1	General Support		The Provincetown AIDS Support Group wishes to express its support of Runway 14/32	Comment noted.
148.2	Alternatives	Peak Period Pricing	We oppose peak pricing because it would end year round air service to Provincetown and the region.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption Program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

LETTER 149

A·D·S Ventures, Inc.

1540 Monument Street
Concord, MA 01742-5303
Tel 978-369-1920
Fax 978-369-1918
E-mail: chcta@ix.netcom.com

Jay Wickersham
Director
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street 20th Floor
Boston, MA 02202

April 22, 1999

Jay:

Please find enclosed, several suggestions for Logan mitigation as put forward by *Save Our Heritage.* I have, as we discussed late last month, forwarded a copy of the suggestions onto Chuck Anastas for his information. Please do not hesitate to contact me if you have any questions.

Sincerely,

Chester G. Atkins
Director
ADS Ventures

cc: Chuck Anastas

Mitigation Strategies for Logan as Proposed by *Save Our Heritage* – a community group

The most challenging and pressing issue facing Massport with regards to Logan airport is the issue of noise pollution. Indeed, this is an issue that effects any community in the country that "hosts" an airport. In order to address this issue, Massport should begin the FAR Part 161 process. Under the Airport Noise and Capacity Act of 1990, this is the only formal way an airport operator can legally restrict airport noise. If a FAR Part 161 proposal for Logan were to be accepted by the FAA, this would allow for noise surcharges, limitation on numbers of operations, limitation on the ultimate size of the airport, or special flight procedures. Unfortunately, no airport has ever had a Part 161 proposal accepted by the FAA. In fact, the FAA has made it clear that they do not intend to accept a Part 161 proposal. However, this is really the only binding way to control Logan growth. Through coordinate and combined energy of the community, the state and legislators, there may even be the possibility of establishing breakthrough and instigating change at the national level. 149.1

An Airport noise taskforce under the direction of the Secretary of Environmental Affairs should be created. The mission of the taskforce should be as follows: 149.2

1) Review all current Massachusetts environmental regulations with respect to noise
2) Review the work of other states and countries in the area of airport noise regulation
3) Propose state standards for measurement of noise and noise impact
4) Develop and propose a section in the MEPA regulations related to noise
5) Make recommendations defining the objectives of any Logan FAR Part 161 Process
6) Make recommendations on the content of the noise discussions in the next Logan GEIR

The task force would consist of recognized noise experts from both the public and private sectors who are recognized for their objectivity. Additionally, to gain the support and confidence of the citizens the task force should include community activists.

Massport should work with the state to develop a strategy to move traffic from the air to other forms of transportation and truly build a regional, intermodal system. In particular, the new high-speed rail system offers an excellent opportunity for Massport. Massport could: 149.3

1) Subsidizing and or build parking for rail stations
2) Advertise in support of high speed rail

3) Facilitate access to rail stations through other forms of public transportation
4) Place a surcharge on air operations that offer service to areas serviced by high speed rail. This would encourage the use of rail over the use of air for short haul trips and cut down on the amount of traffic in and out of Logan.

The Governor should set a timetable of 10 years for a "balanced airport noise trade" with our adjacent states and direct Massport to accomplish this. A study of people who come to Logan from New Hampshire and Rhode Island will show that Logan is still carrying a significant and disproportionate load of out-of-state passengers. A regional program should be developed so that each state is carrying its share of the aviation traffic load. Massachusetts should not be a "net importer" of aviation noise pollution, as it has been for the past 20 plus years. This corresponds to a very real and meaningful shift of the noise burden. Although this could be built into a mitigation plan for Logan and proposed by Massport in the EIR, it would be a great opportunity for the Governor to show that the state understands citizens' concerns and is prepared to demonstrate leadership on this issue. 149.4

Massport and the state should support and facilitate the Rt. 3 North construction project. Rt 3 North congestion is the primary barrier to the use the Manchester Airport. New Hampshire has made improvements on its section of Rt. 3. If the Massachusetts section of Rt. 3 were improved and the New Hampshire tolls removed Manchester would become a dependable and preferred option for many travelers. The use of Manchester for commuter flights by Massachusetts's travelers could offset the use of Logan for international and long-range flights by New Hampshire travelers. 149.5

Massport should use whatever legal techniques are available to ensure that quieter aircraft use Logan. If possible, carriers should be discouraged from using Stage 2 aircraft that have been "hushkitted" to Stage 3. These aircraft are much louder than true Stage 3 aircraft. This will be challenging, such "discrimination" is prohibited by Federal regulation. However, there may be creative ways for Massport to "encourage" operators to not use hushkitted aircraft. It is interesting to note that currently the European Union is working to ban the use of hushkitted aircraft in European airports. 149.6

Massport require the publication of the names of users of hushkitted aircraft, other loud aircraft, or late night operations. Additionally, a public monthly report of number of infractions by carrier should be published. These reports should explain the extra noise impact of these operations. This would allow the public to put pressure on the operators. However, Massport is under extreme pressure not to do this by the operators. This is an issue of disclosure, which could fall under the auspices of MEPA, and the Office of 149.7

Environmental Affairs. MEPA and OEA could require that this be done as part of the acceptance of the EIR. In this way, the communities could vent their frustration to the appropriate parities, the worst offenders. This could have a very real effect on the behavior of the operators, and it would also circumnavigate FAA regulations. The communities could focus on the operators instead of on Massport and effect change through market pressure.

Massport, the Governor, and the Secretary of Environmental Affairs should put in a formal request, in the form of an open letter, to the FAA regarding the proposed Stage 4 program for the next generation of quieter aircraft. This letter should explain that communities can no longer accept the noise of airports and the forecasted growth of airports can not go forward without Stage 4 mitigation. A timetable for the development and deployment of Stage 4 aircraft by the airline industry should be demanded. 149.8

Today, local officials are seen as attempting to protect citizens from airport noise. The state, rightly or wrongly, is viewed as a creator of airport noise. The Governor and the Secretary of Environmental affairs need to establish a position of leadership on the issue of protection from noise. This can and should be done through both the EIR process and through unilateral leadership initiatives from the Governor and the Secretary.

Save Our Heritage

A.D.S. VENTURES, INC.

FACSIMILE TRANSMITTAL SHEET

TO: Jay Wickersham

FROM: Chet Atkins

COMPANY: MEPA

DATE: 4/22/99

FAX NUMBER: 617 727 1598

TOTAL NO. OF PAGES INCLUDING COVER:

PHONE NUMBER: 617 727 5830

SENDER'S REFERENCE NUMBER:

RE: Noise Suggestions

YOUR REFERENCE NUMBER:

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Please see attached- hard copy to follow

Letter 149
Save our Heritage
c/o ADS Ventures, Inc.
Chester G. Atkins

Code	Topic 1	Topic 2	Comment	Response
149.1	Environmental Review Process	FAA/NEPA	Massport should begin the FAR Part 161 process. Under the Airport Noise and Capacity Act of 1990, this is the only formal way an airport operator can legally restrict airport noise.	Massport prefers to exhaust all available measures on a voluntary basis rather than embark on a FAR Part 161 Study. To date no commercial airport has been able to get FAA approval for a noise rule under the provisions of the regulation.
149.2	Environmental Review Process	MEPA	An Airport noise taskforce under the direction of the Secretary of Environmental Affairs should be created.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
149.3	Regional Transportation	Passenger Rail	Massport should work with the state to develop a strategy to move traffic from the air to other forms of transportation and truly build a regional, interrmodal system. In particular, the new high-speed rail system offers an excellent opportunity for Massport.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
149.4	Regional Transportation	Regional Airports	The Governor should set a timetable of 10 years for a "balanced airport noise trade" with our adjacent states and direct Massport to accomplish this. A regional program should be developed so that each state is carrying its share of the aviation traffic load. Massachusetts should not be a " net importer" of aviation noise pollution, as it has been for the past 20 plus years.	This is a matter for the United States Congress and individual state legislatures.
149.5	Regional Transportation	Regional Airports	Massport and the state should support and facilitate the Rt. 3 North construction project [because] Rt. 3 North congestion is the primary barrier to the use the Manchester Airport.	Comment noted.
149.6	Noise	Hushkitted Aircraft	Massport should use whatever legal techniques are available to ensure that quieter aircraft use Logan. If possible, carriers should be discouraged from using Stage 2 aircraft that have been "hushkitted" to Stage 3.	Massport commits to begin discussions with the FAA with the goal of instituting restrictions, either locally or nationally, on the use of hushkitted Stage 3 aircraft at Logan Airport.
149.7	Environmental Review Process	MEPA	[MEPA should require] Massport [to publish]... the names of users of hushkitted aircraft, other loud aircraft, or late night operations. Additionally, a public monthly report of number infractions by carrier should be published. These reports should explain the extra noise impact of these operations.	Refer to response to Comment 149.6.
149.8	Noise	Hushkitted Aircraft	Massport, the Governor, and the Secretary of Environmental Affairs should put in a formal request, in the form of an open letter, to the FAA regarding the proposed Stage 4 program for the next generation of quieter aircraft.	Refer to response to Comment 149.6.

LETTER 150

The Seaport Alliance for a Neighborhood Design (SAND)
300 Summer Street Boston MA 02210 617-423-4299
www.bostonseaport.com

April 22, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge St. 20th Floor
Boston, MA 02202

Re: EIS/EIR #10458 — Logan Airside Improvements

Dear Secretary:

The Seaport Alliance for a Neighborhood Design is a community group based in the Fort Point Channel neighborhood of South Boston. Our members, including many Boston-area residents and business owners, have advocated for the planning of a "neighborhood" in the South Boston Seaport District. A chronicle of this effort is documented on our website at www.bostonseaport.com.

We are addressing the Massport EIR for Logan Airside Improvements (#10458) by discussing the long-term impacts of Logan expansion on the South Boston waterfront — an area slated to emerge as a wonderfully vibrant neighborhood over the next 30 years. The South Boston waterfront is geographically the most severely impacted area — a future pedestrian friendly environment now imperiled by the proposed tripling in capacity of Logan Runway 27.

South Boston Seaport District — A Gem in the path of Runway 27

150.1

Surprisingly, economic and environmental impacts on the South Boston Seaport District have not been presented by Massport. This tract of land, roughly 4-5 times larger than Boston's North End, is projected by the Boston Redevelopment Authority's recently published Public Realm Plan to emerge as a dense urban residential and commercial neighborhood over the next 30 years. Outdoor elements of the waterfront plan already under way include harborwalk, harbortrail (bike path), a Fan Pier outdoor skating rink, tidal pool and many harbor-based leisure activities. The Fan Pier buildout alone is projected at $20 billion — much of it made possible by public investment in infrastructure.

Taxpayers have invested $4 billion into Seaport District infrastructure and $4 billion into harbor cleanup, and should expect a long-term return on these investments. A large number of these taxpayers, including all of our members, have dedicated a personal effort in attending hundreds of various meetings with the City of Boston, the BRA, City Council, community leaders, the MBTA, the BTD, landowners, developers, towards achieving a successful master plan for the South Boston waterfront. At none of the hundreds of planning meetings attended by SAND core members — even with Massport, was a mention or consideration of an increase in flights departing from Runway 27. 150.1 (cont.)

Most unfortunately, the South Boston Seaport District is not yet inhabited by the tens of thousands of residents, workers and pedestrians projected in the BRA Master Plan, those most adversely affected by the tripling of capacity of runway 27 to 56,000 departures per year. We at SAND remain vigilant on behalf of our future neighbors.

The Massachusetts Visitors' Bureau and the Massachusetts Convention Center Authority contend that the proposed changes to the airport will aid the South Boston Seaport District by bringing in conventioneers. These cheerleaders for tourists and conventioneers are well-meaning, yet indefensible — the Boston Convention Center occupies a 60 acre parcel out of 800 acres of developable area. The Seaport District of South Boston has never been dedicated to the import and management of tourists, but rather to the service and livelihood of all denizens of the City. Furthermore, the impact of plane flights on the pedestrian environment evolving around the Convention Center (much to the benefit of conventioneers) has not been studied by the MCCA, nor do we expect pedestrian impacts to be provided your office in their comments on this EIS/EIR. 150.2

SAND continues to stress that the success of the South Boston Seaport District will be in its ability to evolve as a mixed-use district for living and working — not as a pedestrian-unfriendly environment with planes roaring 500 - 600 feet overhead. Massport — an agency that has squandered land-banking opportunities within its own Seaport District-based Marine Industrial Park for the sake of short-term revenue generation, is seemingly incognizant of the economic opportunities to benefit Massachusetts over decades to come.

Massport's systematic expansion of Logan Airport

Massport asserts that this proposal will reduce delays caused by wind patterns. Logically, one must ask why delays have been worsening over the past 10-15 years. Here, Massport does not contend that delays have increased as a result of wind patterns. Delays increase because Massport has systematically overburdened its runways. Massport's modus operandi for expansion has been to seek approval at a stated capacity, continue to exceed the capacity to a breaking point and then to state a new objective to alleviate its problems. 150.3

In fact, delays have worsened due to Massport's unwillingness to balance supply and demand for air travel. If passengers were able to fly for free, would Massport be expecting its airports to continue to meet demand?

We would suggest that delays would be reduced, now and in the future, by regulating supply and demand for air travel. Business and leisure travel has increased during the current economic boon and will certainly decrease as the economy stabilizes or if ticket prices are raised during peak periods. 150.4

Massport has not met reasonable Community Obligations

Although Massport is well aware of our community group (based in South Boston's historic Fort Point Channel neighorbood) Massport has not held a single meeting in this area for the benefit of property owners, residents, businesses. The Fort Point Channel neighborhood, home to the Childrens' Museum and New England's highest density population of artists and creative professionals, is the starting point and most significantly impacted neighborhood affected by Runway 27. 150.5

Flights pass over the Fort Point Channel neighborhood along A Street at altitudes of approximately 500-800 feet, yet no decibel or emissions testing has been performed in the Fort Point Channel area. 150.6

Massport's Concerted Campaign of Obfuscation

Massport's EIR and public relations campaign have been devoid of relevant information for the layperson to assess impact.

Massport has portrayed this EIR as

1) a delay reduction program
2) a plan to move air traffic over the harbor with a unidirectional runway
3) an economic necessity for Massachusetts

150.7

None of these portrayals are entirely truthful or substantiated by the EIR/EIS. Considering the potential for increased capacity at Logan with an additional runway (backed by precedent), this plan is much more than a delay reduction program. And considering the major *land-based* shifts in traffic on runways 22L, 22R and 27, the proposal is not a harbor move.

Although we accept that expansion at Logan would have a positive impact on the Massachusetts economy, we do not believe the positive benefit of this particular proposal outweighs its tangible burdens. Despite the vocal chorus of business leaders supporting the runway plan, none have embarked on providing an assessment of the long-term impacts to substantiate their position.

150.8

We at SAND expect a thorough economic assessment before we accept claims regarding substantial benefit.

As further evidence of Massport's attempt to obfuscate, the agency accepted and used the skewed results of a poll conducted by a business group to demonstrate an "invisible army" of support. In fact, questions offered by the telemarketing firm regarding the Logan proposal were misleading and directed towards supporting the plan.

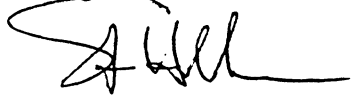
150.9

We ask the EOEA to either consider the actual questions asked by these telemarketers, or to discard Massport's use of biased polls and studies.

Finally, it is important to note that Massport worked with Governor Paul Cellucci during the EIS/EIR comment period, to secure Worcester Airport for future expansion. This type of knee-jerk planning is emblematic of Massport's roughshod approach to solving regional transportation issues.

In conclusion, SAND would suggest that Massport EIS/EIR 10458 is short-sighted, permanently retarding the progress of one of Boston's most notable long-term planning accomplishments — the South Boston Seaport District. This urban waterfront will evolve over many decades rather than in one or two business cycles, and the EOEA should join with SAND in appreciation of it — protecting an environment today that generations will enjoy tomorrow.

Best regards,



Steve Hollinger
on behalf of:
The Seaport Alliance for a Neighborhood Design (SAND)

Letter 150
The Seaport Alliance for a Neighborhood Design(SAND)
Steve Hollinger

Code	Topic 1	Topic 2	Comment	Response
150.1	Noise	Impacts	The South Boston waterfront is geographically the most severely impacted area...[T]he tens of thousands of residents, workers and pedestrians projected in the BRA Master Plan[are]...those most adversely affected by the tripling of capacity of Runway 27 to 56,000 departures per year.	Winthrop is actually the most severely affected by high noise exposure levels, now and in the future regardless of which alternative is implemented. However, the Preferred Alternative will provide some noise benefit to Winthrop, as well as to parts of East Boston and Revere that are also exposed to higher noise levels than South Boston.
150.2	Environmental Review Process	Public Process	...[T]he impact of plane flights on the pedestrian environment evolving around the Convention Center (much to the benefit of conventioneers) has not been studied by the MCCA, nor do we expect pedestrian impacts to be provided your office in...[MCCA's] comments on this EIS/EIR.	Comment noted.
150.3	Purpose and Need	Delay	Delays increase because Massport has systematically overburdened its runways. Massport's modus operandi for expansion has been to seek approval at a stated capacity, continue to exceed the capacity to a breaking point and then to state a new objective to alleviate its problems.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. Refer also refer to Section 4.2. The availability of Runway 14/32 is projected to produce a small improvement in air quality from improved efficiency of airfield operations.
150.4	Alternatives	Other Non-Construction Alternatives	We would suggest that delays would be reduced, now and in the future, by regulating supply and demand for air travel.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.

Code	Topic 1	Topic 2	Comment	Response
150.5	Environmental Review Process	Public Process	Massport has not held a single meeting in...[The Fort Point Channel] area for the benefit of property owners, residents, business.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
150.6	Cumulative Impacts	Noise, Air Quality	...no decibel or emissions testing has been performed in the Fort Point Channel area.	Massport has a permanent noise monitor installed in South Boston at B and Bolton Streets not far from Fort Point Channel. It is referred to as Site 2 in numerous tables and in text throughout the document and is used as one of the 23 specific points at which many supplemental noise calculations are made.
150.7	Purpose and Need	Delay	Massport has portrayed this EIR as 1. a delay reduction program 2. a plan to move air traffic over the harbor with a unidirectionaly runway 3 an economic necessity for Massachusetts Considering the potential for increasing capacity at Logan with an additional runway.... this plan is much more than a delay reduction program. And considering the major *land-based* shifts in traffic on runway 22L, 22R and 27, the proposal is not a harbor move.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway 14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.

Code	Topic 1	Topic 2	Comment	Response
150.8	Environmental Review Process	MEPA	Although we accept that expansion at Logan would have a positive impact on the Massachusetts economy, we do not believe the positive benefit of this particular proposal outweighs its tangible burdens. We at SAND expect a thorough economic assessment before we accept claims regarding substantial benefit.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
150.9	Environmental Review Process	Public Process	[Massport] accepted and used the skewed results of a poll conducted by a business group to demonstrate an "invisible army" of support...[Q]uestions offered by the telemarketing firm regarding the Logan proposal were misleading and directed toward supporting the plan. We ask the EOEA to either consider the actual questions asked by these telemarketers, or to discard Massport's use of biased polls and studies.	Comment noted.

A Law Office of HOLLAND & KNIGHT LLP

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KENNETH P. BRIER
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kbrier@hklaw.com

LETTER 151

April 12, 1999

Secretary of Environmental Affairs
ATTN: NAPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, MA 02205

Dear Mr. Secretary:

I would like to add my voice in support of the Logan Modernization project (including runway 14/32). 151.1

As I think a recent article in the *Boston Globe* amply demonstrated, the alternatives to Logan Modernization – including expansion of Hanscom Airport and other regional facilities – either are not viable or will not be sufficient by themselves. While I do not discount the importance of other transportation measures, such as expansion of airports in Worcester, New Bedford, Providence and Manchester and the introduction of a high-speed rail link to New York, I think that the continuation of improvements to Logan Airport is essential to the local economy. In the absence of such improvement, the problem of delays are bound to get worse. This would result in inconvenience to millions of air travelers in the Boston area, as well as the loss of millions of dollars to the local economy and the loss of opportunity for further jobs for the local workforce.

Very truly yours,

SHERBURNE, POWERS,
HOLLAND & KNIGHT

Kenneth P. Brier

Kenneth P. Brier

KPB/dmr

Letter 151
Sherburne, Powers, Holland & Knight Law Offices
Kenneth P. Brier

Code	Topic 1	Topic 2	Comment	Response
151.1	General Support		I would like to add my voice in support of the Logan Modernization project (including runway 14/32)	Comment noted.

SLADE GORTON & CO., INC.
ROCKY BAY FISHING CO.

Finest and Widest Line of Seafood Anywhere"

LETTER 152

April 7, 1999

Mr. Arthur Pugsley EOEA No. 10458
Secretary of Environmental Affairs
MEPA Office
100 Cambridge Street 20th Floor
Boston, MA 02205

Dear Mr. Pugsley,

The Seafood Industry in New England has moved its product dependence from local fishing ports to Logan Airport for both receipt and shipment of fresh seafood. With the decline in fishing resources from local waters, fresh arrives instead from Chile, Iceland, Norway, Canada, etc. Therefore, the Logan Modernization project is critical for the economic well being of our businesses. The additional runway included in this project will allow more air-freight availability in and out of Boston, making importing and exporting of fresh fish quicker and more efficient. 152.1

Another benefit of this modernization is the improvement of the Roadway Interchange System currently being constructed by the Third Harbor Tunnel and the Central Artery projects. Reconfiguring the existing airport exit routes to a two-level roadway system will make the transport of cargo to and from the airport much easier and reduce traffic and congestion.

Of greatest importance to us is that the Logan Modernization project will help us with product availability and will keep Boston as the hub of the U.S. Seafood Industry. Slade Gorton will then be competitive in today's markets and into the 20th century.

If I can provide more information to you please contact me at 617-442-5800.

Sincerely,

Wally Stevens
President

WS/rp

Letter 152
Slade Gorton & Co., Inc.
Wally Stevens, President

Code	Topic 1	Topic 2	Comment	Response
152.1	Alternatives	Runway 14/32	The Logan Modernization project is critical for the economic well being of our businesses. The additional runway included in this project will allow more air-freight availability in and out of Boston, making importing and exporting of fresh fish quicker and more efficient.	Comment noted.

The South Boston Environmental Health Watch
c/o South Boston Public Health Initiative
409 West Broadway
South Boston, MA 02127
Voice 617.464.7664 Fax 617.464.7693

LETTER 153

April 22, 1998

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention: MEPA Office
Arthur Pugsley, IV EOEA No. 10458
100 Cambridge Street - 20th floor
Boston, Ma 02202

Dear Secretary Durand,

The South Boston Environmental Health Watch is a group of residents that works with the support of the South Boston Health Center's Public Health Initiative to research and address environmental factors that threaten community health. We are particularly concerned with air quality as South Boston residents experience higher than expected rates of chronic obstructive respiratory diseases, cardiovascular disease, and some cancers including lung cancer. All of these diseases are worsened by air pollution.

Consequently, we are troubled by the Logan Airside Improvement Planning Project. Although the report proposes development at Logan to reduce aircraft delays, the premise of the entire report supports growth at Logan.. We are concerned that increased flights at Logan will translate to further degradation of air quality in the communities closest to Logan both from aircraft departures and takeoffs as well as from the associated ground traffic. 153.1

Massport claims that increased air traffic is needed to support local business, industry, and tourism. These needs will be increased as the Convention Center and Seaport District are developed. Our concern is that our community and other urban neighborhoods will bear the consequences of worsening air quality from increased road traffic bringing people and supplies to the Seaport District as well as from increased aircraft activity.

We, therefore, urge you to consider the cumulative effects of all sources of increased air quality degradation to the South Boston and other surrounding communities, already at high risk, that will be most impacted by growth at Logan.

Sincerely

The Undersigned "Francis "Lucky" Devlin" Kristen E. Donahue

Brian R. Mahoney

BRIAN R. MAHONEY

Paul J Gannon

Nina Lew PA, MPH

Mary Russell, MPH

Linda E. Dekan

LINDA E. DEKAN

Francis P. Allen

Francis P. Collins

Thomas J Roche

Harvey Fidell Cox

Margaret Healey

Mary Scafidi

Nina Hayes

Laura Connelly

Letter 153
The South Boston Environmental Health Watch

Code	Topic 1	Topic 2	Comment	Response
153.1	Public Health	Effects	We are concerned that increased flights at Logan will translate to further degradation of air quality in the communities closest to Logan both from aircraft departures and takeoff as from the associated ground traffic.	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.

Squantum Community Association
136 Standish Road
Squantum MA 02171

LETTER 154

April 7, 1999

State Representative Bruce Ayers
65 Williams Street
No. Quincy MA 02171

Dear Bruce:

The Squantum Community Association has many concerns regarding the proposed additional runway at Logan Airport.

1. The first concern is the Quality of Life in Squantum. Currently we are affected by the noise from the airport. It is, however, at the present time a concern, but due to previous negotiations it is a controlled effect. The evening flight paths do not bring flights over the Squantum area. The possibility of the increase of flights, especially over Squantum will also increase the noise level. 154.1

2. The discharge from the airplanes is a great concern to our residents. As flights increase so will the discharge and the potential for pollutants to fall from the sky. 154.2

3. The flight pattern that will increase any traffic over Moon Island is of serious concern to our residents. The planes will be at an altitude lower than the 1000 feet which is needed in order to maintain safety. A misfired bullet could hit the fuel tank of a low flying plane. Since these planes will have full fuel tanks, a disaster is sure to follow. 154.3

4. Very little has been done to prepare the South Shore and the Squantum Community for the impending runway. We feel that more information needs to be disseminated and more safety issues need to be addressed. 154.4

We look forward to hearing from you regarding all of the above issues.

Sincerely,

Frank Buckley

Frank Buckley
President,
Squantum Community Association.

Letter 154
Squantum Community Association
Frank Buckley, President

Code	Topic 1	Topic 2	Comment	Response
154.1	Noise	Impacts	The possibility of the increase of flights, especially over Squantum will also increase the noise level.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations.
154.2	Air Quality	Impacts	As flights increase so will the discharge and the potential for pollutants to fall from the sky.	Although VOC emissions increase over time because of increased aircraft operations activity at Logan Airport, emissions are lower with Alternatives 1 and the Preferred Alternative, when compared to the No Action Alternative. The decreases are attributable to both the proposed Runway 14/32 and the taxiway improvements.
154.3	Alternatives	Runway 14/32	The flight pattern that will increase any traffic over Moon Island is of serious concern to our residents. The planes will be at an altitude lower than the 1000 feet which is needed in order to maintain safety. A misfired bullet could hit the fuel tank of a low flying plane. Since these planes will have full fuel tanks, a disaster is sure to follow.	Runway 14/32 will reduce jet traffic over Moon Island from Runway 22 departures. It will increase the number of arrivals and departures over the harbor (Long Island, Rainsford Island, Gallops Island, Georges Island, etc.

Code	Topic 1	Topic 2	Comment	Response
154.4	Environmental Review Process	Public Process	Very little has been done to prepare the South Shore and the Squantum Community for the impending runway. We feel that more information needs to be disseminated and more safety issues need to be addressed.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

swissôtel

LETTER 155

BOSTON

April 6, 1999

Mr. Arthur Pugsley – EOEA No. 10458
Secretary of Environmental Affairs
Attention MEPA Office
100 Cambridge Street
20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

I am writing to convey some thoughts regarding the Logan Airport Modernization project and to give our support for the initiative that includes runway 14/32. 155.1

Swissôtel Boston is a 500 room deluxe hotel sited in downtown Boston serving the business and leisure communities not just from the United States but from around the world. A majority of our guests arrive by air, hence requiring the smooth operation of a state of the art world class efficient airport. Delays,often leading to cancellations,become a business hazard that need not be.

Our employee base is directly related to our occupancy and occupancy depends greatly on the airport.

Also, I believe that the success of our current convention center and the anticipated success of our future convention center rely heavily on a world class airport.

I hope your agency will do all in its powers to aid the Legislation for this worthy goal.

Sincerely,

David Gibbons
General Manager

Letter 155
Swissotel, Boston
David Gibbons, General Manager

Code	Topic 1	Topic 2	Comment	Response
155.1	General Support		I am writing to convey some thoughts regarding the Logan Airport Modernization project and to give our support for the initiative that includes Runway 14/32	Comment noted.

Tufts Associates
Corporate Benefits Planning

1208 VFW Parkway, Suite 300
Boston, MA 02132
(617) 327-9600
(617) 327-9677 Fax

LETTER 156

April 8, 1999

Mr. Arthur Pugsley
Secretary of Environmental Affairs
MEPA Office
100 Cambrdige Street, 20th flr.
Boston, MA 02205

Dear Mr. Pugsley,

RE: Logan Airport

156.1

I support another runway at Logan which would alleviate the delay problems. As a traveler, I have frequently circled eastern Mass. waiting to land; and as a resident of Milton, I often witness planes circling overhead at very low altitudes.

Commerce in Boston is a very important issue to me as a business person. Instead of using the old-fashioned, Yankee approach to public infrastructure of "patch and make do" with the attitude of "You can't get there from here," or "If you don't know the way, you don't belong here," why not move toward a user-friendly airport while simultaneously supporting regional airports and rail travel.

It's time for action.

Sincerely,

Charles K. Tufts, CLU, ChFC

emg

Letter 156
Tufts Associates
Charles K. Tufts, CLU, ChFC

Code	Topic 1	Topic 2	Comment	Response
156.1	General Support		I support another runway at Logan which would alleviate the delay problems.	Comment noted.

U·S AIRWAYS

LETTER 157

Robert A. Hazel
Vice President
Properties and Facilities

April 8, 1999

Mr. Thomas J. Kinton, Jr.
Director of Aviation
Massachusetts Port Authority
One Harborside Drive, Suite 200S
East Boston, MA 02128-2909

Dear Mr. Kinton:

US Airways, which carries more Boston passengers than any other airline, strongly supports the development of a new 5,000 ft. runway and other airside improvements designed to reduce delays at Logan International Airport.

As you know, for many years, restricted airfield capacity at Logan has resulted in extensive delays for our Boston passengers. Because of the "unbalanced" nature of Logan's current airfield layout, the amount of useable runway capacity changes dramatically depending on the direction of the wind. As a result, not only does Boston rank sixth in delays in the U.S., but the occurrence and severity of those delays are particularly unpredictable.

In order for US Airways and other airlines to provide reliable and affordable air service, it is important that we be able to operate efficiently. Current airfield limitations at Logan do not permit efficient operations. The resulting delays are costly to the airlines and both costly and inconvenient for our passengers. 157.1

As with other major cities, Boston's future economic health will depend in part on having reliable air transportation links to national and international markets. Many other cities, including Atlanta, Miami, Philadelphia, San Francisco, and Seattle, are addressing this challenge by improving runway capacity. To remain competitive, Logan must move forward as well.

Sincerely,

Robert A. Hazel /cyp

Letter 157
US Airways
Robert A. Hazel, Vice President, Properties and Facilities

Code	Topic 1	Topic 2	Comment	Response
157.1	Purpose and Need	Delay	In order for US Airways and other airlines to provide reliable and affordable air service, it is important that we be able to operate efficiently. Current airfield limitations at Logan do not permit efficient operations. The resulting delays are costly to the airlines and both costly and inconvenient for our passengers	Comment noted.

LETTER 158

WINTHROP CHAMBER of COMMERCE

207 Hagman Road
Winthrop, Massachusetts 02152-0005

Telephone: 617-846-9898
Fax: 617-846-9922
Website: *www.winthropchamber.com*
E-mail: *winthropcofc@erols.com*

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Russ Sanford

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James Polino
Patricia Sullivan

Executive Director
Barbara McNeil

Executive Assistant
Paula Flaherty

April 12, 1999

Statement of the Winthrop Chamber of Commerce Regarding the Logan Airside Improvements Planning Project, Draft Environmental Impact Statement/Report of February, 1999.

The members of the Winthrop Chamber of Commerce recognize the economic value of Logan International Airport to this region. We also recognize the quality of life issues that face the residents of the Winthrop community. The health of the business community in Winthrop hinges on the quality of life present there. This Chamber cannot encourage any expansion that could create additional air or land traffic, additional noise, pollution, additional future operations, and/or other impacts. 158.1

We do in fact recognize the potential economic benefits to other areas of the Commonwealth and will support and encourage the development of regional airports, especially for but not limited to commuter flights. We feel that this would bolster the State's economy and would allow Logan the flexibility it needs to address the needs of both Boston as a world class city, and of Logan's neighboring communities. 158.2

Letter 158
Winthrop Chamber of Commerce

Code	Topic 1	Topic 2	Comment	Response
158.1	General Opposition		This Chamber cannot encourage any expansion that could create additional air or land traffic, additional noise, pollution, additional future operations, and/or other impacts	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates). Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
158.2	Regional Transportation	Regional Airports	We...encourage the development of regional airports, especially for but not limited to commuter flights. We feel that this would bolster the State's economy and would allow Logan the flexibility it needs to address the needs of both Boston as a world class city, and of Logan's neighboring communities.	Massport considers Logan Airport to be part of a regional system of airports that includes T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of the roles of Logan Airport and these regional airports in the eastern New England aviation system.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

LETTER 159

Duane Andrews, RN
85 Appleton Street #4
Boston, MA 02116
617-236-4890

Arthur Pugsley
Secretary of Environmental Affairs
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
Attn. MEPA Office

April 15, 1999

Dear Mr. Pugsley,

I am writing to express my strong opposition to the proposed opening of Runway 1432 at Logan Airport and to the unfair and misleading tactics that I believe Massport is using to gain public support for the runway.

How Runway 1432 will harm my neighborhood:

I have been a resident of the South End of Boston for many years. It is a wonderful and historic landmark district neighborhood -- the largest existing collection of Victorian-era brick row-house architecture left in the United States. Unfortunately, it is also in the direct flight path of a large number of flights taking off from Logan Airport.

Runway 1432 will allow Massport to significantly expand the number of flights using the airport and will significantly increase the number of jets flying directly over my neighborhood according to Massport projections.

The current level of noise in the neighborhood is an incredible burden to all of us here. The jets begin at 6:00 am. They often can still be heard until at least 11:00 pm, sometimes later. When Massport is using the runway that targets the South End, the noise is continuous. It wakes us up, it rattles our windows, it makes roofdecks and gardens un-useable. Watching TV or talking to friends is interrupted every few minutes as another jet takes off. As an RN in a pediatric hospital, I am also well aware of the dramatic rise in rates of asthma in children (and adults) and of the suggested links between asthma and poor air quality.

My neighborhood will be significantly harmed by the increased noise and pollution that will result if Massport is allowed to go forward with Runway 1432 plans. 159.1

How I believe Massport is using unfair and misleading tactics to gain support:

Last night, I saw a commercial on TV touting the purported benefits of Runway 1432. A toll free number was provided for those desiring more information. The commercial was distressing

in that it displayed Massport's apparent continued disdain and lack of concern for the neighborhoods which it impacts.

First, information was provided stating that the new runway would only be used for over-water take-offs, thus giving the false impression that Boston residents would not be adversely affected. No mention was made of the fact that the new runway's collateral effects would allow more intense use of the other existing runways, and would in fact, per Massport's own projections, double or even triple the number of flights over various neighborhoods in Boston. 159.2

In addition, when calling the toll free number, I was asked if I was aware that the new runway would reduce noise and air pollution over Boston. How can more-than-double the number of flights over my neighborhood decrease the noise and air pollution I am experiencing?

Finally, the commercial played on people's fears and frustrations related to the number of delays at Logan and the possible effect this could have on Boston tourism and business. In my opinion, these delays are overstated, as I understand Massport's statistics to include delays of less than 15 minutes (hardly a major inconvenience). Also, Massport did not point out that, while delays may be experienced, Logan Airport is one of very few airports in the country (world?) which can boast that it is located a mere 5 minute cab ride or 10 minute subway ride from the heart of the downtown business district. In most cities, you might always get in on time, but then you have an expensive, 45 minute ride to where you need to go. 159.3

Please consider what I have written. Please stop Runway 1432.

Sincerely,

Duane H. Andrews, RN

Letter 159
Duane Andrews, RN
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
159.1	Noise	Impacts	My neighborhood will be significantly harmed by the increased noise and pollution that will result if Massport is allowed to go forward with Runway 14/32 plans.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
159.2	Environmental Review Process	Public Process	Massport's television ads give... the false impression that Boston would not be adversely affected. No mention was made of the fact that the new runway's collateral effects would allow more intense use of the other existing runways, and would in fact, per Massport's own projections, double or even triple the number of flights over various neighborhoods in Boston.	Massport did not sponsor television, radio, or newspaper advertisements. Projected changes in flight patterns and associated noise shifts are consistent with the PRAS goals, which were studied and approved by the community when established. Activity increases over certain communities are offset by activity reductions over other severely impacted communities and by activity increases over water.

Code	Topic 1	Topic 2	Comment	Response
159.3	Delay	Model	Massport overstates the levels of delay that occur at Logan.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

LETTER 160

40 Union Park
Boston, MA 02118
April 12, 1999

Mr. John Rodman, Assistant Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Subject: New Runway at Logan Airport

Dear Mr. Rodman:

I'm sending you this written testimony since I was unable to attend the public hearings last week.

The South End section of Boston is adversely affected by airplane noise. I have lived here over seven years and this year the noise level has increased dramatically. It starts at 6 am with a plane flying low overhead every minute, and it continues all day and part of the night.

If the new runway is built the number of flights over the South End and Roxbury will triple in ten years. Life here will become unbearable. The South End is a landmark district with just as much historic value as Concord and Uxbridge. It is an area that is undergoing an economic rebirth. Similarly, the Washington Street "Main Street" and Roxbury are both being redeveloped. But running a stream of low flying planes over these areas is going to ruin the quality of life in our neighborhoods, and damage property values as well. 160.1

Eventually the new runway will permit Massport to increase air traffic levels over ALL areas of the city. It is time to put a stop to this continual expansion, especially since Massport has no clear plan for the future. Alternative forms of transportation (especially trains) need to be developed and other airports promoted in order to keep Logan from growing like a cancer and destroying the city. 160.2

I ask the MEPA to not approve the new runway at Logan Airport.

Sincerely,

John Archibald

John Archibald

Letter 160
John Archibald
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
160.1	Noise	Impacts	...Washington Street "Main Street" and Roxbury are both being redeveloped. But running a stream of low flying planes over these areas is going to ruin the quality of life in our neighborhoods, and damage property values as well.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
160.2	Regional Transportation	Passenger Rail/Regional Airports	Alternatives forms of transportation (especially trains) need to be developed and other airports promoted in order to keep Logan from growing like a cancer and destroying the city.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

David A. Banta & Caroline E. Coggeshall
158 West Canton Street
Boston, MA 02118
(617)236-4637

March 30, 1999

LETTER 161

Governor Paul Cellucci
The State House
Office of the Governor, Room 360
Boston, MA 02133

Dear Governor Cellucci,

Massport's proposal to build Runway 14/32 is a slap in the face of all of Boston's neighborhoods and citizens. This runway will add capacity and inflict heavy noise on the majority of the city's inner neighborhoods, including East Boston, Charlestown, South Boston, Beacon Hill, Back Bay, Roxbury, Jamaica Plain as well as our own South End community.

For the past nineteen years, we have lived and raised our family in the South End, committed to the many benefits of being part of a diverse, caring inner city community. Over the last several years, our neighborhood has increasingly been on the flight path, which sends ear-deafening jets every couple of minutes over our home. As it currently stands, pilots often do not obey the noise abatement "corridor", and I was at a recent meeting where Massport and the FAA admitted that there is no way to enforce this corridor. If Runway 14/32 goes through, that traffic, and the noise pollution associated with it, will triple. 161.1

Massport claims that Runway 14/32 will help reduce delays at Logan. Yet they also admit that the proposed runway is a short-term solution, and that delays will return to their current levels by 2005, while the increase in noise pollution will be with us, the people of the City of Boston, forever. What, we ask, will be proposed in 2005?

It appears that Massport seeks to pit the Boston communities against each other, yet clearly this is a regional problem that demands regional solutions. Massport and the State Administration must look seriously at better utilizing existing airports in Providence, Worcester and Manchester, as well as Hanscom Field. Clearly, Boston needs a viable secondary airport that many American cities enjoy.

A long-time South Ender recently remarked "If there was ever a time for the people of Boston to stand up and shout, then this is that moment". As our Governor, you are in a position to help Boston's neighborhoods by opposing Runway 14/32. We hope that we, the people of Boston, can count on you.

Sincerely,

David A. Banta

Caroline E. Coggeshall

cc: Peter Blute, Trudy Coxe

Letter 161
David A. Banta and Caroline E. Coggeshall
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
161.1	General Opposition			Comment noted.

LETTER 162

David Bartol
15 Dartmouth Place #3
Boston, MA 02116
February 16, 1999

MEPA Office
100 Cambridge Street
Boston, MA 02202

Dear Sir or Madam,

I have lived in the South End of Boston for about 10 years and find that the current noise from Logan Airport is a serious problem. In the summer when my windows are customarily open, it's sometimes impossible to hear an indoor conversation because of the airline noise! I have to sleep with a fan or air conditioner running when otherwise unnecessary, so as to provide "white noise" to drown-out the cacophonous noise from the jets overhead. And this is just the problem experienced indoors! Outdoors, it's even more disturbing. The existing situation is bad enough and I suppose I am resigned to it; however, the proposal to create a new runway, "14-32" is completely unacceptable.

I ask you to take whatever action possible to permanently stop the construction of runway 14-32! 162.1
Thank you for your attention and efforts.

Yours Truly,

David Bartol

Letter 162
David Bartol
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
162.1	General Opposition		I ask you to take whatever action possible to permanently stop the construction of Runway 14/32!	Comment noted.

Claudia Brede
15 Blackwood Street #4
Boston, MA 02115

LETTER 163

Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
ATTN: MEPA Office

Subject: Logan's expansion plans; EIS

Boston, April 20th 1999

Dear Arthur Pugsley,

Enclosed you can find the letter my husband and I sent a couple of weeks ago to the most important politicians and representatives of Massachusetts with regard to Logan's expansion plans and Massport's Environmental Impact Statement (EIS).

In addition to this letter I would like to mention following:

LOGAN'S IMPACT ON BOSTON:
* also Back Bay and Beacon Hill are already impacted of the noise caused by the use of Runway 27. An additional runway 14/32 will make it even worse !
* in Boston most planes do neither fly in the dictated flight height nor flight path
* the last couple of month the planes pass between 6.00 and 8.30 am approximately every 30 seconds the South End/Back Bay neighborhood

FAILINGS of MASSPORT'S NOISE ABATEMENT OFFICE:
* the last couple of weeks I have called the Logan's Noise Complaint Line again and again. Either I received different answers for the same questions and complaints or I haven't received my complaint report or nobody answered the phone
* until now I haven't received my requested personal copy of the EIS
* answers like "an airport is a bearable burden" are not acceptable !
* I also tried to get in contact with the acting Manager of Noise Abatement, Nancy Timmermann. She never returned my call (voice mail message)

BOSTON'S INTERNATIONAL APPROACH or what describes a world class city?:
* in most civilizedcountries planes are not allowed to fly over a highly populated area
* most countries have a night flight stop
* in most countries airports have been moved outside of the cities

These statements make clear that further expansion plans of Logan Airport are not acceptable. Boston's quality of life and reputation as a world class city will definitely suffer under a new runway.

I ask you to do all in your power to stop the construction of Runway 14/32. Massport also needs to investigate other equitable solutions for Runway 27. Vibrant, healthy communities are a major factor in Boston's reputation as a world class, people friendly area. Please do not allow Massport to destroy what the Bostonians have worked so hard to achieve.

Sincerely,

Claudia Brede

enc. 4

Claudia Brede
15 Blackwood Street #4
Boston, MA 02115

SENT TO:
Senator Edward M. Kennedy
Senator John F. Kerry
Congressman John Joseph Moakley
Congressman Michael Capuano
Senator Dianne Wilkerson
Senator Stephen F. Lynch
Representative Byron Rushing
Representative Gloria L. Fox
Representative Salvatore F. DiMasi
Governor Paul Cellucci
Mayor Thomas M. Menino
Councilor James M. Kelly
Councilor Thomas Keane

March 1999

Dear:

In 1997 my husband and I bought a Penthouse condominium next to the South-West Corridor. Until June 1998 we lived here in a peaceful and relatively quiet neighborhood, but since then we suffer from increasing noise generated by airplanes departing Logan Airport on Runway 27. This is has reached a level, that now even our 22month old daughter (normally a good and long sleeper) wakes up every morning between 6.00 and 7.00 am.

We understand that the Massachusetts Port Authority ("Massport") has recently filed for the environmental permits required to open a new runway, Runway 14/32, which they claim is needed to reduce delays at the airport. A byproduct of this delay reduction will be a 300% increase in airplane traffic over our home, bringing with it increased noise and air pollution. Not to forget the possible damage to the very old buildings due to shaking vibration and sound waves. Not to mention the disastrous consequences, if a plane crashes in to our neighborhood. 163.1

In our opinion this is a short sighted solution to the delay problems at Logan. Massport's own analysis reveals that delays will return to current levels with five years of construction runway 14/32, and their claim of improved "spreading" of the noise associated with a 4% annual growth rate can not be substantiated. Indeed, the FAA tower has re-fused to be held to any agreement concerning noise abatement or mitigation measures.

As the noise levels are already unacceptable, any increase will cause a serious deterioration in the quality of life in our neighborhood as well as in a decrease of the value of our homes. 163.2

We ask you to do all in your power to stop the construction of Runway 14/32. Massport needs to investigate alternatives such as peak hour pricing and the use of regional airports, such as Massport owned Hansom Airport in Bedford, before adding to our burden. 163.3 163.4

Vibrant, healthy communities are a major factor in Boston's reputation as a world class, people friendly area. Please do not allow Massport to destroy what the Bostonians have worked so hard to achieve.

Sincerely,

Claudia Brede

→ 4282800

→ 617/5673333

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Claudia Brede
15 Blackwood St.
Boston, MA 02115

Telephone:

Disturbance Date and Time: 11:07 on 03 Aug 98 to
11:07 on 03 Aug 98

Conditions:

Wind Direction: 0 deg
Wind Speed: 6 Knots
Ceiling: 5500 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: Last Saturday at 6:15 am the planes were coming over in 3 minute intervals. It was the same situation today at 6:15 am. It was also like this Saturday night at 11:00 pm. It is getting worse and worse.

Massport Report of Investigation: You are affected by departures from Logan's Runway 22. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

428-2800
567-3333
Pike

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Claudia Brede
15 Blackwood St.
Boston, MA 02115

Telephone:

Disturbance Date and Time: 14:45 on 28 Jul 98 to
14:46 on 28 Jul 98

Conditions:

Wind Direction:	200 deg	**Wind Speed:**	16 Knots
Ceiling:	4000 Ft	**Visibility:**	9.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: For the last couple of weeks there has been an increase in noise. I bought this place last September and there was no problem. Yesterday between 9 pm and 11 pm a small plane flew overhead. The noise wakes my daughter up in the morning.

turboprop

Massport Report of Investigation: You are affected by departures from Logan's Runway 22, in use with strong southerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Ms. Claudia Brede
15 Blackwood St.
Boston, MA 02115

Telephone:

Disturbance Date and Time: 10:21 on 29 Sep 98 to
10:21 on 29 Sep 98

Conditions:

Wind Direction:	0 deg	**Wind Speed:**	5 Knots
Ceiling:	25000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	27 - 33L

Complaint Description: There is plane noise at 6 am. Why are they using Runway 27? Why are they flying in a bow shape? They should be higher before they start turning. It would not be as bad if they flew straight. This is a residential area. There is a plane every 30 seconds. It is not like this at other major airports.

Massport Report of Investigation: You are affected by jet departures on Runway 27, in use with northerly winds and a runway closure due to maintenance. A change of runway configuration occurred at 2:30 pm.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

Letter 163
Claudia Brede
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
163.1	Alternatives	Runway 14/32	...Runway 14/32 will cause... a 300% increase in airplane traffic over our home, bringing with it increased noise and air pollution. Not to forget the possible damage to the very old buildings due to shaking vibration and sound waves. Not to mention the disastrous consequences, if a plane crashes in to our neighborhood.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
163.2	Noise	Impacts	As the noise levels are already unacceptable, any increase will cause a serious deterioration in the quality of life in our neighborhood as well as in a decrease of the value of our homes.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
163.3	Alternatives	Peak Period Pricing	Massport needs to investigate alternatives such as peak hour pricing .	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
163.4	Regional Transportation	Regional Airports	Massport needs to investigate alternatives such as the use of regional airports, such as Massport owned Hansom Airport in Bedford, before adding to our burden.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

LETTER 164

4/20/99

Arthur Puglsley
Executive office of Environmental Affairs
100 Cambridge Street
Boston MA 02202
Attn: MEPA office

I live on the street level of an apartment in Boston's South End. In fact, my bedroom is yards away from Shawmut Avenue. On most weekends, I am awakened early, around 6 AM. The noise doesn't come from the sound of automobile traffic. Nor is it car radios, pedestrians walking by, sirens, or trucks that cause me to wake up. Instead, it is planes from nearby Logan airport. From 6 AM and lasting all day, these planes cause so much noise, that the peace and tranquility of a weekend in the South End is ruined. Even having a conversation with someone within earshot becomes a shouting match.

Now, Massport, and Gov. Celluci, want Logan to expand to accommodate more air traffic, thus causing more noise and pollution over nearby communities and forever destroying any semblance of quiet within our neighborhood.

Since moving here in 1996, I observed how little long term planning has gone into Boston's future. The most obvious examples of planning gone awry to this outsider include the ugly and obsolete Central Artery; the just plain ugly City Hall; and the badly located Logan Airport. Now, instead of addressing the real problem - that Logan is also becoming obsolete and should be relocated - Massport and Celluci want to throw a Band-Aid on this noisy, festering wound. Allowing air traffic to increase will be a sonic nightmare for the area residents. If South End residents don't like the noise now, it's certainly not going to improve once Logan expands and installs a new runway. Unlike Mayor Menino, the short sighted Celluci wants to appease the business and tourist trade with solutions that remedy the symptoms not actually solve the long-term problems. As South End residents, we will suffer more. 164.1

Certainly, the Big Dig, as unattractive as it is, is a step in the right direction, "righting the wrongs" of past bad planning in a way. Perhaps Massport could take a cue from the badly planned past and help create a more livable future instead of trying to 'soft sell" us with TV advertising or steamrolling runway expansion through the legislature. By proposing a new out-of-town airport, Massport and Celluci would show that they have the progressive ideas that were sorely lacking from past politicians and planners. This means having courage and risking one's political career to effectively *plan.*

Jon Burk
26 Worcester Street
Boston 02118

Cc Byron Rushing

Letter 164
Jon Burk
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
164.1	Noise	Impacts	If South End residents don't like the noise now, it's certainly not going to improve once Logan expands and installs a new runway.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

LETTER 165

April 20, 1999

Mr. Arthur Pugsley
Attn: MEPA Office
Executive Office of Environmental Affairs
100 Cambridge St.
Boston,
MA 02202

Re: Proposed Expansion of Logan Airport

Dear Mr. Pugsley:

I am writing to oppose the Massport proposal for an additional runway at Logan Airport. I believe this proposal is based on a flawed strategy for improving airport service, it increases pollution in neighboring communities that are subjected to a disproportionate environmental burden already, and results from an unwillingness by Massport to acknowledge or remedy the adverse impact Logan has on the surrounding community.

I understand the rationale for airport expansion is based on the anticipation of increased air traffic in the eastern Massachusetts, and the fact that Logan experiences significant delays in service. At the same time, Massport has indicated new runway is only a short-term remedy. I believe the following issues need to be addressed prior to approval:

- Massport must present a master plan for comprehensive review. It is ridiculous to approve airport expansion on a case-by-case basis. Massport claims that the new runway will only be unidirectional. Is this restricted use embedded in the long-term plan, or is the unidirectionality of the runway a temporary condition? **MEPA must demand a full review of Massport's long-term airport expansion strategy.** 165.1 165.2

- It is evident that Massport has not made a serious effort to use facilities effectively. For example, it has not instituted a peak-pricing structure to shift traffic to off-peak times. Surrounding airports are operated far below capacity. Massport dismisses alternatives to expansion as "unworkable", which only suggests they cannot be trusted to implement remedies that would render expansion unnecessary. **MEPA must require Massport to exhaust all reasonable alternatives prior to the approval of Logan expansion.** 165.3

- This short-term Massport expansion anticipates increases air traffic at Logan. Thus, Massport proposes to increase pollution in neighboring communities. I oppose this additional pollution for personal reasons. I live under Logan flights and suffer from frequent loud jet engine noise. I shudder to imagine what tripling the frequency of

flights will do. **MEPA must cap, at the current level, the amount of noise, and other relevant pollutants, created by Logan activities**. Thus, Logan could expand as technological advances in pollution/noise reduction are implemented by airlines. 165.4

- It is important to review the history of the relations between Massport and the community. Massport has a history of broken promises with its neighbors. Of relevance is that fact that covenants exist in the Big Dig/Third Harbor Tunnel agreement that will be contravened by implementing this Massport proposal. Thus, Massport will discard its own recent agreement because it is expedient. **For this reason, MEPA must apply a higher standard for permit approval for entities such as Massport with a poor record of compliance or community relations.** 165.5

I hope my comments will be granted serious consideration. On a personal note, I am disgusted that Massport would offer this proposal without giving any opportunity for honest community input. This proposal anticipates an extremely negative impact on the quality of life of Logan's neighbors. Massport doesn't even care. I hope that you will.

Cordially,

Barry B. Corden

Barry B. Corden

119 Pembroke St. #3
Boston,
MA 02118

Letter 165
Barry B. Corden
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
165.1	Alternatives	Runway 14/32	Massport claims that the new runway will only be unidirectional. Is this restricted use embedded in the long-term plan, or is the unidirectionality of the runway a temporary condition?	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
165.2	Alternatives	Preferred Alternatives	MEPA should demand a full review of Massport's long-term airport expansion strategy.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
165.3	Environmental Review Process	MEPA	MEPA should require Massport to exhaust all reasonable alternatives prior to the approval of Logan expansion	Refer to response to Comment 165.2.
165.4	Environmental Review Process	MEPA	MEPA must cap, at the current level, the amount of noise, and other relevant pollutants, created by Logan activities. Thus, Logan could expand as technological advances in pollution/noise reduction are implemented by airlines	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.
165.5	Environmental Review Process	MEPA	MEPA must apply a higher standard for permit approval for entities such as Massport with a poor record of compliance or community relations.	Comment noted.

LETTER 166

FAX

RECEIVED
APR 23 1999
MEPA

Date 4/22/99

Number of pages including cover sheet 4

TO: Mr. Salvucci

FROM: Dukakis
Northeastern University
Department of Political Science
303 Meserve Hall
Boston, MA 02115

Phone 617-373-2796
Fax Phone 617-373-5311

CC:

REMARKS

Reply ASAP ☐ Please Comment

Alan Garman 1:30
Marmot-
1:30 Sloan
Sterman

I thought Fred Salvucci and I had buried the plan for a new runway at Logan Airport forever back in the 1980s.

Unfortunately, like the Phoenix, it's back-- and this time it makes even less sense that it did ten years ago.

Why? Because it is a very short term solution to what is a long term problem that won't be solved by putting another runway in Boston Harbor. That problem can be solved by using three important tools that are now available to us. 166.1 166.2

The first is Amtrak's new high speed Acela express service that begins this fall-- ten trains a day between Boston and Washington that will carry thousands of former shuttle sufferers quickly and easily from Boston to New York in three hours, downtown to downtown. No more metal detectors. No more fuming at delays in the airport and on the runway. No more thirty dollar, one hour cab rides from LaGuardia into downtown New York.

And if you happen to live west, south or north of Boston, you can forget about fighting your way through the tunnels to Logan and a sixteen

dollar a day parking tab. A new Amtrak station with two thousand parking spaces will be waiting for you at Route 128.

The second is not one, not two, but three regional airports, each located close to an older urban community that wants and needs growth. 166.3 Manchester, Worcester and Providence are all conveniently located within easy driving or rail commuting distance of thousands of Logan users who can be better served by these airports. Providence is already connected to Boston by road and rail, and a new station stop at Green Airport will be just minutes by a moving sidewalk from the terminal. The Massachusetts Turnpike Authority should get cracking on a spur from the turnpike to the Worcester Airport, which is just a few minutes shuttle ride from the magnificently restored Worcester railroad station. New Hampshire already plans to build a new highway connection to the Manchester Airport, and it wouldn't take much to extend existing commuter rail lines there as well.

Finally, some simple management steps at Logan would open up even more capacity for the longer flights that Logan is uniquely equipped to provide. We tried one-- peak pricing-- in the 1980's with spectacular 166.4 success. In fact, Logan went almost overnight from 18th to 2nd among the nation's major airports in on-time performance. Unfortunately, the small

plane lobby went to work on the Reagan Administration, and we were ordered to revoke our landing fee plan. But there is absolutely no reason why small puddle jumpers should be taking up valuable airspace during some of Logan's busiest hours. Peak pricing requires them to adjust around those hours, and there are plenty of smaller airports in addition to Manchester, Worcester, and Providence that can accommodate them as well.

Mayor Menino had the good sense to call for a blue ribbon commission on the subject. I have what I think might be an even better idea. Governor Cellucci should call a summit meeting of his fellow governors from New Hampshire and Rhode Island and the mayors of the four key cities that are involved. They should each bring their top transportation planners with them. Stan Bagley, a Massachusetts native and the very capable chief of Amtrak's Northeast division, should join them. In a matter of months they could put together a plan that would dwarf the piddling contribution that a new runway would make to the problem. 166.5

Then we could bury this misbegotten proposal once and for all with appropriate ceremonies and pronounce a final benediction over it.

Rest in peace.

Letter 166
Michael Dukakis, Northeastern University Dept. of Political Science Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
166.1	Alternatives	Preferred Alternative	... it is a very short term solution to what is a long term problem ...	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
166.2	Regional Transportation	Passenger Rail	... problem can be solved by using three important tools that are now available to us. The first is Amtrak's new high speed Acela express service...	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market.
166.3	Regional Transportation	Regional Airports	The second is not one, not two, but three regional airports ... Manchester, Worcester and Providence...	Since 1990, there have been several studies that have recommended regional initiatives to improve the efficiency of the region's inter-city transportation network. These studies reflect the cooperation of federal, state and local transportation agencies and stakeholders. Section 2.1 of the Supplemental DEIS/FEIR summarizes relevant regional planning studies and their conclusions. All studies have concluded that the Proposed Runway 14/32 and the other airside improvement projects at Logan Airport, along with increased use of the regional airports, including T.F. Green/Providence, Manchester and Worcester Regional airports, and high-speed rail services, are all necessary for accommodating the region's future inter-city air travel demand. Refer to discussion of the role of regional alternatives and steps Massport has taken to foster increased use of these alternatives in Chapter 2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
166.4	Alternatives	Peak Period Pricing	Some simple management steps at Logan would open up even more capacity for the longer flights that Logan is uniquely equipped to provide. We tried one—peak pricing—in the 1980's with spectacular success. In fact, Logan went almost overnight from18th to 2nd among the nation's major airports in on-time performance. Unfortunately, the small plane lobby went to work on the Reagan Administration, and we were ordered to revoke our landing fee plan.	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
166.5	Environmental Review Process	Blue Ribbon Panel	Governor Cellucci should call a summit meeting of his fellow governors from New Hampshire and Rhode Island and the mayors of the four key cities that are involved. ... In a matter of months they could put together a plan that would dwarf the piddling contribution that a new runway would make to the problem.	In November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.

Irv Englander
131 West Concord Street
Boston MA 02118
Phone: (617) 267-0206
email: lenglander@bentley.edu

LETTER 167

Thursday, 22 April, 1999

Mr. Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston MA 02202

Dear Mr. Pugsley,

As a resident of Boston's South End for more than 25 years, I must register my strong opposition to the Massport runway expansion plan. I am not qualified to speak for other sections of the city, but I believe I can accurately state that the plan will negatively affect the quality of life in the South End, Roxbury, and Jamaica Plain so severely as to undo much of the growth and economic gain accomplished in the recent past.

I live approximately three miles from the end of runway 27. Although my house is more than ½ mile from the center of the designated takeoff path, airplanes take off directly over my house frequently. At their worst, a not uncommon occurrence unfortunately, planes take off every 45 seconds. Peak noise levels in excess of 90 db are common, and I have personally measured many planes with peak sound levels in excess of 105 db. The roar of jet planes is particularly onerous. The roar of an individual plane can often be heard for two minutes (with additional reinforcement every 45 seconds!). When airplanes are flying overhead it is virtually impossible to sleep, carry on conversation, or even watch TV. Six A.M. is a busy time, so morning sleep is out of the question. If runway 27 is also in use the previous evening, airplanes will take off until midnight, and occasionally even later, limiting the total number of hours of sleep to six or less.

Massport acknowledges that the runway plan will triple the number of airplanes passing over our houses, which is itself well beyond acceptability, but I have good reason to believe that the noise effects will more than triple. In my experience and measurements made over the years, small planes do not generate either the level of noise nor the pervasive roaring type of noise created by the larger jets. If the smaller planes are diverted to the new runway and the number of planes over our neighborhood tripled, the noise increase will far exceed the level of noise suggested by Massport. The number of nights for which more than six hours of sleep is possible will obviously decline substantially.

167.1

Massport has clearly pulled out all of their guns to win approval for the expansion plan. After being chastised for attempting to spend public money on advertising, it has persuaded business leaders to finance full page ads in favor of its plan. It has attempted to pit neighborhood groups against each other, and it has attempted to paint those opposed to the expansion as anti-business. I am hardly anti-business: I teach in a business department at Bentley College, and consult to business. I understand the need for efficient airport access and operation. However, that need must not be allowed to take absolute precedence over a reasonable quality of life for the citizens of Boston. 167.2

There have been many days in which the airplane noise has tempted me to give up the many years of effort I put into building my home and improving my neighborhood. If the noise increases even as much as Massport admits, I fear that I will no longer be able to remain in my home. Many of my neighbors have expressed the same opinion: that, with great reluctance, they will find it necessary to abandon the city in favor of sleep and quality of life.

This situation must be weighed fairly in tradeoff with the needs of business and other travelers to Boston. With the political climate strongly in favor of Massport, it seems that the state Office of Environmental Affairs and the U.S. Environmental Protection Agency are the only ones who are in a position to protect the interests of the citizens of Boston, and that the intense noise pollution proposed with its accompanying deterioration of the quality of life is a serious and reasonable concern to be addressed by these offices.

As a footnote, I might add that it is difficult for me not to be skeptical of any claims or promises that Massport makes. After working on a committee of FAA, Massport representatives, commercial pilots, scientific analysts, and citizens for ten years to establish a reasonable takeoff pattern for runway 27, airplanes using runway 27 still do not adhere to the runway pattern developed. Although Massport claims that the pilots are unable to fly the pattern accurately, commercial pilots that I have met have told me that the pattern is perfectly reasonable, but that the control tower makes virtually no effort to enforce the pattern. Use of the developed pattern would provide substantial noise relief for the community, but Massport appears to have little concern for anything but its own interests; its promises ring hollow to me. 167.3

Sincerely yours,

Irv Englander

Cc: State Rep.Byron Rushing
U.S. Rep. Michael Capuano

U. S. Rep. J. Joseph Moakley
Mayor Thomas Menino
City Council Pres. Jim Kelly
Editorial Room, Boston Globe
Editorial Room, Boston Herald
Anastasia Lyman, Runway 27 Coalition
Editorial Room, South End News
J. DeVillars, Regional Administrator, U.S. Environmental Protection Agency
Jane Garvey, U. S. Federal Aviation Agency

Letter 167
Irv Englander
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
167.1	Noise	Impacts	Massport acknowledges that the runway plan will triple the number of airplanes passing over... [The South End] which is itself well beyond acceptability, but I have good reason to believe that the noise effects will more than triple. In my experience and measurements made over the years, small planes do not generate either the level of noise nor the pervasive roaring type of noise created by the larger jets. If the smaller planes are diverted to the new runway and the number of planes over... [The South End] tripled, the noise increase will far exceed the level of noise suggested by Massport.	Massport and the FAA stand by the estimates in this document.
167.2	Purpose and Need	Delay	I understand the need for efficient airport access and operation. However, that need must not be allowed to take absolute precedence over a reasonable quality of life for citizens of Boston.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
167.3	Noise	Runway Use	Although Massport claims that the pilots are unable to fly the [Runway 27] pattern accurately, commercial pilots that I have met have told me that the pattern is perfectly reasonable, but that the control tower makes virtually no effort to enforce the pattern. Use of the developed pattern would provide substantial noise relief for the community.	Since the new departure procedure was implemented in accordance with the *Runway 27 EIS*, Massport and the FAA have been monitoring and analyzing aircraft flight track data for compliance and to determine the need for changes to achieve the objectives. Pilots are responsible for knowing and complying with noise abatement procedures unless otherwise instructed. As more aircraft are equipped with GPS navigation, compliance should improve.

LETTER 168

March 23, 1999

Bob Durand, Secretary
EOEA, Attn: MEPA Office
Arthur Pugsley, EOEA #10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

RE: Draft Logan Airside Improvements (a/k/a Runway 14/32) EOEA #10458

Dear Mr. Durand:

1. I am **OPPOSED** to Runway 14/32 as any benefits of same are strongly outweighed by the resulting adverse health, environmental, and economic costs on myself, my neighbors and other metropolitan area residents. 168.1

2. As a homeowner residing adjacent to Franklin Park, I am already negatively impacted by Logan Airport's overflights resulting in loss of sleep, irritability, loss of use/enjoyment of my yard and garden, concerns re pollutants and health impacts, and diminishment of enjoyment of public spaces such as Franklin Park and the Arnold Arboretum.

3. Runway 14/32 will further increase the adverse health, environmental, economic, and quality of life impacts on myself and my neighbors from these overflights. It will also negatively impact area children's health and learning as the planes are clearly audible within, for example, English High School where I attended Massport's informational meeting on this matter. 168.2

4. Massport should be required to withdraw this proposal and perform a comprehensive study, including, analysis of the health, environmental, and economic costs on the affected communities, using current data, and including maximum utilization of other pre-existing regional airfields. 168.3

Name: Brian Gallagher
Address: 11 Stedman Street, #1
Boston, MA 02130
Phone: (617) 982-3542

Letter 168
Brian Gallagher
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
168.1	Alternatives	Runway 14/32	I am opposed to Runway 14/32 as any benefit of same are strongly outweighed by the resulting adverse health, environmental, and economic costs....	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
168.2	Alternatives	Runway 14/32	Runway 14/32 will further increase the adverse health, environmental, economic, and quality of life impacts.....	Refer to response to Comment 168.1. Refer to Chapter 6 of the Supplemental Draft EIS/FEIR for a discussion of environmental impacts of the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
168.3	Environmental Review Process	MEPA	Massport should be required to withdraw this proposal and perform a comprehensive study, including, analysis of the health, environmental, and economic costs on the affected communities, using current data, and including maximum utilization of other pre-existing regional airfields.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

LETTER 169

Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 0--2202
Attn: MEPA Office

April 20, 1999

Dear Mr. Pugsley,

I'm writing to register my opposition to Massport's Runway 14/32 (airport expansion) project. What concerns me most is how this will impact the city I love so much. The size of this city is what drew me here from New York. With an increase in air traffic we will loose the very thing that makes this city so livable. And all this for convention attendees who don't even live here? Who barely leave their hotel? Let them go to NYC if they want a crowded, dirty, noisy location for their meeting. If they want a walkable, livable city to enjoy during their stay then they will come here and put up with a few delays (but as you know there are delays at the largest airports). 169.1

I would secondly oppose the project because it could triple the number of flights over the South End which not only is my home but is one of the most desirable neighborhoods in Boston. Increased flights will most definitely have an impact on this, and the general quality of life we enjoy here in this city. Personally, I'm willing to give up any financial gain in order to maintain the quality of life I enjoy here. 169.2

Boston's advantage is it's manageable size, The fact that one can walk around easily and actually "experience" the city while you are visiting - even if only for a short time. We offer water, shopping, history, gardens and architecture all within a short distance; in a city that seems the size of a large village....and we need to preserve this.

I hope for your support on this matter,
Sincerely,

Nina Garfinkle

Letter 169
Nina Garfinkle
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
169.1	General Opposition			Comment noted.
169.2	Alternatives	Preferred Alternative	...project ... could triple the number of flights over the South End which not only is my home but is one of the most desirable neighborhoods in Boston....	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

Cc:
Bcc: Arthur Pugsley@MEPA@EOEA
From: "Sandra Gibbs" <skgibbs@worldnet.att.net>
Subject: comments on Logan airside improvements Draft EIS
Date: Wednesday, April 21, 1999 14:53:37 EDT
Attach: MEPA letter-SKG-Gen.doc
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 170

Attached please find my comments on the Massachusetts Port Authority's Draft Environmental Impact Statement on its airside Improvements Planning Project. I would ask that you reject their proposal.

LETTER 170

61 RUTLAND STREET
BOSTON, MA 02118

April 22, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge St.
Boston, MA 02202
Att: MEPA Office/Arthur Pugsley

Dear Secretary Durand:

I am writing to give my comments on the Massachusetts Port Authority's Logan Airport Airside Improvements Planning Project Draft Environment Impact Statement.

I am a 34 year resident of the South End of Boston, directly under the flight path of Runway 27, which is slated to see an increase of as much as three times the current air traffic under which we suffer today. The neighborhood in which I live is a multi-ethnic, multi-economic and multi-generational one.

It is my strong feeling that Massport's DEIS does not make a credible case for its project and should be rejected for the following reasons:

1. **It will impose an unacceptable noise burden upon my community without any commensurate benefit either to Logan Airport or to the citizens of the Commonwealth.** The EIS, as I read it, argues a narrow case for construction of a new runway and taxiway without examining in appropriate detail how these construction projects will adversely affect the surrounding impacted communities. The EIS similarly fails to evaluate the effect of the increased demand which will be generated by the proposed construction project on its terminal facilities, baggage handling, parking capacity, public transportation and road access at the airport. 170.1

2. **The project, by Massport's own account in the DEIS, will generate, at best, limited, dubious and short term benefits for the traveling public while imposing onerous and permanent noise and pollution burdens on Massport's neighbors.**

3. **Massport has failed to perform any outreach to impacted non-English-speaking Latino residents in my community.** There is a large community here, several thousand residents in the development of Inquilinos Boricuas En Accion, who will be severely and adversely impacted by this proposed runway construction project. Several hundred more are low-income tenants of the Boston Housing Authority. Massport's failure to attempt any 170.2

education of the non-English speaking population, coupled with their refusal to meet with other members of the South End community seems in direct violation of the standards set forth in President Clinton's Environmental Justice Executive Order promulgated early in his administration.

4. **Massport's paid advertising campaign, during the public comment period, is an outrageous violation of the spirit of the environmental laws with which Massport has to comply in order to receive approval for this project.** That it would engage in such a blatant attempt to influence the environmental process by purveying false and misleading information about the purposes and results of this complex project should, in itself, be viewed as grounds to reject the DEIS. If left to stand, it will make a mockery of the environmental process itself. Many more people will have heard the false claims in the TV and radio advertising than will have had access to the Environmental Impact Statement. That Massport refused to hold educational meetings in many communities and failed to provide any information in the Spanish language while engaging in deceptive advertising should be severely sanctioned. The appropriate sanction is requiring withdrawal of the DEIS. In no event should Massport, or a group calling itself Citizens for Efficient Regional Transportation, be allowed to submit to MEPA any results from an alleged "survey" being conducted in conjunction with this campaign. The "survey" is completely biased and uses invalid polling methods to come up with a result predestined to favor the project. 170.3

5. **Massport's assertions about delay are questionable at best.** The Citizens Advisory Committee to Massport (CAC) has determined that Massport failed to use readily available data on delay from the FAA to support its representations about the severity of the problem at Logan. My community's representative on that body has convinced me that there is no basis for Massport's assertions about the new runway as a tool for delay reduction at the airport. To the contrary, it appears that the delay situation will worsen within 5 years or less while Logan will have subjected its neighbors to an environmental nightmare of noise and pollution. At the least, the DEIS should be withdrawn and Massport should be required to compute actual delay data for Logan airport. 170.4

6. **The EIS makes short shrift of logical solutions to congestion and delay at the airport such as Peak Hour Pricing and regional alternatives such as Massport-owned Hanscom Field.** 170.5 170.6

In short, *Massport's Draft Environmental Impact Statement is fatally deficient. It should be rejected or withdrawn from consideration by the EOEA. A new study should be required based on a broader scope and a higher standard for community education and input.* Thank you for your consideration.

Very truly yours.

S. Kay Gibbs

Letter 170
S. Kay Gibbs
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
170.1	Alternatives	Preferred Alternatives	It will impose an unacceptable noise burden upon my community without any commensurate benefit either to Logan Airport or to the citizens of the Commonwealth.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-7 of the Supplemental DEIS/FEIR.
170.2	Environmental Justice	Impacts	Massport has failed to perform any outreach to impacted non-English-speaking Latino residents in my community.	Massport has involved the Hispanic community in public review of the Airside Project. Copies of the Airside Project Draft EIS/EIR were distributed to the Chelsea Human Services Collaborative, the Centro Hispano de Chelsea, and the Chelsea Commission on Hispanic Affairs. Consistent with FAA policy of providing translation on request, a Spanish-language interpreter was present at a meeting on February 23, 1999 with the Latin American Planning and Development Group. Massport also held a public hearing on March 3, 1999 with the Chelsea City Council at which over one hundred citizens had the opportunity to provide comment to Massport officials following a presentation of the Proposed Project.
170.3	Environmental Review Process	Public Process	Massport's paid advertising campaign, during the public comment period, is an outrageous violation of the spirit of the environmental laws with which Massport has to comply in order to receive approval for this project.	Massport did not sponsor television, radio, or newspaper advertisements for the Airside Project. Since the initial scoping, FAA and Massport have established a dialogue with the Airside Review Committee (ARC), community leaders and the public through hearings, briefings, and circulation of over 700 copies of the *DEIS/EIR* for comment. At public meetings and at the request of interested community members, Massport has provided the public access to information about the Airside Project and its associated social and environmental effects. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the *DEIS/EIR*, the FAA held two public hearings.

Code	Topic 1	Topic 2	Comment	Response
170.4	Delay	Model	Massport's assertions about delay are questionable at best.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
170.5	Alternatives	Peak Period Pricing	The EIS makes short shrift of logical solutions to congestion and delay at the airport such as Peak Hour Pricing.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
170.6	Regional Transportation	Regional Airports	The EIS makes short shrift of logical solutions to congestion and delay at the airport such as regional alternatives such as Massport-owned Hanscom Field.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Sterling Giles / 154 West Newton Street / Boston, MA 02118-1203
(617) 421-9134 / sterlg@aol.com / no fax available

April 19, 1999

LETTER 171

Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
attn: MEPA Office

Dear Mr Pugsley:

Please know that I am a registered voter and I am strongly opposed to the construction of Runway 14/32. Our priorities must be a livable city now and long-term (not short-term) tourist, convention, and business growth. Only the former can foster the latter in a lasting, significant manner. 171.1

Sincerely,

Sterling Giles

cc: Representative Byron Rushing

Letter 171
Sterling Giles
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
171.1	General Opposition		...I am strongly opposed to the construction of Runway 14/32.	Comment noted.

LETTER 172

April 22, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs/MEPA Office
Arthur Pugsley, EOEA No. 10458 (Logan Airside Improvements Planning Project)
100 Cambridge Street - 20th Floor
Boston, MA 02202

Dear Secretary Durand:

We are writing in opposition to MASSPORT's Logan Airside Improvements Planning Project and request that your office (i) withhold issuance of a certificate; (ii) require a much more rigorous review of alternatives to the new runway; and (iii) require substantiation and an in-depth analysis of the cause of the purported conditions at the airport. MASSPORT's stated need for the project is two-fold: to reduce delay and enhance safety; the DEIR does not support either claim. In addition, MASSPORT has failed to substantiate its contentions in the public hearings held on this project. The Mayor's Director of Environmental Affairs has submitted comments to the EOEA addressing indirect traffic, congestion, and air pollution impacts of the proposal on the City. We agree that these issues warrant analysis and urge your office to fully consider these comments in your decisionmaking process. In addition, we appreciate your consideration of the concerns discussed below. 172.1

We live in the South End, the primary attraction for commercial and residential development in the City for the last several years. Already we are adversely impacted by the failure of pilots to stick to the flight path of Runway 27. If proposed Runway 14/32 is constructed, the South End will face a 300% increase in flights over our skies. This could potentially halt all development in the South End and result in plummeting property values as well as property taxes. The City, and by extension the Commonwealth, depends on the continued growth of the South End, which has also become an attractive tourist destination due to the historical significance of the area, the diversity of culture, and the nationally recognized restaurants which make the South End their home. 172.2

The measurement of current delays is widely different among MASSPORT, the FAA and an outside consultant. If we're not able to come to some consensus on what the issue really is, how are we going to be able to resolve it? The EOEA should require an independent analysis of the existing conditions and the benefits that could potentially be derived from a new runway from reducing delays, as well as a comparison of any potential benefits to the definite detriments that would occur in terms of noise, air pollution, visual impact and increased automobile traffic. It is likely that the option with the least environmental impact will be the no-build option. MASSPORT's claim that a new runway would enhance safety appears to be little more than a public relations pitch unsubstantiated by any concrete data. 172.3 172.4

There are many alternatives to the new runway that have not been fully analyzed and are too readily dismissed, such as the no-build option or utilizing Hanscom Field or Worcester Regional Airport instead. MASSPORT should be required to demonstrate that there is absolutely nothing they can do at Logan to improve alleged flight delay problems absent construction of a new runway. In addition, there has not been sufficient debate regarding sending small planes (for which the runway is proposed to be built) to Hanscom Field (the airport designed to accept small aircraft). Certainly the environmental impacts associated with utilizing Hanscom, where approximately 40,000 residents would be impacted, pale in comparison with the impacts associated with building a new runway at Logan, where (according to MASSPORT) 1.2 million 172.5 172.6

people are affected. No reasonable person wants planes flying over his head, yet the 1.2 million impacted people in Boston that are saying "no" don't seem to have as much influence as the impacted people in Bedford and surrounding areas. Hanscom is located right on Route128, where most businesses are, where other businesses are trying to reach and where people would benefit most. Another argument against Hanscom has been the need to preserve historical monuments in the area. There is no more historical place in the country than the City of Boston. The red line is only 8 miles from Hanscom, an extension of which would bring people right to downtown Boston and right to Logan airport. An extension could easily be built by going under any historical sites. Airforce One just landed at Hanscom last week, so the facility must be capable of handling all-size planes.

Utilizing the under-utilized Worcester Regional Airport also makes good environmental and economic sense. Most of the people using Logan do not reside in the City, yet it is the residents of the City who bear all of Logan's impacts. If the majority of the people who need to fly out of Massachusetts live closer to Worcester and/or Hanscom, why not make use of the airports closer to their residences rather than expand an airport that is already the most difficult airport to access by both air and land? 172.7

We are stuck with Logan where it is now, but we should not make a bad situation worse. Economic development in the Commonwealth is not dependent on access to Boston only, but access to Western, Central, Northern and Southern Massachusetts as well. If all the economic activity is centralized in Boston and Logan is still difficult to access, then the result will be contrary to what the project proponents are contending; i.e., businesses will look outside of the Commonwealth for both permanent operations and short-term activities (ex. conferences, business meetings).

We respectfully request that the EOEA require a much more exhaustive analysis of the impacts associated with the proposed expansion at Logan than what was presented in the DEIR. We also ask that the agency refrain from issuing a certificate to MASSPORT because the majority of the people don't want it due to the environmental impacts it would cause. If the issues of aircraft delay and safety enhancement are as serious as MASSPORT says, they certainly warrant a more careful examination and selection of long-term, instead of short-term solutions.

Sincerely,

Robert and Kathleen Hathaway
220 West Canton Street
Boston, MA 02116-5814

C: Senator Edward Kennedy
Senator John Kerry
Congressman Joe Moakley
Congressman Mike Capuano
Governor A. Paul Cellucci
Representative Byron Rushing

Letter 172
Robert and Kathleen Hathaway
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
172.1	Environmental Review Process	MEPA	We are writing in opposition to Massport's Logan Airside Improvements Planning Project and request that your office (i) withhold issuance of a certificate; (ii) require a much more rigorous review of alternatives to the new runway; and (iii) require substantiation and an in-depth analysis of the cause of the purported conditions at airport.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Refer to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of the operational benefits of the Preferred Alternative and to Chapter 6 of the Supplemental DEIS/FEIR for a discussion of environmental impacts of Preferred Alternative.
172.2	Alternatives	Runway 14/32	...we are adversely impacted by the failure of pilots to stick to the flight path of Runway 27. If proposed Runway 14/32 is constructed, the South End will face a 300% increase in flights over our skies. This could potentially halt all development in the South End and result in plummeting property values as well as property taxes.	Both the *Logan Airport 1997 Annual Update* and *Logan Airport 1998 Annual Update* reported that aircraft were not achieving the goals of the 1996 FAA ROD and that further testing was needed to get improved conformance. The FAA is currently funding an analysis of the procedure and meets periodically with the Runway 27 Advisory Committee to report interim findings. The *Logan Airport 1999 ESPR* (previously GEIR) reports on flight track monitoring which includes Runway 27 test results. The Runway 27 departure tracks have been reviewed in more detail in Section 4.3 of the Supplemental DEIS/FEIR.
172.3	Delay	Model	The measurement of current delays is widely different among Massport, the FAA and an outside consultant.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
172.4	Alternatives	Runway 14/32	The EOEA should require an independent analysis of the existing conditions and the benefits that could potentially be derived from a new runway from reducing delays, as well as a comparison of any potential benefits to the definite detriments that would occur in terms of noise, air pollution, visual impact and increased automobile traffic.	To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study.

Code	Topic 1	Topic 2	Comment	Response
172.5	Alternatives	Other Non-Construction Alternatives	Massport should be required to demonstrate that there is absolutely nothing they can do at Logan to improve alleged flight delay problems absent construction of a new runway.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
172.6	Regional Transportation	Regional Airports	...there has not been sufficient debate regarding sending small planes...to Hanscom Field....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Code	Topic 1	Topic 2	Comment	Response
172.7	Regional Transportation	Regional Airports	Utilizing the under-utilized Worcester Regional Airport also makes good environmental and economic sense.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Airside Project Draft EIS/EIR for these improvements. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other alternative regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Section 2.2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.

ANN HERSHFANG
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LETTER 173

March 1, 1999

Secretary Bob Durand
Executive Office of Environmental Affairs
100 Cambridge Street
Boston 02202

Attn: MEPA office re: Runway 14/32

Dear Secretary Durand:

This letter requests your office to (1) extend the deadline for the environmental process on proposed new Runway 14/32 so that citizens have sufficient time to analyse Massport's documents and (2) make a final decision that honors the quality of life of near neighbors of Logan Airport. 173.1

If built, Runway 14/32 will inflict an unacceptable noise impact on adjacent neighborhoods all around the airport. It will add capacity, triple use of Runways 9/27 and 15/33 and inflict heavy noise on Boston neighborhoods in particular, including East Boston, Charlestown, South Boston, South End, Beacon Hill, Back Bay, Roxbury, Jamaica Plain, and possibly even further southwest areas like Hyde Park, Roslindale and West Roxbury. 173.2

Building this runway reverses 25 years of pathbreaking noise abatement programs and policies by Massport--which included a noise-abatement overwater take-off turn from Runway 22R, emphasizing overwater use of Runway 15/33, night-time restrictions on noisy planes, and an extensive soundproofing program for schools, hospitals and residences.

Twenty-five years ago the Massport Board initiated these nationally renowned noise abatement policies in an Airport Master Plan (1976) which also included other good neighbor commitments--no further expansion of the land area of Logan, $1 million to the East Boston Health Center, a sizeable payment-in-lieu-of-taxes to Boston and Winthrop, transferring the Belle Isle Marsh to the MDC, conveying blockbusted parcels in East Boston to abutters, moving triple-deckers from Neptune Road to Coleridge Street and a committment to build Piers Park and Jeffries Point Park. These policies have continued through the years until now.

In 1975, everyone said such noise and good neighbor policies would mean the death of the airport and increased danger for airlines and

Letter 173
Ann Hershfang
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
173.1	Environmental Review Process	MEPA	This letter requests your office to (1) extend the deadline for the environmental process on proposed new Runway 14/32 so that citizens have sufficient time to analyze Massport's documents...	In January 2000, the FAA called for the preparation of a Supplemental Draft EIS (SDEIS) after the conclusion of a SDEIS Panel review process. The SDEIS Panel, which consisted of 6 representatives appointed by the Governor and the Mayor of Boston, met over a ten-month period from March 2000 to December 2000. As a result of the FAA's actions, the environmental review process for the Logan Airside Improvements Project was extended by more than one year.
173.2	Alternatives	Runway 14/32	If built, Runway 14/32 will inflict an unacceptable noise impact on adjacent neighborhoods all around the airport.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-7 of the Supplemental DEIS/FEIR.

LETTER 174

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April 22, 1999

Executive Office of Environmental Affairs
100 Cambridge Street, 2nd floor
Boston MA 02205
email: arthur.pugsley@state.ma.us

RE: Case #10458 Runway 14/32

Dear EOEA,

174.1

This letter requests your office to reject Massport's inadequate Draft Environmental Impact Statement on proposed Runway 14/32 and to require Massport to develop a new DEIS that includes a full, fair and honest presentation of all relevant data, dates and impacts.

174.2
174.3
174.4
174.5

A new DEIS should fully describe benefits from alternative actions, such as (1) diversion to Hanscom Field and other regional airports, (2) gains from peak hour pricing based on a reasonable threshold (115 flights is too high), (3) the high-speed Boston-New York rail service which begins this fall, and (4) a second-major airport, starting from the recommendations in the Massachusetts Aeronautics Commission report. These combined actions can do more to solve any existing Logan delay than a new runway, which even Massport estimates will be effective for five years or less.

Complex solutions to complex problems have been successful before--and at Massport. Twenty-five years ago the Massport Board considered the proposed Runway 14/32 along with operating changes designed to minimize noise and other impacts on surrounding neighborhoods. Then, business interests offered the same knee-jerk reactions about economic and job losses. In spite of those predictions, Massport adopted broad noise-abatement and community restoration policies in a 1976 Master Plan, and the runway was not built.

The airport survived and thrived. Passengers increased from 11 million in 1976 to 26 million in 1998, flights from 260,000 in 1976 to 500,000 in 1998.

Now, by proposing Runway 14/32, the current Massport administration for the first time in 25 years would move over water flights back over residential areas. Small planes would land over water on 14/32; other arrivals would also land over water. This would shift large jet departures, which are noisier,

to Runways 27 and 33 and triple their number. They will fly over the close-in populated areas of East Boston, Chelsea, Everett, Somerville, Cambridge, Charlestown, South Boston, South End, Beacon Hill, Back Bay, Roxbury, Jamaica Plain, Hyde Park, Roslindale, West Roxbury, Brookline and Newton. More people live under these two runways than live under all the other Logan runways combined. Is this a "fair" distribution of noise.

The real issues here are regional fairness and inadequate long-range planning by Massport not the livelier and irrelevant scenarios favored by news coverage. This is not a "turf war" or partisan "political wind." Runway 14/32 is truly about noise, neighborhood destruction, loss of enjoyment and property value. It involves real people and real damage to real people in their homes and neighborhoods. It is truly an environmental issue.

A few specific observations about the DEIS:

1. Peak hour pricing: Of all DEIS deficiencies, the lack of serious analysis of peak hour pricing is the most disappointing. Peak hour pricing would free up Logan airspace and reduce delay by pricing out underloaded carriers. Massport instituted a peak hour program in the 1980s which successfully reduced operations and delay until courts invalidated it as too broad. A legally compliant program was subsequently prepared and ready for implementation in 1990 but has never been tried. Peak hour pricing--a market-based solution--could be in place relatively quickly at a low cost. 174.6

2. Noise:

- There is only one small, unreadable noise contour chart in the EIS, with no identifying city or street name. Its obscurity must be a deliberate deception. A better presentation must be required, and the impact of doubling/tripling noise over residential areas must be made clear. 174.7
- Massport's computer calculations in the DEIS consistently understate noise compared to that measured by microphones in the field. 174.8
- Could Massport have chosen 1993 as base year to minimize the projected noise increase.
- In 2000 the airline fleet is required to be 100% stage III compliant. Noise benefits of 100% stage III equipment should be calculated first, then the impact of 14/32. This serious flaw justifies withdrawal of the DEIS. 174.9

3. Equity: The equity of locating airport noise pollution in the Commonwealth's poorest neighorhoods deserves more than four pages out of four volumes. Massport's unsupported conclusion that low-income communities do not receive a disproportionate impact requires further explanation. 174.10

4. Delay:

- Why does Massport's use a formula which calculates more delay than the FAA's.
- Why is a new runway necessary now since there is less delay than in 1993.
- What is actual delay, as opposed to projected.
- How has, and how might, airline consolidation reduce delay. Why doesn't Massport jawbone airlines into consolidation as airport management is now doing in San Francisco, another delay-prone airport. 174.11
- How much of the delay is caused by snow, fog, airline equipment, airline scheduling/cancellations, air traffic control shortcomings, lack of airside space, etc., rather than wind direction and runway availability.

Runway 14/32 must not be approved until all the relevant issues are fairly, openly and honestly examined and discussed.

Massport suggests restrictions that are enforceable only by the Federal Aviation Administration-- one-way use of 14/32 and "fair" distribution of noise. The FAA's record at enforcing its prior commitments is poor. FAA's tower has not effectively used the Preferential Runway Assignment System to share the noise burden. It has not strongly enforced the Runway 22 departure noise-abatement turn. 174.12

Quite recently, FAA has thrown up its hands about enforcing the Runway 27 departure track over the Fort Point Channel industrial area. After 3+ years of night meetings, residents under the Runway 27 flight path thought we had a commitment from the FAA on this "noise-abatement" departure. Now, as the enclosed article indicates, and as the planes overhead from 6:15 am these last several days prove, the FAA either cannot or will not enforce that agreement mandated after a successful suit won by the Runway 27 coalition.

The State of Massachusetts, must protect us and our environment. Neither Massport nor the Federal Aviation Administration will do so.

Thank you for your consideration of these comments.

Sincerely,

Ann Hershfang

...ght path called the wrong way

...sidents peeved planes stay off course

BY JEFF SKRUCK
STAFF WRITER

Aviation officials last week told members of the Runway 27 Coalition that they have done all they can o maintain flight tracks designed to educe jet noise from the Logan ...ternational Airport which im...acts the South End and several ...ther neighborhoods.

Federal Aviation Administration ...ficials, Massachusetts Port Author... and airline pilots say ...e current flight corridor defined ...y an environmental impact study ...s "unreasonable" and beyond ...urrent technology, said Kurt ...Valter, a member of the Run...way 27 coalition.

But for members of the coa...ition that just isn't good ...nough.

"They say, 'We've done our ... We can't do any better,'" ...aid Walter, a former South End ...esident. "Needless to report, ...e community members are ...ot happy with this report."

...at's more, the aviation officials' latest ...e contradicts what they have said for the ...ear and a half, according to coalition ...bers.

...ey basically said it was doable and a ...nd-a-half later they say, 'We don't know ...nd we can't make it better,'" said ...sia Lyman, president of the coalition. ... Jan. 25 meeting was the latest review ... Runway 27 flight track monitoring, a ...s that began 10 years ago with the ...on's law suit agai... ...AA, resulting ...environmental ...udy.

The purpose of the review process is to contain about 68 percent of departing aircraft within one standard deviation of the flight path, a corridor that hangs between South Boston and the South End. Radar data measures if the planes are following the flight path by determining whether the planes pass through five gates.

Members of the Logan Airport Citizens Advisory Council, FAA, Massport and pilot representatives reviewed flight tracks for September, October and November at the meeting.

"As we suspected, the number of planes achieving all five gates had dropped from 50 percent or so over the summer to an abysmal 34 percent by October," Walter stated in a press release.

The Runway 27 coalition formed in 1978 and won a lawsuit nearly a decade later against the Federal Aviation Administration that led to the coalition and the FAA to work on an environmental impact study. Coalition members have said there has been no successful change in the noise for any of the communities. The coalition continues to meet with the FAA and Massport to fine tune the flight track.

While airport officials said they have pretty much done the best they can with the current technology, the citizens advisory council got some encouragement from Northwest Airlines. Company officials agreed to flight test an improved flight procedure for their planes for the next three months. The planes fly with the latest Flight Management System (FMS) technology, a system that automatically sets a plane's flight path.

Arlene Salac, FAA spokesperson, agreed that aviation officials have done just about all they can with planes that do not use FMS technology. But she said there is room for improvement regarding the planes flying with the new technology.

"It looks like we've taken it as far as we can at this point," Salac said. "If there are any further suggestions, we'll look at that."

Despite the high technology behind FMS planes, they have consistently been veering off track and flying right over the South End since the summer, according to the coalition.

And the high-tech planes only account for about 25 percent of the departures from Runway 27, he added.

Even though airport officials say they are doing the best they can, the citizens council will continue to meet with them quarterly regarding flight track monitoring. Plus, it's a particularly important issue with Massport making its big push for the construction of Runway 14/32.

Massport will present itsproposal for the controversial runway at the Airport Review Committee meeting on February 11 at the State Transportation Building, 10 Park Plaza, conference rooms two and three, from 6 p.m. to 10 a.m.

Runway 14/32 is a uni-directional runway that would serve commuter aircraft. Its skeleton lies underground at the airport. Massport — the state agency that oversees Logan — began construction on the runway more than 20 years ago, but a court order halted the project, following massive opposition from East Boston residents.

The project makes community members from Br... ...eighborhoods and outlying towns ... ...icious of Massport. Many, including ... ...an, say the new ... ...

result in increased use for Runway 27 and many other runways. In short, city neighborhoods like the South End, South Boston, Roxbury, Jamaica Plain and East Boston to name a few, will hear a lot more jet noise.

"I don't think we should let them off the hook," said Walter, regarding the airport officials' cop out at last Monday's meeting. "Especially with Runway 14/32, it will be a complete disaster a decade from now."

The citizens advisory council will try to increase its political pressure, Walter added.

As for next Thursday's meeting, Walter said he's prepared to hear Massport's "song and dance" about how great Runway 14/32 will be for Logan and the city. Peter Blute, who heads Massport, will present projected figures regarding increases of runway use to the Airport Review Committee, which consists of residents and business leaders.

Many neighborhood activists have written off Runway 14/32 as a done deal. Four days after Blute's presentation, the proposal will be filed with the state environmental protection agency, Walter said.

Letter 174
Ann Hershfang
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
174.1	Environmental Review Process	MEPA	This letter requests your office to reject Massport's inadequate Draft Environmental Impact Statement on proposed Runway 14/32....	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
174.2	Regional Transportation	Regional Airports	A new DEIS should fully describe benefits from alternative actions, such as diversion to Hanscom Field and other regional airports.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives.

Code	Topic 1	Topic 2	Comment	Response
174.3	Alternatives	Peak Period Pricing	A new DEIS should fully describe benefits from alternative actions, such as gains from peak hour pricing based on a reasonable threshold (115 flights is too high).	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport. Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion.
174.4	Regional Transportation	Passenger Rail	A new DEIS should fully describe benefits from alternative actions, such as the high-speed Boston-New York rail service which begins this fall.	Massport's analysis of regional alternatives is comprehensive and reflects all the major recommendations of various regional planning studies that have been conducted over the last decade. These include expansion of the regional airports and development of high-speed rail in the Boston-New York market.
174.5	Regional Transportation	Regional Airports	A new DEIS should fully describe benefits from alternative actions, such as a second-major airport, starting from the recommendations in the Massachusetts Aeronautic Commission report.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
174.6	Alternatives	Peak Period Pricing	[Massport should analyze peak hour pricing more in depth.]	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. PPP is not recommended for implementation at this time because airline overscheduling is not a major contributor to current delays at Logan Airport. However, as a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
174.7	Noise	Impacts	[The EIS noise contours should be made more clear.]	Comment noted. The figures in the Supplemental DEIS/FEIR have been significantly improved since earlier drafts.
174.8	Noise	Model	Massport's computer calculations in the DEIS consistently understate noise compared to that measured by microphones in the field.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.
174.9	Noise	Hushkitted Aircraft	In 2000, the airline fleet is required to be 100% Stage III compliant. Noise benefits of 100% Stage III equipment should be calculated first, then the impact of Runway 14/32.	Comparisons of the Action Alternatives to the No Action Alternatives for individual fleet scenarios are the appropriate basis for evaluation and are not distorted. Fleet composition within each individual forecast scenario remains consistent. The phase-out of Stage 2 aircraft will reduce the noise impacts from Logan Airport, producing benefits to surrounding communities. These impacts are discussed in the *Logan Airport 1999 ESPR* (previously GEIR). The 29 M Low Fleet scenario includes 22 daily operations in Stage 2 aircraft (depending on the alternative examined), which represent about 2.5 percent of the total daily jet operations in that fleet. (Refer to Table 6.2-1 of the Supplemental DEIS/FEIR). In the shift to a post-1999, 100 percent Stage 3 fleet, some of these aircraft would likely have received hushkits resulting in very little improvement in the noise of individual overflights (and hence, little improvement in DNL), and some were likely converted to Stage 3 airplanes. However, on balance, the total number of Stage 2 operations in 1999 is small, and a revised 29 M Low Fleet scenario would leave a significant number of hushkitted airplanes to dominate the exposure. For these reasons, it is estimated that the presence of the Stage 2 airplanes in the 29 M Low Fleet scenario overstates noise exposure by only a few tenths of a dB, which does not represent a material difference.

Code	Topic 1	Topic 2	Comment	Response
174.10	Environmental Justice	Impacts	The equity of locating airport noise pollution in the Commonwealth's poorest neighborhoods deserves more than four pages out of four volumes. Massport's unsupported conclusion that low-income communities do not receive a disproportionate impact requires further explanation.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
174.11	Delay	Model	[The delay model is not satisfactory.]	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. Chapter 1 and Appendix C include a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
174.12	Noise	PRAS	FAA's tower has not effectively used the Preferential Runway Assignment System to share the noise burden.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 175

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

The EIS/EIR does not address the problem of ground airlag because there is not sufficient public transportation to accommodate the air traffic they expect to come to Boston. 175.1

This is a short term solution. With in 10 years we will face the same issues.

Name Christine A. O'Toole
Address 3 Greenough Park
Boston MA 02130
Phone 617 522 2343

Letter 175
Christine A. O'Toole
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
175.1	Ground Transportation	Access to Logan	The EIS/EIR does not address the problem of ground delays because there is not sufficient public transportation to accommodate the air traffic they expect to come to Boston.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Annual Updates (Environmental Data Reports).

Darryl Pomicter

136 Myrtle Street
Boston, MA 02114-4403
Phone/Fax: 617 227-1153
E-mail: dpomic@aol.com

LETTER 176

April 22, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention MEPA Office
Arthur Pugsley, IV, EOEA No. 10458
Commonwealth of Massachusetts
100 Cambridge Street, 20th Floor
Boston, MA 02202

RE: Logan Airside Improvement Planning Project, DEIR/DEIR

Dear Secretary Durand:

As the Beacon Hill Civic Association representative to the CAC and the ARC my basic opposition to Massport's proposal to construct a new runway at Logan Airport is stated in the letter of opposition from the Beacon Hill Civic Association.

This letter expresses additional opposition based on Massport's inconsistent, unbalanced, and misleading presentation of information. My comments are based on my experience, which also includes on the Technical Subcommittee of the ARC (which included an additional series of technical meetings with Massport and their consultants); in the Boston Redevelopment Authority's Boston Central Artery Depression Feasibility Study in 1974-75 (as Beacon Hill representative); doing business around the world for many years; and as an MIT trained engineer.

Massport has presented overwhelming amounts of information, formally and informally. While most of the volumes of information and their comments are factually accurate, much of their presentation of information in print and verbally is inconsistent, misleading, and deceptive--misinformation. Many normal people are overwhelmed by the information and feel they must agree with the "facts". Despite the quantity, the information is often incomplete and improperly presented; and their conclusions are consequently defective.

Massport's presentation of information, in print and verbally, mixes operations and passengers, quantities and percentages—presenting what at that point is most favorable and omitting what at that point is unfavorable. They should consistently present operations and passengers figures with both quantities and percentages, including subtotals and totals. A few examples: 176.1

1. At the State House hearing March 23, Director Blute talked about "70,000 planes a year using the new runway will be moved over the water." In the next sentences he talked about "the few percent of increased traffic over some communities will more closely match the PRAS percentages agreed to by all the communities." Those 70,000 operations over the water are about 15% of total operations at Logan. Those few percent of flights moved to other neighborhoods includes more than 40,000 operations from Runway 27, more than 30,000 from Runway 33, and more than 10,000 from Runway 22. Since neighborhoods are typically affected by more than one runway, the moved flights increase flights over some neighborhoods by 50-70,000—more than triple current levels. (And, when the PRAS

percentages were formulated in the early eighties, no one agreed to current levels of traffic—increased by 112% over the last 20 years—much less Massport's intended continued increase without limit over time.)

2. At the same hearing, Director Blute threatened that, if the new runway is not built, traffic will still increase and the primary runways will be used for more than 90% of operations to try to satisfy the demand with the least delays. Of course, with the new runway, traffic is still intended to increase without limits; and the primary runways will still be used excessively. It will just take longer for the excess to grow. (No consideration is given to limits on operations, maximum capacity.)

3. Logan's airport ranking as the 11th in the US in operations and the 6th in delays has been widely stated as justification for the new runway to improve the delay ranking. At our February CAC and ARC meetings we noted to Director Blute that the additional ranking of 17th busiest in passengers indicated a lower than average number of passengers on each plane. Getting more people on each plane could also improve the ranking, since the same number of passengers on fewer planes should have fewer delays. At the State House hearing, Director Blute upped the ante by arguing that 17th in passengers while 5th in delays further emphasized the need for the new runway to decrease delays. (No mention was made of the operations 11th ranking or the alternative of getting more passengers on each plane.)

4. Massport details the worsening in rank from eighth in 1990 to sixth in 1997 in their recent DEIS/DEIR (page 1-13), and they note the FAA figure for 1997 of 25.2 delays per 1,000 operations (2½%) (page 1-11). They exclude the FAA delay figures for prior years which have dropped steadily from a peak of 39.23 (under 4%) in 1992 (www.ASC.FAA.GOV). More complete detail was included in their 1995 Airside Improvements Feasibility Study (page I-4), different from the current FAA figures, with usually worse delays but better rankings for the same years. (No ranking adjustment "handicap" is made in any case for inherently worse-than-average New England weather or for the constrained urban location, which may slow airport operations but should speed arrival to urban destinations.)

5. Massport's recent, widely delivered presentations state strongly that the new runway "Significantly Reduces Delays: 20-25% Annually, 45-55% in Good Weather (VFR), and Up to 90% on Northwest wind days." Their 1995 Airside Improvements Feasibility Study estimated that delays were then 80-100,000 hours for the year (page I-4). They forecast 200,000 hours of delay for 1999 and estimated that Runway 14/32 "could reduce delays by approximately 21,000 hours per year", for a 10% reduction (pages V-23 & V-24). Massport's 1997 Annual Update only mentions delays in connection with the Airside Improvements Project (page 3-2)—there is no detail. Their recent DEIS/DEIR estimates "121,000 annual hours of delay in 1998" (page 1-11), separately adds 22,000 hours for taxiway delays for a 143,000 hours total, and updates their 1999 estimates to 136,000-190,000 annual runway delay hours (page 4-33), It also notes approximately 159,000 hours total (135,000 for runways and 24,000 for taxiways) modeled aircraft delay in the 1993 base year (page 4-28). Much of the delay estimates add the runway and taxiway delays together, and much of the benefits estimates combine the Runway 14/32 and Reduced Landing Minimums. However, the difference in runway related delay between "All Actions" and "All Actions except Runway 14/32" is still 20,000 hours for the likely 1999 scenario (page 4-33)—a 16% reduction—and a 22% reduction for the likely future

scenarios. And the FAA's calculations for Logan delays are substantially lower than Massport's estimates. (Under which shell is the pea, which card covers the Queen?)

6. Massport estimated "annual savings of over $65,000,000 may be realized" in their 1995 Airside Feasibility Study, calculating 21,000 delay hours with a $3,100 operational cost per hour (page V-24). Separately, the $3,100 per hour was divided into $900 operating costs of aircraft to the airlines and approximately $2,200 travelers' costs of delay (page I-6). In their recent DEIS/DEIR, the airline cost per hour of delay (considering the Logan fleet mix) is estimated at $1,115; and the time of the average 53 passengers per aircraft is valued at $27 per hour for an average economic cost to passengers of $1,431—and a total value per hour of $2,546. The most likely 20,000 hours estimated to be saved in 1999 now has a decreased $51 million value. (No value is ever put on the negative affects on others—no decreased property value, decreased ability to business, or decreased ability to enjoy life. This can be quickly estimated at 4 hours/day x 5 days/week x 50 weeks/year = 1,000 hours/year/person affected. Valuing diminished ability to work or relax at several dollars per hour for a minimum 500,000 people affected quickly totals more than $1,000,000,000—dwarfing the delay costs side of the full equation. (A recently added $25 million estimate to construct the new runway excludes the cost to demolish and replace existing cargo facilities or to relocate those businesses.)

7. Asked about developing Hanscom, Massport responds that Hanscom is being developed as a reliever airport for general aviation (rather than as a regional airport for commercial passenger and cargo aviation). They note that it already has more operations than Portland, Maine and even their very brief mention of Hanscom in the DEIS/DEIR notes that it ranks second in operations among New England airports, behind Logan (page 2-41). Massport's 1997 Annual Report (page 4-9) notes that 85% (160,000) of the 188,000 annual operations at Hanscom are single-engine piston aircraft and that 41% (77,000) of the operations are touch-and-go flight training operations with single-engine piston aircraft; but Massport does not include this detail in their DEIS/DEIR or verbally. Or that Hanscom, the former US Air Force facility with existing 8,000 and 5,000 foot runways (and now owned and managed by Massport), has unused capacity for 50,000 or substantially more operations—even with the touch-and-gos. (The absence of commercial passenger and cargo operations at Hanscom—located in the middle of more than 50% of the passengers using Logan—both presently and in planning, is not addressed.)

We hope and trust for your actions to deny Massport's current proposal with direction to provide more technically consistent, complete, current, and less biased information. A longer range study and proposal is needed, which more fairly evaluates the positive and negative impacts of facilitating air traffic while respecting the health and wellbeing of all of those affected and of our environment—before any additional expansion of operations is allowed. 176.2

Thank you for your efforts.

Sincerely,

Darryl Pomicter

cc: CAC

Letter 176
Darryl Pomicter
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
176.1	Analysis Assumptions	Passenger Forecasts	Massport's presentation of information, in print and verbally, mixes operations and passengers, quantities and percentages-presenting what at that point is most favorable and omitting what at that point is unfavorable. They should consistently present operations and passengers figures with both quantities and percentages, including subtotals and totals.	The Airside Project involves a substantial amount of technical analysis and data. In public presentations Massport has sought to simplify the presentation of results in order to focus non-technical audiences on major conclusions and summary points. However, all of the technical analysis and data is contained in the environmental documents. Please refer to the main volume and the technical appendices of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR.
176.2	Alternatives	Other Non-Construction Alternatives	A longer range study and proposal is needed, which more fairly evaluates the positive and negative impacts of facilitating air traffic while respecting the health and well being of all of those affected and of our environment before any additional expansion of operations is allowed.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* (previously GEIR) and its updates.

Cc:
Bcc:
From: Arthur Pugsley@MEPA@EOEA
bject: <Beverlysky@aol.com>
te: Logan Airport Expansion, bad for business
cach: Tuesday, April 20, 1999 13:14:46 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 177

Mr. Robert Durand, Secretary
MEPA Unit - Executive Office of Environmental Affairs
Attention: Arthur Pugsley, File # 10458 EOA
100 Cambridge Street 20th Floor
Boston, MA 02202

Dear Mr. Durand,

I strongly object to any expansion of Logan Airport runways. I am offended by Massports TV advertisements promoting this expansion. 177.1

Look to the sky as Massports plans for building the new Runway 14/32 will bring 60,000 more planes a year flying over our neighborhoods. By their own data Massport expects a 300% increase in flights!

ttended the hearing at City Hall in the Council Chambers on March 2 at 0 PM opposing any operational expansion at Logan Airport. The chamber was packed with people, mostly from East Boston, Winthrop, Dorchester, Roxbury, Jamaica Plain, Somerville and the South End. I know that I am not the only person in the South End who cant sleep past six in the morning on Saturdays and Sundays in the summer. The planes start flying over every five minutes if the wind is coming from the southwest, and the southwest wind is the prevailing wind from the early spring through the fall. I keep my windows closed but it doesnt help. The windows start to rattle, and I start counting the planes. If I want to sit out on my deck I cant talk on the phone or to a neighbor without having to stop every few minutes as another big bird buzzes my house.
These planes sound like an endless parade of jackhammers. That isnt even the worst of it. These planes are like giant crop dusters filled with deisel fuel emissions, every five minutes! Take a deep breath. There is more. We homeowners in the SE have watched as our homes have doubled and tripled in value, and our tax rates to match. We are a designated historic Victorian neighborhood, a nice ten minute walk from the Statehouse and Boston Common. We are blessed with fabulous restaurants, a vibrant artists community, a great people mix of racial. cultural and economic diversity.
We are on a major flight path for planes taking off from Logan airport.
This is a no - brainer. Who wants to live under a flight path?
Developers will not advertise this feature in their brochures.
Real Estate agents, developers of Washington Street and other SE areas will have a difficult time selling luxury residences in a desirable neighborhood if they have to raise their voices to their customers as they scribe all the amenities. You cant hide noise pollution. Its noisy.
pollution isnt so obvious, but it is more insidious. Air pollution causes heart and lung disease. We, residents of the South End will come

together to stop Massport from turning our neighborhood into the new East Boston. The good people of East Boston have been fighting this war for many years. A war to protect their quality of life from deteriorating any more than it already has. I was very impressed with how knowledgeable these citizens were about levels of organic and non-organic pollutants in the missions from airplane fuel exhaust. Articulate about all the beaurocratic ganizations that they must work with at federal, state, city and local evels. These were working class people who have read these ten year environmental impact reports that cost millions of dollars and are several inches thick and understand them! Massport interprets the end result of all of these studies as a directive to enlarge Logan airport. To quote one of the speakers, who had charts, graphs, maps, and bulleted points on the video screen Expansion of Logan airport will improve the quality of service at Logan. Of Course. It will be a good, short term solution for Logan.
On the other hand it will be a short term and long term disaster for the people who live and work in Boston. The strongest point Massport wanted to make was how good for the economy, jobs and the convention center this new runway would be. Yes, the convention center promises thirteen thousand new jobs! Where will the people who get these jobs come from? Will they be living in the convention center or commuting? Sixty-thousand more planes a year! These are Massports projections so I assume they are a conservative estimate. These planes will need taxies, buses, cars in order to disgorge all these people into the tunnels, coming and going. They claimed at the meeting that the new runway will be unidirectional. Which direction will that be? Only for takeoffs? Only for landings? It doesnt matter. There are too many planes now. More planes are just that, more planes. If Massport builds it, yes, they will come.
The problem is where will we go? At the meeting Massport representatives talked about giving back to the communities. I didn't know this, but Massport has actually paid homeowners in East Boston to soundproof their homes from the noise! Talk about palliative Band-Aids. This works great if never want to go outside. They have built parks and baseball fields for kids in Eastie. Another bandaid. Would you want your kids running around a field as jumbo jets spew toxic emissions overhead? Would you want to sit in a park breathing in this stuff? Listening to the noise? Massport cannot pay us all off, build more parks, insulate our homes enough to make this problem of quality of life go away.
We are the endangered species here.
I suppose Massport could supply citizens of Boston with headsets and gas masks in the future, but I think this would be sending a distasteful message to all the tourists and conventioneers arriving in our fair town, unless they were all supplied with their own pollution kit as they emerge from their flight.
We want them to have a good experience after all.
The people of Boston and our legislators have fought to clean the harbor waters. One of the most beautiful harbors in the world, I think, rivaling San Francisco's.
This is a unique, priceless visual and economic resource in our city. Closed off to us by big buildings and expressways. Guess what the beautiful downtown greenbelt will be like after the elevated expressway is torn down. Prime Real estate turned into a flight path for noise and air contaminants.
Castle Island, in South Boston, is a spectacular place to view the harbor the Islands and the skyline. It is regretfully unbearable to spend any length of time there, especially in the mornings and evenings at peak take off and land times. You can almost touch the planes that take off and land every few minutes. It is impossible to have a conversation as the planes roar overhead, never mind the smell of exhaust fumes. Now we must take our battle to the

wont abdicate our Air Rights to Massport for the sake of the convention center, or for the sake of all these corporations and businesses that

Massport claims must have a major international airport right in the heart, at the very entrance to this city. No.
Travelers all over the world do not base their destinations on the proximity of the airport to the center of town. Think about this. London, Paris, Tokyo, Rome, New York all have international airports that are one or two (depending traffic conditions) hours from the heart of the city. Orly and Heathrow ch have high speed rail transports. When was the last time you said to yourself Im not going to go to London because the airport is an hour or more outside of town!
Lets think Big. Get really creative. Think outside of the grid (lock).
Downsize Logan into an air commuter and Eastcoast flights only airport.
There are other solutions to expanding Runway 14/32.
The most profound speaker of the evening was a young man who looked like he was about ten or twelve years old from East Boston.
This is what he said;
The planes are noisy and wake me up at night so I cant sleep, they also smell real bad. Thats it in a nutshell. Plain speaking, common sense.
We in Boston are waking up from the noise and smelling the fumes.

Protect us. Protect our town from this assault on our health, our property values and the daily quality of our lives here in Boston.
Say no to Runway 14/32 once and for all.

Sincerely,

Beverly Sky
36 Upton Street
Boston, MA 02118

Letter 177
Beverly Sky
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
177.1	General Opposition		I strongly object to any expansion of Logan Airport runways.	Comment noted.

LETTER 178

April 22, 1999

FAA Office of Airports
800 Independence Avenue, SW
Washington, DC 20591
Room 600 East

Dear Madam or Sir:

I am writing to complain about the growing number of planes that take off directly over the city of Boston from Logan Airport. According to Massport officials, this noise is caused by the use of the runway configuration 33/27, which is used based on wind and other factors. This runway is often in use during the very early morning hours and late evening hours, since according to Massport officials its use during peak hours would cause too many delays at the airport. Planes are constantly departing directly over the central city, from 6:00am to 11:00pm. The situation has become unbearable. 178.1

After repeated calls to Massport over the past year, the situation continues to worsen. The departure route is the most densely populated take-off routing from Logan, by far. This routing is almost never used for arrivals. I have found that no matter the wind condition, this configuration is often used. Based on reports that I have received from Massport, this routing is used in various wind conditions. On Sunday, March 14, it was also used in calm wind conditions. In addition, stage II aircraft are not allowed to land or depart Logan before, 7:00am. This is not the case, as I have visually observed stage II aircraft depart from as early as 6:15 am. 178.2

Massport and the FAA need to address these concerns and avoid disrupting the life of Boston resident at the benefit of the more wealthy suburbs. It makes no logical sense to have planes take off directly over the most densely populated area in the region, especially at times when people are sleeping. Flights should be arranged to take off over the ocean and over less populated areas. 178.3 At the same time, Massport needs to find a solution to overcrowding of the runways by finding an alternate site for airport expansion, such as Hanscom Field, and not a new runway at Logan. 178.4

Thank you and best regards,

John Stewart.
34 Rutland Square
Boston, MA 02118

Letter 178
John Stewart
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
178.1	Noise	Runway Use	Planes are constantly departing directly over ... central [Boston], from 6:00 AM to 11:00 PM. The situation has become unbearable...and the situation continues to worsen. The departure route is the most densely populated take-off routing from Logan, by far. This routing is almost never used for arrivals.	Table 6.2-17 of the Supplemental DEIS/FEIR shows nighttime jet operations projected to increase from 144 in 1998, to as many as 231 under the No Action Alternative with the 2015 High Regional Jet Fleet. However, regardless of the fleet, many of the future night operations are the result of delays that will occur as demand at Logan Airport continues to increase. One of the direct benefits of the Preferred Alternative is that it will reduce these night operations by 32 to 43 flights depending on the fleet forecast, though *any* alternative to the No-Action scenario will help alleviate some of the projected delays. In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.
178.2	Noise	Nighttime Noise	Stage II aircraft are not allowed to land or depart Logan before, 7:00 AM. This is not the case as I have visually observed Stage II aircraft depart from as early as 6:15 AM.	By Federal regulation, as of December 31, 1999, Stage 2 airplanes weighing more than 75,000 pounds are no longer permitted to fly in the continental United States. There are, however, Stage 2 airplanes less than 75,000 pounds which the FAA still permits to operate. Thus, Massport continues to enforce its nighttime noise rules which apply universally to all weights of aircraft.
178.3	Noise	Nighttime Noise	It makes no ... sense to have planes take off directly over the most densely populated area in the region, especially at times when people are sleeping.	The preferential runway rules at Logan Airport have late night departures on Runway 16 over the harbor as the highest priority to minimize departures over highly populated neighborhoods. The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.17 and 6.2.18 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.

Code	Topic 1	Topic 2	Comment	Response
178.4	Regional Transportation	Regional Airports	...Massport needs to find a solution to overcrowding of the runways by finding an alternative site for airport expansion, such as Hanscom Field and not a new runway at Logan.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

from the desk of
VINCENT R. TINO

LETTER 179

March 29, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

Although I support social progress and economic growth for the Commonwealth, I believe the addition of Runway 14/32 would only be a temporary solution to a long-term problem. The lack of available land and buffer area poses many barriers to growth at Logan International Airport. Therefore, I feel that a second airport would better serve the region. To currently increase capacity, the airport should use its available configuration to more efficiently move passengers. Therefore, private civil aviation and cargo operations should be relocated to suburban airfields. Operations at Logan should cap annual Landing/Takeoff operations (LTO) but strive to maximize passenger throughput with increased passenger-to-LTO ratios. In addition, relocating regional air commuting to suburban airfields would help to relieve delays. 179.1 179.2 179.3 179.4

With these concerns, I provide to you my comments on the Logan Airside Improvements Planning Project, Volume I, Draft Environmental Impact Statement/Report (February 1999).

Chapter 6.3 discusses the air quality impacts associated with the proposed project. Section 6.3.1 discusses the methodology used in the air quality analysis. The methodology states that the Logan Dispersion Modeling System (LDMS) was used to assess air quality impacts. Although the methodology used appears to be technically sound, the analysis fails to follow guidelines set forth by the both the U.S. Environmental Protection Agency (EPA) and the Federal Aviation Administration (FAA) for air quality analyses. Appendix W of 40 CFR Part 51 lists the Emissions and Dispersion Modeling System (EDMS) as the preferred dispersion model for airport air quality analyses. The Federal Register (dated April 13, 1998) states that FAA policy (docket number 29194) requires the "use of EDMS to assess the air quality impacts of proposed airport development projects." Although the analysis states that the Massachusetts Department of Environmental Protection (DEP) and EPA Region I approve of the LDMS, the FAA policy statement regarding EDMS is not addressed. Both references are included for your review. 179.5

Section 6.3.1.2 discusses the inputs for the dispersion modeling analysis. The highest and most conservative concentrations found in any airport air quality analysis are usually found at the property boundary of the airfield. However, property boundary receptors are not included in this analysis. Although the included receptors were specifically selected by DEP, these receptor locations may fail to predict the most conservative concentrations, since the receptors are at points located a significant distance from the airport property. For an airport in such close proximity to residential neighborhoods, it is likely that maximum concentrations would occur at the property boundary and very close to residential neighborhoods. Thus, the maximum concentrations provided in Tables 6.3-10 through 6.3-14 may be underestimated and may fail to comply with National and State ambient air quality standards. 179.6

Section 6.3.2 presents the results of both the emissions inventory and dispersion modeling. Table 6.3-2 presents maximum background concentrations of carbon monoxide (CO), hydrocarbons (HC), nitrogen dioxide (NO_2), and particulate matter less than 10 microns in diameter (PM_{10}). Although Table 5.3-2 states that the second highest nearby annual 24-hour average PM_{10} concentration in 1995is found to be 52 micrograms per cubic meter ($\mu g/m^3$), Table 6.3-2 reports a value between 45-48 $\mu g/m^3$ be added as background. Similarly, the annual background PM_{10} concentration is shown to be 24 $\mu g/m^3$ (in Table 5.3-2, 1996) while the value added as background in Table 6.3-2 is shown to be 23 $\mu g/m^3$. Also, it appears that the unit conversion from background values in parts per million (ppm) to $\mu g/m^3$ has been performed inconsistently and with errors. The following table presents a summary of the calculations: 179.7

Pollutant	Averaging Time	Reported Second Highest Background		Implied Conversion Factor	Average AP-42 Conversion Factor	Corrected Second Highest Background
		ppm	$\mu g/m^3$	$(\mu g/m^3)/ppm$	$(\mu g/m^3)/ppm$	$\mu g/m^3$
CO	1-hour	7.7	4446	577	1140	8778
	8-hour	4.9	2262	462	1140	5586
NO_2	1-hour	0.09	173	1922	1880	169
	Annual	0.03	58	1933	1880	56

It is clearly shown that the conversion of CO and NO_2 from ppm to $\mu g/m^3$ has been performed with some inconsistency. Differences in the NO_2 factor could quite possibly be found in the assumptions of temperature and pressure. However, the discrepancies in conversion factors for CO are significantly different and discrepancies in the factors between pollutant averaging times should not occur. The conversion table from Appendix A of U.S.

EPA's Compilation of Air Pollution Emission Factors (AP-42) is also provided for your review.

It is unclear if background concentrations are included with the maximum concentrations presented in Tables 6.3-10 through 6.3-14. Table 6.3-2 presents maximum background annual NO_2 and PM_{10} concentrations of 53-58 $\mu g/m^3$ and 23 $\mu g/m^3$, respectively. Tables 6.3-10 through 6.3-14 present maximum total NO_2 and PM_{10} concentrations of 55 (or 56) and 24 $\mu g/m^3$, respectively. Firstly, the higher background concentration (in this case 58 $\mu g/m^3$) should be summed with the highest modeled concentration to produce the more conservative result. It appears that the lower background NO_2 concentration was added to the modeled value. Secondly, it appears that modeled annual concentrations of 3 $\mu g/m^3$ for NO_2 and 1 $\mu g/m^3$ for PM_{10} (inferred as the differences between background and total concentrations) are surprisingly low for airport air quality analyses and should be checked for errors.

Particulate emission factors for the majority of aircraft engines are generally unavailable. Only limited amounts of data for total suspended particulate (TSP), not PM_{10}, from a few older engines exist. Yet the analysis presents PM_{10} emissions from all sources, including aircraft. Therefore, either particulate emissions from aircraft where factors were unavailable were omitted, or significant assumptions relating to aircraft PM_{10} emissions were made. These assumptions would be capable of greatly varying the results of the analysis.

Based on my review, I suggest that both the Massachusetts Secretary of Environmental Affairs and the FAA Regional Manager of Environmental Programs review the above comments thoroughly before final approval of the proposed project is made.

Sincerely,

Vincent R. Tino

Vincent R. Tino

Enclosures (3)

Letter 179
Vincent R. Tino
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
179.1	Alternatives	Runway 14/32	...I believe the addition of Runway 14/32 would only be a temporary solution to a long-term problem.	The Airside Project analysis is based on alternative 20-year forecasts of operations by aircraft type. Only larger aircraft compatible with the existing facilities at Logan Airport are included in the future forecasts for Logan Airport fleets on which the delay and environmental analyses are based. Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.
179.2	Regional Transportation	Regional Airports	...a second airport would better serve the region.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.
179.3	Regional Transportation	Regional Airports	...private civil aviation and cargo operations should be relocated to suburban airfields.	Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport (as of January 15, 2000). Massport plays no role, however, in the decisions of private airlines regarding air service routes or service levels. As proprietor of Logan Airport, Massport's primary responsibility is to supply, operate, and maintain Logan Airport's infrastructure which includes the runways, taxiways, terminal buildings, parking facilities and access roads. As a recipient of federal airport grants, Massport must adhere to grant covenants that require it to operate Logan Airport in such a way so as to ensure access and availability for public use on fair and reasonable terms and without unjust discrimination.
179.4	Alternatives	Other Non-Construction Alternatives	Operations at Logan should cap annual Landing/Takeoff operations (LTO) but strive to maximize passenger throughput with increased passenger-to-LTO ratios.	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.

Code	Topic 1	Topic 2	Comment	Response
179.5	Analysis Assumption	Air Quality	...the Logan Dispersion Modeling System (LDMS) was used to assess air quality impacts. Although the methodology used appears to be technically sound, the analysis fails to follow guidelines set forth by the both the U.S. Environmental Protection Agency (EPA) and the Federal Aviation Administration (FAA) for air quality analyses.	The dispersion model portion of the LDMS is an EPA-approved model. The methodology is consistent with FAA and EPA guidelines.
179.6	Air Quality	NAAQS	Thus, the maximum concentration provided in Tables 6.3-10 through 6.3-14 may be underestimated any may fail to comply with National and State ambient air quality standards.	The model and methods used to develop these data were based on EPA- and DEP-approved guidelines and show that the NAAQS will not be violated.
179.7	Air Quality	Model	[There are inconsistencies that need to be either explained or corrected in Section 6.3.2 of the DEIR/DEIS air quality analysis.]	The model and methods used to develop these data were based on EPA- and DEP-approved guidelines and show that the NAAQS will not be violated.

Mark E. Warren
Attorney
174 Princeton Street, E. Boston
mail: P.O. Box 6146
Boston, MA 02209-6146

Telephone (617)569-6581

LETTER 180

April 16, 1999

Secretary of Environmental Affairs
Logan Draft EIR
Attention MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02205

Dear Mr. Pugsley:

After reviewing Draft Environmental Impact Statement/Report submitted by the Massachusetts Port Authority I am left with the impression that it is little more than carefully directed obfuscation. The objective of Massport is the expansion of Logan Airport's landing capacity. The draft document states the agency's justification for this goal without sufficient consideration of the negative environmental consequences or serious consideration of alternatives. The confused logic of Massport does not support the expansion of a poorly located facility at the expense of its already disadvantaged neighbors.

The report does not adequately consider which segment of the population will bear the most serious adverse consequences of airport expansion. The addition of Runway 14/32 and the centerfield taxiway will have a disproportionate negative impact on minority and low-income neighbors of Logan Airport. Property owned by people in lower socio-economic groups will face reduced property values to increased aircraft noise. 180.1

In the area where I reside, for example, the East Boston and Chelsea communities, these people tend to be recent Hispanic immigrants. The report is silent on why these people must face lowered property values while residents of the communities surrounding Hanscom Airport are not confronted by, or seriously considered for, proportionate losses.

While the draft report ignores the weaker neighbors of Logan International Airport, it also fails to adequately consider a very powerful and persistent neighbor. More powerful than the opposition any human opponent may muster is the might of the North Atlantic. As one looks at a map, located just to the right of Logan is the weather engine that is responsible for the flight delays Massport now seeks to appease by runway expansion. Weather happens. No rational amount of expansion will abate the weather delays caused by the proximity of Logan Airport to the North Atlantic. Inland alternatives

Letter 180
Mark C. Warren, Esq.
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
180.1	Environmental Justice	Impacts	The addition of Runway 14/32 and the centerfield taxiway will have a disproportionate negative impact on minority and low-income neighbors of Logan Airport. Property owned by people in lower socioeconomic groups will face reduced property values due to increased aircraft noise.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Cc:
Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "White, Barbara A." <BAWHITE@PARTNERS.ORG>
Date: 14/32
Attach: Monday, April 19, 1999 12:39:09 EDT
Certify:
Priority: N
Defer until: Normal
Expires:
Forwarded by:

LETTER 181

Mr. Pugsley,

As a new resident to the City of Boston (SouthEnd), I am very surprised at the amount of airplane noise that is already present in this location. Increasing this three-fold by building runway 14/32, will add considerable discomfort and truly have a very negative effect on our lives here. 181.1

Boston's reputation as a livable city has caused its real estate to skyrocket. Gentrification has beautified this area and increased property values to an incredibly high level. Business, tourism and ultimately money has come to this city because it is one of the most beautiful cities in the US. Building a new runway can deteriorate this growth.

Every major city in the US is served by two airports. All of these airports are at a distance (1 hour) from the heart of the city. Other than Logan, Providence and Worcester airports, already built and not maximized, should be the 2nd and 3rd major airports for the City of Boston.

Spend the effort on improving transportation between these cities and Boston, and every person who lives in Massachusetts and every business that wants to relocate or do business anywhere in the state, will have superior and quick access to air transportation. 181.2

Thank you,
Barbara A. White
bawhite@partners.org

Letter 181
Barbara A. White
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
181.1	Noise	Impacts	As a new resident to the City of Boston (South End),I am very surprised at the amount of airplane noise that is already present in this location. Increasing this three-fold by building runway 14/32, will add considerable discomfort and truly have a very negative effect on our lives here.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.
181.2	Regional Transportation	Regional Airports	Spend the effort on improving transportation between ...[Providence, Worcester] and Boston, and every person who lives in Massachusetts and every business that wants to relocate or do business anywhere in the state, will have superior and quick access to air transportation.	MassHighway is preparing a Draft EIS/EIR an improved access to Worcester Regional Airport.

LETTER 182

4 Rutland Square
Boston, MA 02118-3106
April 20, 1999

Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge St
Boston, MA 02202

Dear Mr. Pugsley,

I am not in a position to evaluate the health problems that would result from the construction of Runway 14/32, although I understand that incidence of respiratory diseases is already abnormally high in areas affected by Logan flights. I would like to comment, however, on the effect of noise pollution in the neighborhood where I live. The South End is an historically unique neighborhood, and one of those delightful downtown residential neighborhoods which give Boston its special character and must be the envy of cities affected by inner city blight. A friend living on Union Park, certainly one of Boston's finest residential squares, has already sold her condo finding present noise levels from low-flying jets intolerable. The mere possibility of a tripled flights has discouraged me from building a roof deck to take advantage of the commanding view. My understanding is that support for the proposed runway is to be found mainly in the business world. I pay more than $7000 annually in real estate taxes, roughly 10% of my income, and make minimal demands on public services. I would not be willing to do so if there were a substantial increase in flight noise. The business community might find their enthusiasm for the runway waning if the tax basis eroded and their well-heeled clientele sought peace and quiet elsewhere. 182.1

Sincerely,

Robert Wynne

Robert Wynne

Letter 182
Robert Wynne
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
182.1	Noise	Impacts	[The proposed project will have unacceptable cumulative noise impacts on Boston's South End neighborhood.]	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

LETTER 183

Edwina Yezierski
310 Columbus Avenue
Boston, MA 02116
617-536-3509

April 20, 1999

Mr. Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

ATTENTION: MEPA Office

Re: Proposed Runway 14/32 - Logan Airport

Dear Mr. Pugsley:

I am concerned about the effect of the proposed new Runway 14/32 on the entire Boston area as well as the South End. Regardless of a new runway, and according to Massport's own projections, demand for passengers and aircraft to come to the area is expected to grow significantly, and flight delays are expected to soar. As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in **extreme danger**. 183.1

The City of Boston and the South End neighborhoods have worked very hard over the last 15 years to bring back the South End and make it a desirable neighborhood once again. When I moved there 15 years ago there was little, if any, air traffic noise. Now it is almost constant. At times, it sounds like a war zone. I must say that now being aware of this, I would not again buy in the South End and I am sorry to say that I am hearing other people express the same feelings about living in downtown Boston area which is, indeed, a shame. In addition to the noise pollution, there is also the air pollution to consider.

Please know that I support economic growth for Boston. Communities are working with Senator Travaglini, Congressman Capuano, Congressman Markey, Representative O'Flaherty, Representative DeLeo and others in support of potential solutions to the regional air transportation problem, such as secondary airports, etc. We need you on our side. There are

answers to the problem which could bring economic benefit outside of Boston without increasing capacity at Logan which is not the answer. To increase capacity at Logan would be severely detrimental to those of us who call the Boston area home and, ironically, to those visitors expected to fly here as well. Our health and safety are already at great risk. Our noise and air pollution has increased each year and we cannot accept more. 183.2

Your attention to this serious issue is needed. I urge you to meet with the group of city officials and community leaders in opposition to the new Logan runway to hear the concerns of the residents regarding our health and the environmental impact of this proposal. There are serious questions regarding the adequacy, quality and reliability of information supplied by Massport. I ask you to understand that the quality of life of the Boston area residents is threatened. Thank you for your anticipated attention to this request.

Sincerely,

Edwina Yezierski

Letter 183
Edwina Yezierski
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
183.1	Alternatives	Preferred Alternative	As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in extreme danger.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
183.2	Alternatives	Preferred Alternative	To increase capacity at Logan would be severely detrimental to those of us who call the Boston area home and, ironically, to those visitors expected to fly here as well.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.

LETTER 184

Edwina Yezierski
310 Columbus Avenue
Boston, MA 02116
617-536-3509

April 26, 1999

Mr. Arthur Pugsley
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

ATTENTION: MEPA Office

Re: Proposed Runway 14/32 - Logan Airport

Dear Mr. Pugsley:

Enclosed is a copy of a recommended solution to the proposed Runway 14/32 issue which was presented by Michael S. Dukakis and appeared in the Boston Sunday Globe on April 25, 1999. 184.1

I feel this is an excellent article and his suggestions should be seriously considered and implemented as a permanent solution to transportation needs of the City of Boston. 184.2

Thank you for your attention to this matter.

Sincerely,

Edwina Yezierski

Common sense can solve Logan's problems

MICHAEL S. DUKAKIS

I thought Anna DiFronzo and a group of outraged East Boston residents had buried the plan for a new runway at Logan Airport forever back in the 1970s.

Unfortunately, like Godzilla, it's back – and this time it makes even less sense than it did 25 years ago.

Why? Because it is a very short-term solution to what is a long-term problem that won't be solved by putting another runway in Boston Harbor. That problem can be solved by using three important tools that are now available to us.

The first is Amtrak's new high-speed Acela express service, which begins this fall – 10 trains a day between Boston and Washington that will carry thousands of former shuttle sufferers quickly and easily from Boston to New York in three hours, downtown to downtown. No more metal detectors. No more fuming at delays in the airport and on the runway. No more $30, one-hour cab rides from LaGuardia into downtown New York.

And if you happen to live west of Boston, you can forget about fighting your way through the tunnels to Logan and a $16-a-day parking tab. A new Amtrak station with 2,000 parking spaces will be waiting for you at Route 128.

The second is not one, not two, but three regional airports, each close to an older urban community that wants and needs growth. Manchester, N.H., Worcester, and Providence are all within easy driving or rail commuting distance of thousands of Logan users who can be better served by these airports. Providence is already connected to Boston by road and rail, and a new station stop at T. F. Green Airport will be just minutes by a moving sidewalk from the terminal.

The Massachusetts Turnpike Authority should get cracking on a spur from the turnpike to the Worcester Airport, which is just a few minutes' shuttle ride from the magnificently restored Worcester railroad station. New Hampshire already plans to build a new highway connection to the Manchester Airport, and it wouldn't take much to extend existing commuter rail lines there as well.

Finally, some simple management steps at Logan would open up even more capacity for the longer flights that Logan is uniquely equipped to provide. We tried one – peak pricing for small aircraft – in the 1980s with spectacular success.

In fact, Logan went almost overnight from 18th to 2d among the nation's major airports in on-time performance. Unfortunately, the small-plane lobby went to work on the Reagan administration, and we were ordered to revoke our landing-fee plan. But there is absolutely no reason why puddle jumpers should be taking up valuable airspace during some of Logan's busiest hours. Peak pricing requires them to adjust around those hours, and there are plenty of smaller airports in addition to Manchester, Worcester, and Providence that can accommodate them as well.

Mayor Menino had the good sense to call for a commission to study the subject. Governor Cellucci should call a summit meeting of his fellow governors from New Hampshire and Rhode Island and the mayors of the four key cities that are involved. They should each bring their top transportation planners with them. Stan Bagley, a Massachusetts native and the chief of Amtrak's Northeast division, should join them. In a matter of months they could put together a plan that would dwarf the piddling contribution that a new runway would make to the problem.

Then we could bury this misbegotten proposal once and for all with appropriate ceremonies and pronounce a final benediction over it.

Rest in peace.

Michael S. Dukakis, former governor of Massachusetts, is a professor of political science at Northeastern University and vice chairman of the Amtrak Reform Board.

JOHN OVERMYER ILLUSTRATION

Letter 184
Edwina Yezierski
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
184.1	Alternatives	Peak Period Pricing/Regional Airports/Passenger Rail	[Instead of the proposed project, Massport should pursue use of Amtrak high speed rail; the regional airports at Worcester, Manchester, and Providence; and peak period pricing.]	Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
184.2	Regional Transportation	Regional Airports/ Passenger Rail	Governor Cellucci should call a summit meeting of his fellow governors from New Hampshire and Rhode Island and the mayors of the four key cities that are involved. They should each bring their top transportation planners with them...In a matter of months they could put together a plan that would dwarf the piddling contribution that a new runway would make to the problem.	In November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Section 2.2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.

4/11/99 LETTER 185

OPPOSED TO RUNWAY 14/32"

Dear Mr. Pugsley,

Haven't Bostonians endured enough expansion, noise, traffic and general upheaval with "The Big Dig"?

Why not wait until that project is finished before deciding if we can and need to expand our airport?

Please oppose the proposed new runway at Logan airport! 185.1

Sincerely

Norma Keene

Letter 185
Verna Ferne
Private Citizens: Boston

Code	Topic 1	Topic 2	Comment	Response
185.1	General Opposition		Please oppose the proposed new runway at Logan Airport!	Comment noted.

LETTER 186

NAME:
STREET:
CITY:
DATE:

Arthur Pugsley
Executive Officer of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

SUBJECT: Runway 14/32 Environmental Impact - **PLEASE STOP THE RUNWAY**

Dear Mr. Pugsley:

I am a long time resident of the South End in Boston. This letter is my request that you seriously consider the unacceptable negative environmental impact that the proposed new runway at Logan Airport will have on me and all residents of Boston.

Even without a new runway the current situation has been virtually intolerable since MASSPORT changed flight patterns last September. What used to be quiet neighborhood with only an occasional police siren is now a nonstop parade of airplanes directly over the South End. The planes start at 6:00 am in the morning and go every 4-5 minutes during peak hours. It's bad enough inside the house when you cannot hear your TV or your telephone. Outside of the house you must stop your conversation on the street while the planes pass overhead and hope you can finish before the next one comes along. I dread the thought of what it will be like on my roofdeck this summer !!! What used to be pleasant experience has turned into a nerve wracking NOISE FEST !!! 186.1

Please consider the unacceptable negative environmental impact the additional NOISE from another runway at Logan Airport will have on the residents of Boston. Our quality of life has been compromised enough for the sake of MASSPORT. Who will want to live here if airplane noise levels triple as a result of a new runway ?? Please save our environment.

PLEASE STOP THE RUNWAY !

Thank You,

Marina Cotton

cc:Byron Rushing, Thomas Menino, Michael Capuaono

Letter 186
Marine Cotton, John P. Kilroy Jr., John O'Connor, and Melissa Sciter
Private Citizens: Boston (South End)

Code	Topic 1	Topic 2	Comment	Response
186.1	Noise	Impacts	[The proposed project will have adverse noise impacts on the residents of the South End neighborhood of Boston.]	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR. The Day-Night Sound Level (DNL) data from Noise Monitor No. 1 at Andrews Street in the South End show levels of 56, 55.2,and 56.9 dB for the 29M Low, 37.5M Low and 37.5M High Fleet scenarios with the Preferred Alternative. These levels are less than the1993 value of 57.9 dB and are well below the standard DNL criteria of 65 dB. 1993 is representative of historic high fleet operating conditions at Logan Airport.

Cc:
Bcc: Arthur Pugsley@MEPA@EOEA
From: "M. B. T." <thaler@webtv.net>
Subject: Comments on DEIS for runway 14/32 expansion proposal
Date: Friday, April 23, 1999 17:52:09 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 187

Sir:

I am opposed to the plans to build a new runway at Logan Int'l Airport, Boston, MA. I was a member of the successful class action suit that caused Massport and the FAA to do an EIS fo ther Runway 27 departure flight path that was illegally changed without benefit of one.

Once again, Massport is trying to slip something over on the communtites by trying to get capacity and expansion of the airport accomplished using half truths, faulty data, and political manipulation.

187.1

The "delay issue" is an obviously false one which many others have spoken to being based on faulty data and not solving any problem for more that a year or so, if that. It never takes nto consideration the actual "on time" records of the various airlines that use Logan. The recent report that rated and ranked airlines for just that shows that certain airlines are more delayed because of internal practices (such as baggage handling etc). Many of these airlines heavy users of Logan. How was this factored in? It wasn't.

187.2

The environmental justice issue must be taken seriously, not just on the basis of per capita income but on what the impact of a new runway would have on people no matter what their income. It took those of us who lived under the flight path of Runway 27 years to get a fair resolution This new runway would increase Runway 27's use by 300% according to Massport's own figures. Is this justice?

Peter Blute and his staff have not been fairhanded with those of us who were willing to work on this issue. Delays were manufactured until the current Governor's inauguration at which time a full press for a PR campaign began. It promoted the new runway to the business community and tried to pit separate communities against each other . Phone calls for information went unanswered and meetings were discontinued.

Mr Blute was reluctant to give us additional time for comments because he and his staff wanted this slipped through as fast as possible. They adhered to a mere shadow of the letter of the law.

Statistics were manipulated. delays were based on the best model for Massport and used the worst yeat, ignoring later improvements, environmental issues were ignored, citizens were denied information and access to timely meetings, opposing stories were told to different communities for the best "spin" for Massport.In short. this EIS process is a sham.

I have been involved with Massport for many years. My daughter was in kindergaten when the first planes illegally boomed over my newly purchased home. That was 22 years ago! Yet, I can say that all other Massport management personnel have been respectful of citizens and fair. The current Massport is fascistic at best and I sincerely hope that no hanges tothe airport take place under its reign.

Solutions to the desire to increase capacity at Logan have been well addressed by others but boil down to the fact that Logan and the infrastructure surronding it are simply out of space. We must look elsewhere. Politics and community income level should not be the straw that breaks the Massachusetts camel's back! Outlying communities must be asked to do what those of us closer in have been asked...to share the burden.

Please deny this project.
Thank you.

Mona Thaler
22 Cushing Rd.
Brookline, MA 02445

Letter 187
Mona Thaler
Private Citizens: Brookline

Code	Topic 1	Topic 2	Comment	Response
187.1	Delay	Model	The "delay issue" is an obviously false one which many others have spoken to being based on faulty data and not solving any problem for more that a year or so, if that.	The FAA consistently rates Logan Airport as one of the most delay-prone airports in the United States. Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. The FAA Technical Center simulated Logan Airport operations in 1992 and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Supplemental DEIS/FEIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29 M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates with those of the Airside Project modeling. The FAA has concluded that the Airside Project delays represent "a plausible and conservative estimate". Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.. Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
187.2	Environmental Justice	Impacts	The environmental justice issue must be taken seriously, not just on the basis of per capita income but on what the impact of a new runway would have on people no matter what their income.	The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Refer to Section 6.2 and Section 6.8 of the Supplemental DEIS/FEIR, respectively, for additional information on noise impacts and environmental justice.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Object: "Rob Everts & Deb Biba" <evertsbiba@igc.org>
Date: Airplane noise/Runway 14/32
Attach: Wednesday, April 21, 1999 11:16:42 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 188

Dear Mr. Pugsley,
We are writing as residents of Cambridge, MA (near the Somerville border) in opposition to the construction of an additional runway at Logan Airport. The noise levels of flights currently flying directly over and near our home has increased significantly, in spite of the claims of Massport that flights have not increased. Even with the windows closed and storm windows in place, we are awakened from sleep in the early morning (before 6 AM) and well after 11:00 PM. We have begun to use a "white noise" sleep aid but have have found that the sound of the airplanes still cannot be drown out. At certain times of the day or evening, the flights seem constant - spoiling the ambiance of a quiet conversation or the pleasure of listening to the radio or television or reading a book.

We do not live anywhere near Logan Airport yet the quality of our lives is significantly negatively impacted by the noise caused by the current level of flights tracking over/near our home. It is has increased so much that we have talked about moving in order to get a decent night of sleep and in order to relax when we are home. We are angry that we would have to even consider that option! We cannot even imagine the nightmare of noise pollution over our home and all over this city if the additional runway is allowed to be built. 188.1

The noise pollution burden on the communities (both next to the airport and in its flight paths) is enormous already. Although we are not sure what measures you utilize to determine "environmental impact," we hope that you will seriously consider the negative impact on the psyche of the citizens affected by the constant drone of airplanes overhead. If anyone at MEPA has any questions about whether we exaggerate, we invite them to spend a weekend with us. Please stop the airport expansion.

Thank you for your attention to this important matter.

Sincerely,

Debra Biba and Rob Everts
20 Newell Street
Cambridge, MA 02140

Letter 188
Debra Biba and Rob Everts
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
188.1	Noise	Impacts	...the quality of our lives is significantly negatively impacted by the noise caused by the current level of... flights tracking over/near our home.... We cannot even imagine the nightmare of noise pollution over our home and all over this city if the additional runway is allowed to be built.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-12 of the Supplemental DEIS/FEIR.

Doc: Arthur Pugsley@MEPA@EOEA
From: "Brian Culver" <brian_culver@harvard.edu> LETTER 189
Subject: 14/32 Public Comments
Date: Thursday, April 22, 1999 16:26:40 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

Massport Runway 14/32 Proposal

Dear Mr. Pugsley
I am a pilot, I am an air passenger and I am a resident living beneath the Logan airspace.

Logan is a poorly placed facility. It suffers the same problems as National Airport, serving Washington DC, Love Field in Dallas or Meigs Field in downtown Chicago. These outmoded airports have survived because of their proximity advantage to the city centers.

But none of them have a bright future. National's operations have been reduced by 15% from what they were 20 years ago. Love Field has been converted into a corporate jet park, with limited commercial traffic and Meigs Field is expected to be closed in three years for a Park project. None of these airports have been able to change because other alternatives have been developed for these other metropolitan areas.

What has changed in all of these cases is people have come to realize that airport operations and urban land use criteria are in direct conflict. Building and/or restoring sustainable cities cannot occur with the land use demands commensurate with large commercial jet operations. Enjoyment of our parks, waterfront, historic sites and other outdoor resources are clearly degraded by aircraft noise.

A "fragile peace" exists between the needs of urban living and airport operations. The people within the airspace have, in general, accepted the present level of air traffic, as limited by the current runway configuration. The residents have chosen their communities and have made billions of dollars worth of real estate investment based on the present set of urban criteria; which have included the present level of air traffic and noise, as limited by Logan's present runway configuration.

The public has accepted the peace. So should Massport. The status quo should be sustained until such time as we have advanced our region's transportation vision for the future. We are moving towards an end to our dependence on air travel. 189.1

Nothing in the Massport proposal is innovative. I believe that the 320 degree approach/ 140 degree departure scheme is unworkable. Try to imagine coach instructions to aircraft to report position downwind of the runway when downwind is in the opposite direction? Try to imagine instructing planes to land or takeoff with a forty knot tailwind. And worst of all; try to imagine giving planes "clearance" to take off directly into the path 189.2

of approaching aircraft.

When planes all approach and depart in the same direction all aircraft in flight are in separation envelopes that change slowly. When planes are erating in opposite directions their separations change at two times the locity of each craft. Human nature being what it is suggests that this de of operation would not stand long before it is modified to allow full approach and departure operations to the northwest of the field. 189.2 (cont.)

Opening a new runway will delay our focus on other transportation opportunities. Once we put the idea of airport growth behind us, our public policies can be directed, with full attention toward the new transportation technologies. Even Massport will be turned around. In the end, I believe they will become a strong ally in building a truly modern and innovative transportation system for New England.

Respectfully Submitted,

Brian Culver
385 Concord Avenue
Cambridge, MA 02138

Letter 189
Brian Culver
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
189.1	Regional Transportation	Regional Airports	The status quo should be sustained until such time as we have advanced our region's transportation vision for the future.	The Airside Project analysis is based on alternative 20-year forecasts of operations by aircraft type. Only larger aircraft compatible with the existing facilities at Logan Airport are included in the future forecasts for Logan Airport fleets on which the delay and environmental analyses are based.
189.2	Alternatives	Runway 14/32	I believe that the 320 degree approach/140 degree departure scheme is unworkable...Human nature being what it is suggests that this mode of operation would not stand long before it is modified to allow full approach and departure operations to the northwest of the field.	Comment noted.

LETTER 190

April 18, 1999

Mr. Arthur Pugsley,
MEPA Unit
Executive Office of EA
100 Cambridge Street
Boston, MA 02202

Dear Mr. Pugsley,

I am strongly opposed to the construction of the proposed runway 14/32 at Logan Airport.

My house is on Lakeview Avenue in Cambridge. When air traffic passes over this neighborhood (the Fresh Pond end of Lakeview) the plane noise is loud enough to awaken me from sleep and, when I'm outside, conversation cannot happen when a plane goes over. To be expected by Massport to tolerate even more noise is unacceptable. 190.1

Please put me on record as strongly opposed to any runway construction, now or in the future, that would increase air traffic over Cambridge.

Yours truly,
John D. McKernan

Letter 190
John G. McKernan
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
190.1	General Opposition		Please put me on record as strongly opposed to any runway construction, now, or in the future, that would increase air traffic over Cambridge.	Comment noted.

LETTER 191

5/11/99

Mr. John Silva
Manager Environmental Programs,
Airports Division ANE-600
FAA - New England Region
12 New England Executive Park,
Burlington, MA 01803.

Dear Mr. Silva,

I am opposed to the Airport expansion as described in the Environmental Impact Statement. The draft has not examined a regional transportation plan. It has not covered the concern of future growth and noise.

Logan Airport does not conform to it's agreements today, - how will this change in the future? 191.1

Noise is my main concern, and I have noticed the problem getting worse. 191.2

Please have MASSPORT/LOGAN Airport take a Regional look at transportation and insist on them following the limits on noise. 191.3

Sincerely,

Ann Rodney
4 Newport Rd #5
Cambridge, MA 02140.

Letter 191
Ann Rodney
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
191.1	Mitigation	Initiatives	Logan Airport does not conform to its agreements today. How will this change in the future?	Massport's mitigation measures are reinforced through compliance with M.G.L. Chapter 30A, Section 61 and through specific state and federal certificates approving projects that have mitigation. The status of the Section 61 Finding commitments are tracked and reported in the Logan Airport *1999 ESPR* (previously GEIR).
191.2	Noise	Impacts	Noise is my main concern, and I have noticed the problem getting worse.	The Airside Project Draft EIS/EIR shows that the total noise impacts around Logan Airport will improve in the first decade of the 21st century, primarily from the elimination of the noisier Stage 2 aircraft, and by the gradual elimination of the hushkitted Stage 3 aircraft as they are retired.
191.3	Regional Transportation	Regional Airports/ Passenger Rail	Please have Massport/Logan Airport take a regional look at transportation ...	Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 192

FAX

Thursday, April 22, 1999

TO: (1) Mr. John Silva
Federal Aviation Administration
FAX: 781-238-7608

(2) Mr. Robert Durand
Executive Office of Environmental Affairs
FAX: 617-727-1598

FROM: **Fred Salvucci**
MIT Room 1-240
Department of Civil & Environmental Engineering
Cambridge, MA 02139-4307
USA

Fax: 617-258-8073 Tel: 617-258-8131

April 22, 1999

Mr. John Silva
Manager, Environmental Programs
New England Region
Federal Aviation Administration
12 New England Executive Park
Burlington, MA 01803
FAX 781 238 7608

Robert Durand
Executive Office Of Environmental Affairs
100 Cambridge St.
Boston, MA 02202
Attention: MEPA Office/ Arthur Pugsley
FAX 617 727 1598

Re: Logan Airside Project, Boston MA.
EOEA # 10458

Dear Sirs,

I am writing to give my comments on Massport's proposed Logan Airside Expansion DEIS/R. I urge that you reject the DEIS/R as inadequate, and require a resubmittal of a DEIS/R. based on a revised and updated scope to reflect current information, in order to provide the public a reasonable basis for comment. The DEIS/R overstated the number of passengers who will use (or will be able to access) Logan's airfield by the year 2010, and therefore exaggerates the problem of airfield related delay; does not analyze and therefore ignores the problems of terminal related and ground access related delay; underestimates the potential benefits of peak pricing in reducing airfield delay; ignores other means of reducing excessive use of the airfield by regional non- jets; substantially underestimates the adverse noise impacts that would result if runway 14-32 were built; shows that the delay reduction benefits of runway 14-32 are likely to be eliminated by growth in utilization slightly over 5 years, but fails to analyze the danger that

the problem of airfield related delay; does not analyze and therefore ignores the problems of terminal related and ground access related delay; underestimates the potential benefits of peak pricing in reducing airfield delay; ignores other means of reducing excessive use of the airfield by regional non- jets; substantially underestimates the adverse noise impacts that would result if runway 14-32 were built; shows that the delay reduction benefits of runway 14-32 are likely to be eliminated by growth in utilization slightly over 5 years, but fails to analyze the danger that the provision of F 14-32 might actually worsen delay by locking in the inefficient non- jet regional aircraft structure that utilizes 40% of the airfield capacity for 10% of the passengers. It fails to properly carry out the environmental justice process or the section 4(f) analysis; misinforms the legal status of decision heights or runway analysis; fails to analyze alternatives to the proposed taxiway; and generally seems designed to "sell" one outcome rather than present balanced information for public comment. The cumulative impact of these distortions are such that the most reasonable conclusion, which I believe is to drop runway 14-32 and the taxiway and focus instead on terminals, transit ground access, incentives to consolidate regional non-jet operations, and renewed commitment to noise abatement is obfuscated.

The draft EIS is so defective in presenting information for intelligent reaction and comment, and the outreach to affected communities has been so defective that it does not meet reasonable standards to be considered as acceptable draft, and therefore deprives the community of a reasonable opportunity to affect the decision.

The primary deficiencies are:

1. The Massport proposal claims it is necessary to add airfield changes, including new runway 14-32 in order to avoid dramatic growth in delay that will otherwise occur when Logan passengers rise from the current 28 million figure per year to 37 million to 45 million by 2010. But,
   - Not withstanding the analysis in the DEIS/R of regional airport, high speed rail, and telecommunications improvements that can account for diversion of up to 7.3 million passengers per year, the DEIS does not adjust the "37 million passenger to 45 million passenger by 2010" estimate to reflect any adjustment to recognize the effect of the regional airport and high speed rail initiative underway. In addition, assuming that the recently announced Massport adoption of Worcester Airport is effective and achieves the 50% capture rate assumed for Manchester, an additional 1 million 2010 passengers will be diverted away from Logan, and the introduction of Rail Service to Green should be expected to shift the service area boundary between Logan and Green, diverting at least an additional 1 million 2010 passengers from Logan. Factoring in just the committed regional aviation and high speed rail improvements, and discounting the more conjectural

192.1

teleconferencing projections, the 2010 passenger predictions should be adjusted to 29 million to 37 million, that is, passenger growth of 0 to 8 million at Logan between today and 2010. This dramatically affects the projection of increasing delays at Logan, in particular over the next 5 years when the "hassle factor" of contending with "big dig" and Logan construction will coincide with improving service at Manchester, Green, Worcester, and high speed rail service to New York. The entire bases of the DEIS/R is flawed by this failure to include any adjustment in passenger demand projection at Logan for 2010 to reflect the regional airport and regional rail programmed improvements, and a new DEIS must be prepared to provide a meaningful set of projection to consider. 192.1 (cont.)

- The Massport report contains no analysis of how 35-50% more passengers can get to Logan or through the terminals, when the parking spaces are limited by the Clean Air Act "parking freeze", and transit improvements that were proposed at the airport Blue Line Station and a high-capacity people mover have been abandoned by the state and Massport and the terminal A rebuilding plan has been stuck for years and will have lower capacity during reconstruction. Regional EPA proposed in 1995 that airfield studies should be included in a comprehensive analysis of access to Logan and the capacity through the terminals. Recent events since the "scope" of the study was set in 1995 have proven that the EPA was right. It is not at all clear that many more passengers can get to Logan or through the terminals. In any case, it is absolutely essential that a new draft EIS be prepared that includes a comprehensive analysis of access to Logan, as well as terminals, to evaluate the airfield proposals intelligently. 192.2

- The Massport document shows in figure 1.5-8 that overscheduling of flights at Logan decreased from 1993 to 1998, presumably resulting in reduced delay, but there is no information about actual delay at Logan during this period; only computer predictions about increased delay in the future. But if airline consolidation within the regional carriers has produced a modest reduction in overscheduling, as suggested in the Massport DEIS/R, how has this affected delay and could further consolidation of regional flights produce further reduction in delay? 192.3
- The consultants to the Community Advisory Committee to Massport(CAC) believe that delay has decreased substantially and cite FAA-produced data as evidence. If Massport had continued to dialogue with the CAC, instead of cutting off communications and shifting to a media strategy, there might be credible information on the table. At this point, for a proposal with major adverse impact because of increased overflight in our communities (at least triple), there is precious little real data about actual delay as defined by FAA. There is not adequate information about delay to allow us to comment intelligently. 192.4

2. The noise information presented is so questionable that it needs to be revised into a new draft, to provide a reasonable basis for public involvement.

- The DEIS/R uses computer projections of noise, but the computer projections consistently understate actual noise as measured by Massport over field microphones. 192.5

This problem has been called to the attention of Massport for at least 3 years, but the DEIS/R is based on the inaccurate computer projections and needs to be redone.

- The tripling of overflights predicted actually understates the shift in operations that will occur given the long experience with FAA control tower ignoring the PRAS whenever delay exists. Given Massport's projections of increased delay within 5 years, the utilization of runways 15/33 and 9/27 is likely to more than triple. The lack of analysis of this actual increase in overflight likely makes the noise predictions further understated. 192.6
- Land Use and Coastal Zone Impacts and Smart Growth are ignored- the DEIS ignores the impact of increased overflight, (by a factor of at least 3!) on currently underutilized land in the Seaport district of Boston, and in Chelsea, Everett and Somerville. Because of enormous public investment in the Boston Harbor Clean Up, the Big Dig, and the Urban Ring Transit Project under planning, these formerly underutilized areas are poised to play major roles as centers of "Smart Growth", and benign and compatible uses of the coastal zone, but the Massport DEIS/R ignores this issue. 192.7
- The entire analysis assumes that Runway 14/32 will be used only in overwater approaches and departures, but Appendix I indicates that US statute makes that decision solely the province of the FAA. Such decision must comply with N.E.P.A. But there is no guarantee that even a full EIS would be required to use the runway in both directions. Any interference with the two-way operations of Runway 14/32 posed by the Hyatt Hotel could be removed with the collaboration of Massport. Given recent decisions by Mass Highway and FHWA to reverse commitments made in the 1991 ?SFEIS? for the Central artery/Tunnel project, eliminating commitments to improve transit and substituting 36' high and 53' high highway ramps for highways that were promised to be at or below 192.8

grade, there is no basis for confidence that the runway will be unidirectional. The DEIS/R contains no analysis of the noise and safety impacts on Jeffries Point, East Boston, Charlestown and Beacon Hill that would be caused by two-way operation of Runway 14/32. Failure to disclose the potential impact, and the lack of any disclosure of credible guarantees on this matter is a substantial flaw that requires that the draft EIS/R be rejected as inadequate. 192.8 (cont.)

- The DEIS/R uses 1999 simulated information as the basis of comparison for predicted year 2010 impacts in a variety of scenarios. But the choice of 1999 makes comparisons confusing. The primary Massport strategy to reduce overall noise impact over the past decade has been to require the airlines to use higher proportions of Stage III, less noisy, jets. The federal law requires the phaseout of all non-State III Aircraft by the year 2000, so certainly Logan, with its stricter noise rule should be all Stage III Aircraft by the year 2000. This noise abatement program was committed in the 1980s, as mitigation for the increased frequency of overflight that would occur as flights more than double in frequency(if accurate measurement of noise contours actually experienced in the community had been in practice, Massport might actually have achieved this level in advance of the year 2000.) The benefits of all Stage III aircraft is a long-awaited mitigation of increased frequency that Logan's neighbors are entitled to. For this reason, the 1999 simulation should be run with an all stage III fleet, in order to understand the true impact of the various alternatives, and should be used in particular to identify section 4(f) impacts, for all park and historical resources currently affected by Logan or potentially affected. Because of the failure to identify the 1999 all Stage III exposure, the 192.9

basic analysis of Section 4(f) impacts and noise comparison among alternatives is seriously in error, and the draft EIS/R substantially flawed, and should be withdrawn.

3. The DEIS does not explore a reasonable range of alternatives.

- Massport owns Hanscom Field, an existing airport adjacent to Rte. 128, but no analysis is done of the potential share of commercial activity that Hanscom might absorb, and the net environmental impact on the Hanscom environment if military and General Aviation Activity were displaced. The potential sitare of traffic is likely to be substantial, since Hanscom is better situated for much of the suburban and Rte. 128 market than either Manchester or Green, so a substantial share of the market now using Logan would seem to be potential. With no analysis of this alternative, the draft EIS/RIR is substantially flawed and should be viewed as an inadequate basis for comment. 192.10

- The overutilization of Logan airspace by regional carriers who use 40% of the airspace to accommodate 10% of the passengers is the central problem driving delay at Logan, but the only option explored to deal with this is a very weak form of peak pricing, with a very high "trigger" of 110 movements per hour. No sensitivity analysis is presented, to explore the impact of different "triggers" set at 105,100 or 95 movements per hour. Also, the analysis methodology assumes that flights may move out of the peak, or be eliminated, but does not explore the possibility the flights will be consolidated into a smaller number of larger aircraft. For this reason the analysis both understates the delay reduction potential of this method and overstates its economic impact. No analysis of 192.11

"grandfathering" or "exemptions" for special circumstances is presented, resulting in an exaggerated prediction of economic impact, and a very distorted analysis. The likelihood that even a weak form of Peak Pricing would tend to preclude the high delay "high" scenario is not even mentioned, even though the delay avoidance benefits of the Low vs. High scenario are greater than the differences among the alternatives considered. Since Peak Pricing will tend to inhibit the profitability of redundant regional services, it seems likely that the Peak Pricing would preclude the High Scenario from occurring, and that it should be tried before any of the construction scenarios. The availability of "baby" 15-L-33R and 4L-22R for modest numbers of small aircraft movements to accommodate "exceptions" and "grandfathering" would seem to make such a scenario quite attractive, but the basic analysis is not presented in this draft to evaluate this, so once again the draft EIS is fundamentally inadequate and should be withdrawn. 192.12

- Other alternatives to control overscheduling such as "slotting" Logan at a reasonable number of movements per hour, using market measures to distribute the "slots" are not evaluated whatsoever. 192.13
- Use of limited priority based on size of aircraft to reduce the impact of airfield delay is not considered. Limited prioritization of takeoffs based on size would seem to be a very straightforward way to minimize the impact of delay on passengers and equipment utilization, and sensitive connecting flights. Already existing "Gate-hold" Procedures could be modified to incorporate the same principle for landings, but this possibility is not explored. 192.14
- Simple "jawboning" of regional air carriers is a technique that might have substantial benefit, especially if accompanied by phase-in of Peak Pricing or lease restrictions to 192.15

encourage movements toward an all-jet Logan. This possibiolity is not evaluated at all. 192.16
The effectiveness of the P.A.C.E. program in 1988 is not described or evaluated.

- There are no alternatives considered to the centerfield taxiway proposal. It would appear that the threshold of runway 4L-22R could be displaced substantially to the south, in 192.17 order to iucrease the height of aircraft landing over the Bayeswater St. neighborhood, reducing noise and increasing safety margin. Since over???to ??? from the north are ??? to small aircraft on runway 4L-22R, it should be possible to displace the threshold substantially to the south, and allow aircraft landing on 4R to "turn early" across the inactive northerly remnant of 4L-22R. This displaced threshold should permit consideration of higher blast fence to protect the Bayeswater neighborhood, and the Constitution Beach. It should be possible to consider replacing taxiways November with 192.18 a buffer ?? to protect the beach. Since the entire premise of the Massport airfield proposal is that the 4-22 runways will be utitlized less, it is not clear why the centerfield taxiway is needed at all, or alternatively why a sanitized northerly ENV of runway 4L-22R cannot serve as the taxiway for the northerly portion in lieu of the "November" taxiway which adversely affects Constitution beach. This could avoid the adverse noise and habitat destructions associated with the northerly part of the Proposed taxiway and "November."

4. The draft EIS/EIR does not respect the Environmental Justice Executive Order.

- The core of the Executive Order, and the DOT implementing order of April 1997, is 192.19 identification of affected populations, with particular identification of minority populations and low-income population, and establishment of communication and interaction,

identification of disproportionate impacts or benefits and of alternatives to avoid or mitigate disproportionate impact. This process was not followed.

- The draft EIS includes 7 pages of discussion which basically asserts that no disproportionate impact exists by identifying the proportion of low-income and minority people affected, after assuming mitigation. The basis of the numbers is not clear(1990 census? 1995 update?) The interpretation that soundproofing can mitigate, so that the impact can be denied is inappropriate. The Executive Order requires a process that identifies impact and communicates with affected people to consider alternatives. Mitigation such as soundproofing is appropriate to ameliorate unavoidable impact, it is certainly never complete, and should not be used to deny the impact in the first instance. Also, there is no disclosure in the draft EIS of how soundproofing can be achieved in low-income housing units where the structure may have other building code problems, and owners may lack access to financing and rent levels, and therefor financial resources, are constrained by low-income. It took a decade to get the Logan soundproofing program working reasonably for middle class homeowners. There is no discussion of the kind of program that would be required to make it work for non-owner occupied low income housing.

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- There is more discussion of the economic impact of Peak Pricing on Cape Air, and prediction of difficulty of access to Nantucket, Provincetown and Martha's Vineyard than there is in the entire Environmental Justice section!!

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- The analysis of differential impact should be *comparative.* Alternatives such as Hanscom Field or Peak Pricing are likely to have NO adverse impact on low-income or minority populations. Moreover, low income people, who are less likely to fly, are less likely to

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benefit from any reduction in delay. But there is no comparison of alternatives based on environmental justice concerns.

- Whatever an appropriate decision might be *after* Environmental Justice consideration(it is possible that the FAA and Massport might choose alternatives with high Environmental Justice impacts after full consideration). The Executive Order and DOT implementation order are clear that Environmental Justice principles are to be considered at the earliest possible point in the process and occur before decisions are made. That has clearly not occurred in this draft EIS and on that basis alone the DEIS/R is inadequate and should be withdrawn. 192.25

5. The television and radio(and newspaper) advertising program by Massport constitutes a major flaw in the environmental process and a violation of environmental justice and in and of itself requires a withdrawal of the draft EIS/R. 192.26

- The topic of airfield delay and alternatives to deal with it is a very complex subject. The television and radio advertisements oversimplify and distort this complex issue. Television and radio are difficult means to communicate complex public policy issues in any event, but the Massport advertising initiative makes no attempt at a balanced presentation. There is no disclosure that the Runway 14/32 will cause substantial increase in overflight of some communities, there is no identification of alternatives. The entire communication of the draft EIS is imbalanced, leaving out important information and analysis. But the radio and TV advertisements, which are heard by many more people than read the Draft EIS is a totally biased "sales pitch" which makes no pretense at balance. Quite apart from the

appropriateness of a public agency engaging in paid media communication, in coordination with private interested parties, the biased and unbalanced nature of the communication further flaws an already inadequate and imbalanced draft EIS. It must be emphasized that the expense of such communication is totally beyond the financial capacity of the low and moderate income communities adversely affected by the runway proposal and constitutes another violation of Environmental Justice principles. The advertisements also appear to be available only in the English language despite a significant Latino population in the impacted area.

Comments on the Logan Airside DEIS/R SCOPE

The DEIS/R is so deficient and misleading that it should be rejected and "rescoped" in order to provide a document adequate for public comment and interaction to serve as a draft. 192.27

The most serious scope deficiencies are:

(1) The scope of the document was established in 1995, over 3 years ago.

(2) The DOT Implementing Order for the Executive Order on Environmental Justice was issued April 15, 1997, and requires identification of low-income populations and minority populations; consideration of disproportionate impact, consideration of alternatives and mitigation and adoption of practicable alternatives to mitigate. Environmental Justice principles are to be applied at the earliest possible time. These procedures were not followed (even though the Executive Order itself dates from 1994, and the DOT order has been available since April 1997). The only way to remedy the substantial flaw in process is to begin again. 192.28

(3) The scope of the study is much too narrow.

a) It focuses on airfield delay caused by northwest wind. Since by Massport information the northwest wind problem causes approximately 20% of airfield delay, and the remainder of airfield delay will grow to exceed current airfield delay within 5 years, this is much too narrow a problem definition to be serious, and appears to have been selected to predetermine a conclusion to build Runway 14-32. 192.29

b) Even all airfield delay is too narrow a problem definition, as it concentrates excessively on the airfield, to the exclusion of delays caused by deficiencies in the terminal 192.30

configuration. There is no information in the DEIS/R on the question of all delay caused to landing aircraft waiting for a gate, but this appears to be a growing source of delay.

c) The definition of airfield delay does not include analysis of delays caused by small aircraft in the fleet mix. The FAA safety procedures require increased separation when significantly different aircraft follow each other, affecting capacity and causing delay. There is no consideration of this issue, nor is any time dimension placed on the differential time required in transit by the current practice of using non-jets in regional markets. This industry practice appears to be changing in response to customer preference, and analysis of the comparative time in transit could provide insight into the likelihood of major changes in the regional fleet, which now utilizes 45% of the airfield capacity to accommodate 10% of the passengers, according to the information in the DEIS/R. The DEIS/R does not include analysis of the constraint imposed by differential size. 192.31

d) There is no analysis of the potential restructuring of regional air travel, as small jet services make direct flights from Green, Manchester, Portland and other regional airports more attractive than the indirect service of regional carriers to Logan to transfer to other flights. Understanding the potential substitutability of these more direct flights could provide more insight into aircraft movements required to accommodate regional demand, over the next 10 to 15 years. 192.32

e) Even all aircraft delay is too narrow a scope, focusing excessively on the interest of efficient utilization of aircraft. Passenger delay includes delay in processing ticketing and baggage for both emplaning and deplaning passengers. These delays are caused by terminal design constraints and personnel schedules, and increase with congestion in utilization of a given terminal configuration. If the typical passenger follows information to arrive 2 hours in advance, 192.33

these delays clearly involve more passenger hours than the airfield-related weather delays, but they are borne by the passengers, not the airlines, and are not analyzed in this DEIS/R.

f) There is no analysis of passenger delay in accessing Logan on the metropolitan area road and transit system. This system is congested, parking at Logan is limited by the Clean Air Act parking "freeze", and improvements in public transport access are lagging. This factor affects passenger and cargo delay and reliability, and appears to be affecting consumer choices to use Manchester or Green instead of Logan. Since over 50% of Logan passengers originate outside of Route 128, understanding this market is essential to understanding Logan's future. 192.34

g) Regional EPA proposed in its scoping comments of 1995 that a comprehensive analysis of the airport, including the (metropolitan) ground access and terminal capacity and its interrelationship with any airside proposals should be included. Unfortunately, the DEIS/R ignores the need for a comprehensive approach, and refers the reader to the Generic EIR, a state document which, among other problems, deprives citizens of protection of federal laws such as the NEPA requirement to analyze socioeconomic as well as environmental concerns, Title VI (Civil Rights), Section 4(f), and the Executive Order on Environmental Justice. 192.35

h) At the time the scope of the DEIS/R was developed, Massport was proposing a "People Mover" to substantially improve transit access to the Blue Line, and the CA/T project was committed to a major upgrade in the Blue Line Airport Station, including cross-platform transfers in both directions. Now Massport and Mass Highway have withdrawn these commitments, giving rise to the question, "How on earth can Logan handle 50% to 100% growth in passengers with a parking freeze and no significant transit improvement in sight?" This is a fundamental change since 1995. 192.36

i) In 1995, the Port Authority was talking about redeveloping Terminal A through a "privatization" mechanism. Today they have apparently concluded that will not succeed, but there is no clear timetable for the redevelopment of Terminal A, the most prominent terminal at Logan, and the most problematic. While that terminal is being redeveloped, the capacity to handle passengers will go *down* unless a successful mitigation strategy can be developed. Terminal A was to have been redeveloped with a shape designed to buffer noise impacts on the nearby Jeffreys Point neighborhood. In addition, and with no increase in number of gates, rumors indicate that Massport now intends to abandon the noise buffer shape, and add gates. This would constitute "segmentation." A revised scope should include Terminal A redeveloped including any options. 192.37

j) At the time of the scoping (1995), Massport's consultants had developed computer models to predict aircraft movements based on data from 1993, the worst year for delay caused by excessive scheduling of redundant regional commuter services. Most of the projections in the DEIS are based on these projections. The DEIS concedes that airfield delay at Logan actually went down since 1993, but there is no effort to analyze what happened, much less to correct the computer programs to incorporate this in forecasting. This rendered the projection of air movements questionable as well as the resulting predictions of the effectiveness of peak pricing in reducing delay. Realistic air traffic predictions require an open review of the actual data to develop an understanding of what is happening, in order to produce more reliable methods to predict future conditions. 192.38

k) Overflight of parts of East Boston and Chelsea affected by Runway 15-33, and of South Boston, the South End, Jamaica Plain and Roxbury affected by Runway 9-27 is predicted to triple (based on the computer models which include "PRAS" goals if Runway 14-32 " is

available. However, experience shows that during delay conditions the FAA controllers ignore PRAS goals and utilize maximum capacity configurations, so the tripling of exposure to overflight predicted with availability of Runway 14-32 actually *understates* the likely reality. More realistic utilization estimates should be prepared, at least to provide a range of estimate. 192.39

l) Noise impact from aircraft is projected in the DEIS by using computer models, but citizens have complained for years that the noise levels measured by Massport microphones monitored in the field show that actual noise consistently exceeds the predicted levels. Since the computer's predictions are used to decide on the need for airlines to improve the fleet (by replacing noisier aircraft with quieter ones under Massport noise rules), and to decide on eligibility for soundproofing, this is a very important fundamental flaw. In addition, these same models are used to predict noise consequences of the airfield proposals, so the predictions in the DEIS/R understate actual impact. The computer models should be adjusted to better simulate actual noise impacts. 192.40

Moreover, MEPA requested the preparation of 60dB contours, as well as 65, 70 and 75, but this information is not included in the tables in the main report. (There is some information in the appendices for those with the patience to find it.) 60dB contours should be prepared (using consited models) and used in the analysis. 192.41

m) Credibility of environmental commitments has been undermined by Mass Highway reneging on the Airport Station Blue Line commitments. In addition, the Mass Highway revisions constitute a segmentation flaw in the airfield project. The Mass Highway proposal should be suspended, and it and suitable alternatives incorporated into the revised scope. 192.42

In short, based on these multiple flaws, the DEIS/R scope is so out of date as to be meaningless. It should be withdrawn and a new scope developed, consistent with Environmental Justice principles. 192.43

Additional Observations on the DEIS/R, and Scoping Revisions Required:

1) The central problem with airfield capacity is the fact that it is overutilized, as always occurs at facilities in attractive locations unless they are managed through regulation or pricing. Because of a variety of wind and weather conditions, reliability of Logan is much higher at frequency of less than 100 movements per hour, whereas it becomes very unreliable as utilization approaches the maximum capacity of close to 120 movements per hour. Yet the DEIS/R does not provide basic information to identify the reliability of Logan at 75, 85, 95, 105, 115 movements per hour so that the trade off between frequency and reliability can be understood. The 1993 SAR report by Arthur D. Little rates the practical capacity of Logan at 95 movements per hour, and the FAA rates its practical capacity at 93 movements per hour. 192.44

The further fundamental issue at Logan is the fact that approximately 40 percent of the airside capacity is used to accommodate small regional non-jets which carry 10 percent of the passengers, (and a large proportion of the regional passengers are just passing through to other destinations.) If substantial consolidation of regional flights could be achieved, Logan would operate at or below 100 movements per hour and be highly reliable. 192.45

Recognizing this fundamental problem of misutilization of available runway capacity, and the tradeoff between overscheduling and reliability, it should be possible to accommodate substantial increase in passenger service without any airfield expansion. Over the past 20 to 25 years Logan has grown from 8 million passengers per year to over 26 million, with no airfield modifications of significance, because of improvement in technology and increased jet size. Since adoption of the "no increase in environmental impact" policy agreed to in 1987 in the context of the environmental impact studies on the third harbor tunnel, Logan has stayed within the 1987 noise contour, showing that minor increases in passenger volume can

be accommodated on the Logan airfield without increased delay and unreliability *and* without increased noise impact in surrounding communities. In order to encourage the better utilization of Logan runways, six basic strategies are possible:

A) A Clear Policy of No Airfield Action. The overscheduling problem is clearly caused by airline scheduling practice. It also costs the airlines a lot of money, because of inefficient utilization of aircraft, and hurts the image of airlines with customers. The primary cause of current delay is the overutilization of small non-jet aircraft in the regional carrier market, but there is some tendency for more comfortable, faster, and larger "small jets" to be increasingly used in these markets in response to customer preference and changing airline market relationships, so there is some likelihood that a message to the airlines that runway 14-32 is off the table definitively would lead the airlines to resolve the runway overutilization problem on their own without any other action by Massport or FAA.

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B) Option 1 could be supplemented by a "jawboning" approach with the airlines to schedule more realistically.

C) Option 1 could be complemented by reform of landing fee structure to move toward peak pricing, giving some market incentive to encourage rationalization of the regional feeders.

D) Option 1 could be complemented by delay management strategies to prioritize larger aircraft over smaller whenever delay conditions exist, thereby minimizing the impact of delays on the largest number of people and the most expensive aircraft, and also sending a strong signal to the airlines encouraging a shift to jet operations.

E) Logan could set a goal of becoming an "all jet" airport by a date certain, giving a period of time for adjustment followed by a policy of priority for jets on takeoff whenever delay exists.

F) Logan could become a "slotted" airport, with schedules constrained to no more than 95 movements per hour, and a periodic auction mechanism to avoid the anticompetitive aspects of "slots" in other cities, and in Europe.

The DEIS explores only peak pricing among these options, and appears to design it in order to fail, with the peak defined at 110 movements per hour for three successive hours, a level of activity so high the effect on the system should not be expected to be significant.

Moreover, the analytical approach to analyzing the peak pricing seems totally flawed. The DEIS/R hypothesizes a high fleet and low fleet scenario, based on a high and low passenger forecast, and then uses a model to predict schedule shifts out of the peak period and in some cases elimination of flights. But it ignores the fact that the existence of even a weak peak pricing system would inhibit the "high fleet" scenario from developing at all, since it would decrease the profitability of redundant regional services, encourage higher load factors, and, over time, shift to small jets at lower frequency. None of these effects are evaluated, but the differences in delay between high fleet and low fleet scenarios are greater than the differences in delay between the "with" and "without" Runway 14-32 within a given scenario. This leads to a conclusion that the introduction of even a weak form of peak pricing should occur immediately as suggested by EPA in 1995, so its effects can be evaluated and fine

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tuned. The DEIS fails to report on the performance of the PACE program which was tried with some success in 1988. 192.48

The fact is that the current landing fee system is indefensible, except as a relic. It is unrelated to the opportunity cost of using the runway and subsidizes inefficient aircraft to the detriment of the vast majority of passengers.

2) The noise analysis is inappropriate, systematically understating the likely average noise impacts of the introduction of Runway 14-32. While the DEIS predicts a tripling of 192.49 overflight in Chelsea and East Boston, Somerville, and South Boston, South End, Roxbury and Jamaica Plain; the model is constrained by PRAS goals. But experience has shown the FAA control tower will ignore PRAS goals whenever there is congestion, so even greater increases are likely.

In addition, the computer generated noise contours understate noise as measured in the field.

Even ignoring the understatement, the addition of Runway 14-32 clearly increases the noise affected population, and thus violates the 1987 environmental cap, and should be rejected on that basis alone. 192.50

In addition the DEIS attempts to obfuscate the noise impact by focusing on 75 DB contours rather than the 65 used by FAA or the 60 suggested by MEPA. But the households within the 75 DB contour shrink in all scenarios because of fleet improvement, as the category II aircraft are replaced by the less noisy category III aircraft, and all of these affected households have been soundproofed. Based on the Massport theory of mitigation, the already soundproof homes within the 75 DB contour will experience some relief from the fleet improvement. It is the increase in exposure of households in the 60 DB contour who

represent the most significant worsening of noise conditions, without soundproofing, but these numbers are not calculated, and the 60 DB contours are hidden in an Appendix. 192.51

The benefit of compliance with the PRAS is exaggerated in the DEIS/R. The PRAS was a negotiated agreement 25 years ago. It is a way to share basically unreasonable amounts of noise. It is not really so significant as reducing noise by improving the fleet mix through retirement of the noisiest aircraft, or minimizing the number of households within the 60 DB contour.

In addition, the selection of 1999 and 2010 distorts the comparisons, since the phasing out of all Stage III aircraft is due in 2000, and make it more difficult to understand the effect of various proposals. Including a 2001 analysis would separate this effect.

In any case, the measurement of noise should be improved in order to enforce the fleet noise rule more aggressively, and in order to more fairly implement the soundproofing and other mitigation strategies, and more realistically estimate impacts. (However, it is clear even from the inadequate analysis of the DEIS/A that the Runway 14-32 would have substantial adverse effect, violates the 1987 no increase in impact policy, and should be rejected.) 192.52

3) Analysis of the Reduction in Landing Minimum s is Misleading and Inadequate

The landing minimums on Runway 15 and 22 were deliberately held high pursuant to agreements with the city of Boston. The community's objective in negotiating these higher than normal decision heights was to discourage use of landing over populated areas during low visibility conditions, and to encourage instead the use of overwater approaches during low visibility conditions, by installing Category III instrument landing systems, with the lowest decision heights on the 4R and 33L overwater approaches. The DEIS does not accurately describe the reasons for the agreements, or even the fact that the city of Boston 192.53

has contractual rights in this matter. Worse yet, Category III ILS has yet to be installed on Runway 33L. The DEIS/R predictions of improvement of reliability during low visibility conditions is not disaggregated to identify the benefits attributable from improved instrumentation on runway approach 33L which the community supports, as distinguished from the decision height reductions on runway approach 15R and 22L, which the community opposes. In addition, the community has always understood that low visibility conditions generally occur under low wind conditions, but the DEIS/R implies that wind direction is a factor in this proposal. No identification of the frequency of high wind/ low visibility conditions, or data, is presented. Finally, the community concern with low visibility landings over populated area is with safety, and the anxiety caused by such operations in the residential population, but the DEIS/R treats it as a simple noise problem. 192.53 (cont.)

4) The analysis of the taxiway proposals is inadequate. Since the primary taxiway proposal is the taxiway proposed between the 4-22 parallel runways, and since the DEIS/R states that the intention of the package is to *reduce* utilization of the 4-22 runways, it is difficult to understand what delays are proposed to be alleviated. Since the taxiways will increase noise exposure in the Bayeswater section of East Boston and Winthrop, this is controversial, and inadequate explanations of its purpose is presented to allow for intelligent comment. Including the alternatives such as sanitizing the Northern End of Runway 4-22R, and using it as a taxiway should be included in a revised scope. 192.54

5) There is no analysis of metropolitan ground access capacity or terminal capacity to shed light on the feasibility of the 37 million and 45 million passenger projections. With the current parking freeze and no coherent strategy to improve transit, it is difficult to see how even 37 million passengers can reach Logan. The current terminal capacity does not appear

capable of processing appreciably more than current passenger levels. Whenever Terminal A is redeveloped it will probably *lose* capacity during the construction process, but possibly add capacity once it is complete. But there is no analysis to show what number of passengers will be able and willing to access Logan over the next decade so the air service needs can be verified, and the timing of improved access to Green Providence via rail, and high speed rail to New York can be evaluated in the light of more severe growth and terminal access problems at Logan. The missing information is fundamental to make informed choices at Logan. 192.55

6) The appendices on the history of Logan airport are totally lacking in explaining the history of the residential communities around Logan and their interaction with Logan growth. Some basic facts which are necessary to understand the socioeconomic context of Logan should include:

A) The fact that the residential communities predate the existence of the airfield.

B) The major community disruption caused by construction of the Sumner Tunnel.

C) The community disruption caused by the Blue Line extension.

D) The destruction of Wood Island Park caused by expansion of Runway 15-33.

E) The destruction of the Neptune Rd. neighborhood by the combination of increased noise, instillation of the ILS localizer, and the (positive) relocation of houses to the Horace St. area. 192.56

F) The destruction of Amerena Field to expand the airport cargo area and build the (now vacant) post office area.

G) The crash landing of a small plane on the porch of the home of Senator LoPuesti of Bayeswater Street, and the subsequent limits on the use of Runway 4L-22R.

H) The massive trucking on Maverick St. caused by filling the Bird Island flats, the community reaction to the trucks and the development of the internal airport truck route and gating of Porter St. and Maverick St. to control airport related traffic.

I) The gridlock conditions on the airport exit roadway which led to the variable message egress control system to manage the problem, and the growing Day Square traffic.

J) The development of the 1975 master plan and generic EIR process, and the "parking freeze" at Logan.

K) The installation of improved ILS systems on runway approaches 15R and 4L, and the restrictions on decision height agreed to by FAA and the Mass. Port Authority.

L) The development of Porzio Park and the development of the Bird Island Flats cargo area, with the harborside park.

M) The environmental process for the Ted Williams Tunnel, the commitment to a cap on environmental impacts at or below 1987 limits.

N) The implementation studies to implement the 1987 environmental CAP (improved parking freeze, Logan noise rules, Logic study, LADS study, and LAMP study, P.A.C.E. Program. Establishment of CAC.)

O) The commitment to improve transit interface between the airport bus and Blue Line at Airport Station, with cross platform transfer in the 1991 SFEIS of the Central Artery/ Tunnel Project.

P) The initiation of Logan Express services, water shuttle.

Q) The increased relationship with Chelsea for airport-related activity.

R) The commitment to an airport edge buffer park. (not implemented to date)

S) The 1993 Massport-Air Inc. mitigation contract.

T) The Waterfront Park at Marginal St., Jeffries Point section of East Boston.

V) The lawsuit on non-performance of the 1993 agreement.

W) The 1997 mitigation agreement.

7. Given the reliance on environmental commitments in the proposed Runway 14-32, a list of "broken promises" that undercut the credibility of such assurances is worthwhile.

A) Airport Blue Line station (CA/T Commitment, but Massport did not defend the honoring of the commitments to cross-platform transfers and at- or below- grade highways, when Mass Highway removed the Transit improvements and substituted very high (36' and 53' high) highway ramps.) 192.57

B) Airport buffer edge (not implemented)

C) Free shuttle to South Station, added Logan Express service, PeopleMover to Blue Line to increase capacity by a factor of six (now broken).

D) Flight tracks and PRAS

E) Landing decision heights in bad weather

F) Taxiway use regulation to restrain noise exposure at the northern end of the 4-22 runways.

G) The blast fence at the northern end of the runway 22R, which Massport intermittently proposes to remove.

8) The Section 4(f) presentation is substantially flawed and a revised analysis should be required in a new scope. Specifically all Section 4(f) resources affected by current operations or proposed actions should be identified. Their noise exposure today and in 2001, within all Stage III fleet should be identified, to establish a new "Base Condition" based on existing regulation, and the 192.58

impact of various proposals upon 4(f) resources identified. In addition, analysis to identify "all flexible planning to mitigate adverse impact should be carried out and presented.

9) A revised DEIS/R scope should carry out an analysis of impacts on coastal zone and smart growth land resources in the South Boston Seaport area, Chelsea, Everett and Somerville. 192.59

Letter 192
Fred Salvucci
MIT, Department of Civil & Environmental Engineering
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
192.1	Analysis Assumptions/ Methodologies	Passenger Forecasts	The 2010 passenger predictions should be adjusted to 29 million to 37 million...to reflect the regional airport and regional rail programmed improvements	The Airside Project analysis considered the benefits and impacts of alternatives against a broad range of current and potential future activity levels at Logan Airport. A benefit of this approach is that the findings and selection of the Preferred Alternative (Alternative 1A) were not dependent on a specific future condition, but reflect consideration of different scenarios. The analysis of comparative benefits for the alternative airside projects focussed on activity levels at 29 million and 37.5 million annual air passengers with different possible fleet scenarios. These activity levels reflect probable near- and long-term conditions and include diversion of up to 7.3 million passengers that could be accommodated by regional alternatives. The activity levels and the corresponding benefits and impacts of the proposed improvements were central in the selection of the Preferred Alternative.
192.2	Analysis Assumptions/ Methodologies	Passenger Forecasts	... report contains no analysis of how 35-50% more passengers can get to Logan through the terminals, when the parking spaces are limited by the Clean Air Act "parking freeze," and transit improvements that were proposed at the airport Blue Line Station and a high-capacity people mover have been abandoned by the state and Massport and the Terminal A rebuilding plan has been stuck for years and will have lower capacity during reconstruction. It is not at all clear that many more passengers can get to Logan or through the terminals. ...it is absolutely essential that a new draft EIS be prepared that includes a comprehensive analysis of access to Logan, as well as terminals, to evaluate the airfield proposals intelligently.	In January 2000, the FAA called for a Supplemental Draft EIS and a special panel review process. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The impact of the passenger activity levels, analyzed in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR, on ground access patterns was studied and reported in previous GEIRs. The GEIR and its Updates are specifically incorporated by reference in these environmental review documents as background documents. The groundside impacts of the parking freeze, the Blue Line Modernization project, the AITC, which replaces the people-mover project, and the new Terminal A development have been analyzed in the *Logan Airport 1999 ESPR* (ESPR) (previously GEIR). The ESPR was filed on December 15, 2000.The ESPR informs Massport's planning process for all the improvements at Logan Airport, including the improvements under review in the Supplemental DEIS/FEIR. Each ESPR submission is subject to public review and comment. Consistent with past practice, Massport expects that the FAA will take the ESPR analysis into account during its deliberations and decision on the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
192.3	Delay	Model	... flights at Logan decreased from 1993 to 1998, presumably resulting in reduced delay, but there is no information about actual delay at Logan during this period; ... if airline consolidation within the regional carriers has produced a modest reduction in overscheduling, ... how has this affected delay and could further consolidation of regional flights produce further reduction in delay?	The Supplemental DEIS/FEIR presents an expanded analysis and discussion of current and historical FAA delay measures, and additionally quantifies modeled delays at Logan Airport during 1998. Refer to Sections 1.6 and 1.8 of the Supplemental DEIS/FEIR. The delay measures and Massport's modeling both show that Logan Airport continues to suffer from serious airside delays despite the regional carrier consolidation and the decline in regional carrier operations. Regional carrier consolidation did not substantially reduce delays at Logan Airport because airline overscheduling is not a significant cause of delays at Logan Airport. As the Airside Project analysis shows, the lack of a three-runway configuration to handle arriving flights during periods of northwest winds is a major source of Logan Airport delays. Furthermore, the impact of regional carrier consolidation on future delay levels was explicitly examined through the analysis of several future "Low" fleet scenarios, which assume that commuter aircraft comprise a smaller share of Logan Airport's fleet compared to the "High" fleet scenario (new fleet, incorporating a significant proportion of regional jets was also analyzed). Even future Low fleet scenarios show significant levels of delays at Logan Airport. Based on actual experience and the Airside Project modeling, further regional carrier consolidation is not expected to have a significant impact on delay levels in Low fleet conditions. In high fleet conditions, when airline overscheduling is a major contributor to delays, regional carrier flight consolidation reduces delay levels. Massport proposes to monitor airline overscheduling conditions and to seek voluntary schedule adjustments from airlines to reduce delays caused by overscheduling. If airlines do not voluntarily comply, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.
192.4	Delay	Model	The consultants to the Community Advisory Committee to Massport (CAC) believe that delay has decreased substantially and cite FAA-produced data as evidence... there is precious little real data about actual delay as defined by FAA. There is not adequate information about delay to allow us to comment intelligently.	Sections 1.6 and 1.8 of the Supplemental DEIS/FEIR describe FAA and U.S. DOT measures of delay and their limitations, including historical data on delays at Logan Airport and other major United States airports, and discusses the estimation and modeling of flight delays. Regardless of the delay measure used, Logan Airport has consistently been one of the most delayed airports in the nation, ranking sixth in total delays and third in arrival delays in 1998. Historically, FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. In fact, delayed flights at Logan Airport, as measured by the FAA, increased by 30 percent in 1998. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994 and now Logan Airport is the third most delayed airport in the United States in terms of arriving flights. Because the FAA and U.S. DOT delay statistics only record historical delays, the FAA requires delay modeling when evaluating the future delay reduction benefits of airport capital improvements. The methodology used for the Airside Project provides a consistent and systematic estimate of flight delays caused by constraints at Logan Airport. The analysis based on this methodology indicates that: (1) flight delays at Logan Airport remain a significant problem and will become worse over time if no action is taken and (2) the Preferred Alternative can provide significant reductions in current and future delay levels.

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192.5	Analysis Assumptions/ Methodologies	Noise Model	The DEIS/R uses computer projections of noise, but the computer projections consistently understate actual noise as measured by Massport over field microphones.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
192.6	Analysis Assumptions/ Methodologies	Noise Model	The tripling of overflights predicted actually understates the shift in operations that will occur given the long experience with FAA control tower ignoring the PRAS whenever delay exists. Given Massport's projections of increased delay within 5 years, the utilization of Runways 15/33 and 9/27 is likely to more than triple. The lack of analysis of this actual increase in overflight likely makes the noise predictions further understated.	The simulation modeling performed for the Airside Project study analysis considers PRAS only when more than one available runway configuration has sufficient capacity to accommodate demand. There is no basis for the claim that the Airside Project understates the changes in overflights resulting from Runway 14/32.
192.7	Analysis Assumptions/ Methodologies	Noise Model	Land Use and Coastal Zone Impacts and Smart Growth are ignored – the DEIS ignores the impact of increased overflight (by a factor of at least 3!) on currently underutilized land in the Seaport district of Boston, and in Chelsea, Everett and Somerville.	The improvements to be implemented under the Preferred Alternative will reduce delay and enhance the efficiency of an existing airport. The improvements will be constructed on the existing airfield and will support the urban development needs in the area communities and are therefore consistent with Smart Growth policies and Massachusetts Coastal Zone Growth Management Principle #2 (Refer to Section 6.5 of the Supplemental DEIS/FEIR.). The areas that will experience overflights with the use of Runway 14/32 under the Preferred Alternative are the same areas that experience overflights under existing conditions. Flights using overwater routings will increase with the use of the Proposed Runway 14/32.

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192.8	Alternatives	Runway 14/32	The entire analysis assumes that Runway 14/32 will be used only in overwater approaches and departures, but Appendix I indicates that US statute makes that decision solely the province of the FAA. Such decision must comply with NEPA. But there is no guarantee that even a full EIS would be required to use the runway in both directions... there is no basis for confidence that the runway will be unidirectional. The DEIS/R contains no analysis of the noise and safety impacts on Jeffries Point, East Boston, Charlestown and Beacon Hill that would be caused by two-way operation of Runway 14/32. Failure to disclose the potential impact, and the lack of any disclosure of credible guarantees on this matter is a substantial flaw that requires that the Draft EIS/EIR be rejected as inadequate.	A bi-directional Runway 14/32 was not considered for a variety of operational and safety reasons. The unidirectional Runway 14/32 concept analyzed in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR evolved from earlier feasibility studies including the FAA's *Boston Logan Capacity Enhancement Plan* (October1992), which determined that a bi-directional runway was not a feasible option. State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of Runway 14/32 involves physical limitations that reinforce unidirectional use. The Hyatt Hotel and Conference Center, which is located 1,300 feet from Runway 14 and is 174 feet high, invades FAA approach surface glide slope requirements, thereby precluding arrivals from the west to Runway 14. Additionally, the lack of available taxiways to allow aircraft to reach Runway 32 prevents aircraft departures from Runway 32. Massport will reinforce its commitment to unidirectional use by including the intended unidirectional limitation as a mitigation measure. This designation will be reinforced through Section 61 findings that will be adopted by the Massport Board as required under MEPA. It is anticipated that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32.
192.9	Noise	Stage 3	The DEIS/R uses 1999 simulated information as the basis of comparison for predicted year 2010 impacts in a variety of scenarios. The federal law requires that phaseout of all non-Stage III aircraft by the year 2000, so certainly Logan, with its stricter noise rule, should be all Stage III aircraft by the year 2000. For this reason, the 1999 simulation should be run with an all Stage 3 fleet, in order to understand the true impact of the various alternatives, and should be used in particular to identify Section 4(f) impacts, for all park and historical resources currently affected by Logan or potentially affected. Because of the failure to identify the 1999 all Stage III exposure, the basic analysis of Section 4(f) impacts and noise comparison among alternatives is seriously in error...	Comparisons of the Action Alternatives to the No Action Alternatives for individual fleet scenarios are the appropriate basis for evaluation and are not distorted. Fleet composition within each individual forecast scenario remains consistent. The phase-out of Stage 2 aircraft will reduce the noise impacts from Logan Airport, producing benefits to surrounding communities. These impacts are discussed in the *Logan Airport 1999 ESPR* (previously GEIR). The 29 M Low Fleet scenario includes 22 daily operations in Stage 2 aircraft (depending on the alternative examined), which represent about 2.5 percent of the total daily jet operations in that fleet. (Refer to Table 6.2-1 of the Supplemental DEIS/FEIR). In the shift to a post-1999, 100 percent Stage 3 fleet, some of these aircraft would likely have received hushkits resulting in very little improvement in the noise of individual overflights (and hence, little improvement in DNL), and some were likely converted to Stage 3 airplanes. However, on balance, the total number of Stage 2 operations in 1999 is small, and a revised 29 M Low Fleet scenario would leave a significant number of hushkitted airplanes to dominate the exposure. For these reasons, it is estimated that the presence of the Stage 2 airplanes in the 29 M Low Fleet scenario overstates noise exposure by only a few tenths of a dB, which does not represent a material difference.

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192.10	Regional Transportation	Regional Airports	Massport owns Hanscom Field, an existing airport adjacent to Route 128, but no analysis is done of the potential share of commercial activity that Hanscom might absorb, and the net environmental impact on the Hanscom environment if military and general aviation activity were displaced. With no analysis of this alternative, the Draft EIS/EIR is substantially flawed and should be viewed as an inadequate basis for comment.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
192.11	Alternatives	Peak Period Pricing	The overutilization of Logan airspace by regional carriers who use 40% of the airspace to accommodate 10% of the passengers is the central problem driving delay at Logan, but the only option explored to deal with this is a very weak form of peak pricing, with a very high "trigger" of 110 movements per hour. No sensitivity analysis is presented, to explore the impact of different "triggers" set at 105,100 or 95 movements per hour. Also, the analysis methodology...does not explore the possibility the flights will be consolidated into a smaller number of larger aircraft. For this reason the analysis both understates the delay reduction potential of this method and overstates its economic impact.	Logan Airport's normal operating capacity is approximately 120 operations per hour, and is available nearly 80 percent of a typical year. The use of a 110 operations per hour threshold in the illustrative PPP program, which is ten operations below Logan Airport's normal runway capacity, represents a conservative value and avoids understatement of the potential delay benefits of the policy. The possibility that PPP would promote flight consolidation in regional carrier markets is reflected in the analysis presented in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR. This analysis forecasts a reduction in flight frequency within many regional markets with the program in effect.
192.12	Alternatives	Peak Period Pricing	The likelihood that even a weak form of Peak Pricing would tend to preclude the high delay "high" scenario is not even mentioned, even though the delay avoidance benefits of the Low vs. High scenario are greater than the differences among the alternatives considered. Since Peak Pricing will tend to inhibit the profitability of redundant regional services, it seems likely that the Peak Pricing would preclude the High Scenario from occurring, and that it should be tried before any of the construction scenarios...	Additional analysis of PPP is set out in Section 4.5 of the Supplemental DEIS/FEIR. This analysis includes the High Fleet scenario. Demand management measures at other United States and international airports are discussed in Section 3.5.

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192.13	Alternatives	Non-Construction Alternatives	Other alternatives to control overscheduling such as "slotting" Logan at a reasonable number of movements per hour, using market measures to distribute the "slots" are not evaluated whatsoever.	Neither federal nor state scoping directives required an analysis of slot controls. Imposition of slot controls constitutes a federal policy that has been preempted to the FAA under federal law and is not within Massport's jurisdiction. PPP represents a market approach that should encourage the highest value services to use Logan Airport during periods of scarce capacity without the market disruption and other inefficiencies related to slot control. Congress determined that the slot program has a number of significant problems. The U.S. DOT has analyzed options for reducing slot controls at airports. As a result, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), which was enacted in March 2000, eliminates all slots at three of the nation's slot-controlled airports. Slots at the Chicago O'Hare Airport will be eliminated by July 1, 2002 and slots at New York LaGuardia Airport and New York JFK Airport will be eliminated by January 1, 2007.
192.14	Alternatives	Non-Construction Alternatives	Use of limited priority based on size of aircraft to reduce the impact of airfield delay is not considered.	The air traffic control system of the United States, which the FAA operates, is based on a first-come, first-serve policy. Any change in this policy would require a major federal decision that would involve a major overhaul of the entire air traffic control system, including procedures, manuals, software, controller/pilot training, etc. The FAA is continually evaluating alternatives to increase efficiency of the national airspace system. However, future FAA initiatives will not eliminate the need for the proposed airfield improvements at Logan Airport. The FAA's national initiative will not prevent the decline in capacity under northwest wind conditions that occur at Logan Airport.
192.15	Alternatives	Non-Construction Alternatives	Simple "jawboning" of regional air carriers is a technique that might have substantial benefit, especially if accompanied by phase-in of Peak Pricing or lease restrictions to encourage movements toward an all-jet Logan.	As a mitigation measure, Massport will establish a Peak Period monitoring programs as outlined in Section 4.5 of the Supplemental DEIS/FEIR.
192.16	Alternatives	Peak Period Pricing	The effectiveness of the P.A.C.E. program in 1988 is not described or evaluated.	The impacts of the Program for Airfield Capacity Efficiency (PACE) are described and evaluated in Section 3.5 of the Supplemental DEIS/FEIR.
192.17	Alternatives	Taxiway Improvements	There are no alternatives considered to the Centerfield Taxiway proposal. It would appear that the threshold of Runway 4L/22R could be displaced substantially to the south, in order to increase the height of aircraft landing over the Bayswater Street neighborhood, reducing noise and increasing safety margin.	The threshold for Runway 22R is already displaced 845 feet to the south, which increases the height of landing aircraft by only 42 feet. Further displacement would not be a substitute for the benefits of the Centerfield Taxiway. Moreover, Runway 22R is used almost exclusively for jet and non-jet departures so further displacement would have a negligible effect on the impacts of landing aircraft traffic. The northern end of the Centerfield Taxiway will provide an alternate routing for those heavy jets that require the length of Runway 22L for takeoff, allowing them to avoid the queue on Taxiway November. The southern end of the Centerfield Taxiway allows arrivals on Runway 22L and Runway 27 to be routed more efficiently for crossing Runway 22R with reduced delays and minimized ground idling.

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192.18	Alternatives	Taxiway Improvements	It should be possible to consider replacing Taxiway November with a buffer ?? [sic] to protect the beach. Since the entire premise of the Massport airfield proposal is that the 4/22 runways will be utilized less, it is not clear why the centerfield taxiway is needed at all, or alternatively why a sanitized northerly ENV of runway 4L-22R cannot serve as the taxiway for the northerly portion in lieu of the "November" taxiway which adversely affects Constitution Beach.	Converting Runway 4L/22R north of Runway 15R/33L into a taxiway would cause a major reduction in the takeoff distance available on Runway 22R as well as in the landing distance on Runway 4L. When operating to the south, most departures would need to use Runway 22L instead of Runway 22R, which would mean significantly increased ground congestion, delays and associated environmental impacts. To the north, fewer arrivals would be capable of using Runway 4L, which would increase delays on Logan Airport's highest volume configuration.
192.19	Environmental Justice		The core [process] of the Executive Order, and the DOT implementing order of April 1997 ... was not followed.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. TEST Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation.
192.20	Noise	Soundproofing	The interpretation that soundproofing can mitigate, so that the impact can be denied is inappropriate.	The Final U.S. DOT Order on Environmental Justice directs FAA to determine whether its programs, policies and activities will have a disproportionately high and adverse impact on minority or low-income communities, taking account of mitigation, enhancement measures, and all offsetting benefit's to the affected populations, as well as the design, comparative impacts, and the relevant number of similar existing system elements in non-minority and non-low-income areas.
192.21	Noise	Soundproofing	...there is no disclosure in the draft EIS of how soundproofing can be achieved in low-income housing units where the structure may have other building code problems...	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport-sponsored sound insulation program. However, to address impacts in particular projects, such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of the mitigation program to the extent such improvement are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes. For the eligible residences, the FAA will fund building code improvements, to the extent necessary, to implement effective sound insulation treatment.

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192.22	Noise	Soundproofing	There is no discussion of the kind of [soundproofing] program that would be required to make it work for non-owner occupied low-income housing.	Refer to response to Comment 192.21.
192.23	Environmental Justice		There is more discussion of the economic impact of Peak Pricing on Cape Air, and prediction of difficulty of access to Nantucket, Provincetown and Martha's Vineyard than there is in the entire Environmental Justice section!	The Supplemental DEIS/FEIR significantly expands upon the discussion of Environmental Justice presented in the Airside Project Draft EIS/EIR. Refer to response to Comment 192.19 and Section 6.8 of the Supplemental DEIS/FEIR.
192.24	Environmental Justice		The analysis of differential impact should be *comparative.* Alternatives such as Hanscom Field or Peak Pricing are likely to have NO adverse impact on low-income or minority populations. Moreover, low income people, who are less likely to fly, are less likely to benefit from any reduction in delay. But there is no comparison of alternatives based on environmental justice concerns.	The Environmental Justice analysis in Section 6.8 of the Supplemental DEIS/FEIR complies with the applicable requirements of Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on Environmental Justice. The Preferred Alternative will not have a disproportionate high and adverse impact on minority or low-income populations.
192.25	Environmental Justice		Whatever an appropriate decision might be *after* Environmental Justice consideration...The Executive Order and DOT implementation order are clear that Environmental Justice principles are to be considered at the earliest possible point in the process and occur before decisions are made. that has clearly not occurred in this draft EIS ...	Refer to response to Comment 192.24.
192.26	Environmental Justice		The television and radio (and newspaper) advertising program by Massport constitutes a major flaw in the environmental process and [is] a violation of environmental justice ...	Massport did not sponsor television, radio, or newspaper advertisements for the Airside Project. Massport disagrees with the other assertions in this comment.
192.27	Environmental Review Process	MEPA	The DEIS/R is so deficient and misleading that it should be rejected and "rescoped" ...The scope of the document was established in 1995, over 3 years ago.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the Draft EIR, dated May 7, 1999. The issues identified in the MEPA Scope for both the Draft EIR and Final EIR continue to be relevant. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of fifteen visual and written presentations from the Project's technical consulting team and other independent industry experts.
192.28	Environmental Review Process	NEPA	The DOT Implementing Order for the Executive Order on Environmental Justice was issued April 15, 1997...Environmental Justice principles are to be applied at the earliest possible time. These procedures were not followed...	Refer to response to Comment 192.24.

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192.29	Purpose and Need	Delay	Since by Massport information the northwest wind problem causes approximately 20% of airfield delay, and the remainder of airfield delay will grow to exceed current airfield delay within 5 years, this is much too narrow a problem definition to be serious, and appears to have been selected to predetermine a conclusion to build Runway 14/32.	While Massport cannot reduce delays caused by snowstorms, fog, and other severe weather conditions, it can affect delays that occur in VFR conditions. These delays are caused by a fundamental inadequacy in Logan Airport's airfield layout, *i.e.*, the lack of a third available runway in the northwest-southeast operating direction. When strong northwest winds force the airport to a northwest-southeast orientation, air traffic controllers lack a third available runway. If no actions are taken, the VFR component of delay will increase the fastest. The proposed unidirectional Runway 14/32 would produce immediate delay reduction benefits that would increase into the future as forecast activity levels grow. Under a near-term, 29 M Low Fleet scenario, the Preferred Alternative reduces annual delay by 28,000 hours. Under a longer-term 37.5 M High Fleet scenario, the Preferred Alternative saves 94,000 annual hours of delay. Delays caused by northwest winds represent a significant problem at Logan Airport, and one that can be addressed through the recommended construction of unidirectional Runway 14/32. Other elements of the Airside Project address other issues related to delay, airfield efficiency, and safety at Logan Airport. The Preferred Alternative was selected after careful analysis of operating and environmental considerations
192.30	Purpose and Need	Delay	Even all airfield delay is too narrow a problem definition, as it concentrates excessively on the airfield, to the exclusion of delays caused by deficiencies in the terminal configuration.	Refer to response to Comment 192.2.
192.31	Purpose and Need	Delay	The definition of airfield delay does not include analysis of delays caused by small aircraft in the fleet mix. The FAA safety procedures require increased separation when significantly different aircraft follow each other, affecting capacity and causing delay. There is no consideration of this issue, nor is any time dimension placed on the differential time required in transit by the current practice of using non-jets in regional markets. The DEIS/R does not include analysis of the constraint imposed by differential size.	The mix of large and small aircraft at Logan Airport and the resulting impacts on aircraft separation requirements are reflected in simulation modeling for this project.
192.32	Regional Transportation	Regional Airports	There is no analysis of the potential restructuring of regional air travel, as small jet services make direct flights from Green, Manchester, Portland and other regional airports more attractive than the indirect service of regional carriers to Logan to transfer to other flights.	Developments at the regional airports and their impacts on Logan Airport are described in Sections 2.3 to Section 2.6 of the Supplemental DEIS/FEIR. Massport considers Logan Airport to be part of a regional system of airports that includes T.F. Green/Providence, Manchester, and Worcester Regional airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of these regional airports. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. The benefits of improved direct services at the regional airports have, in certain instances, reduced dependence on Logan Airport for connecting services. For example, Manchester Airport received hourly service to Logan Airport in the late 1980s, but receives no Logan Airport flights today. This reflects the availability of improved access to other hubs and major origin and destination markets from Manchester Airport.

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192.33	Purpose and Need	Delay	Even all aircraft delay is too narrow a scope, focusing excessively on the interest of efficient utilization of aircraft. Passenger delay includes delay in processing ticketing and baggage for both enplaning and deplaning passengers. ... these delays clearly involve more passenger hours than the airfield-related weather delays, but they are borne by the passengers, not the airlines, and are not analyzed in this DEIS/R.	Refer to response to Comment 192.2.
192.34	Purpose and Need	Delay	There is no analysis of passenger delay in accessing Logan on the metropolitan area road and transit system. This system is congested, parking at Logan is limited by the Clean Air Act parking "freeze," and improvements in public transport access are lagging. This factor affects passenger and cargo delay and reliability, and appears to be affecting consumer choices to use Manchester or Green instead of Logan.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR assess potential improvements to Logan Airport's airfield that will reduce delay and enhance airfield efficiency and safety, as required by federal and state scoping directives.
192.35	Environmental Review Process	NEPA	Regional EPA proposed in its scoping comments of 1995 that a comprehensive analysis of the airport, including the (metropolitan) ground access and terminal capacity and its interrelationship with any airside proposals should be included. Unfortunately, the DEIS/R ignores the need for a comprehensive approach, and refers the reader to the Generic EIR, a state document which, among other problems, deprives citizens of protection of federal laws such as the NEPA requirement to analyze socio-economic as well as environmental concerns, Title VI (Civil Rights), Section 4(f), and the Executive Order on Environmental Justice.	The Draft EIS/EIR for the Airside Project responds to the FAA Scope as part of the Airside Improvements Planning Project Draft EIS/EIR process and responds to the MEPA Certificate, both which were developed through a public comment process. The ongoing state ESPR process provides information to the federal and state agencies and the general public on the environmental effects of existing and future operations at Logan Airport, on the cumulative effect of airport operations, and on the planning context for individual projects at Logan Airport. The GEIR/ESPR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR as a background document. With the GEIR/ESPR providing background information, the FAA called for a project-specific review, including a cumulative impact assessment, under its NEPA regulations, for the Airside Project. This two-level process has identified the cumulative environmental impacts of operations and projects at Logan Airport and has provided a proper foundation upon which the FAA has fulfilled its NEPA responsibilities.
192.36	Ground Transportation	Access to Logan	At the time of the scope of the DEIS/R was developed, Massport was proposing a "People Mover" to substantially improve transit access to the Blue Line, and the CA/T project was committed to a major upgrade in the Blue Line Airport Station, including cross-platform transfers in both directions. Now Massport and MassHighway have withdrawn these commitments, giving rise of the question, "How on Earth can Logan handle 50% to 100% growth in passengers with a parking freeze and no significant transit improvement in sight?"	The MBTA is developing a new Logan Airport Station to be located about 400 feet north of the existing Logan Airport Station. Massport is consulting with the MBTA on the project's design and operational elements. The new Logan Airport Station will include modern passenger amenities such as wide escalators, oversized elevators, and real-time flight information displays in the station lobby. It will also provide a convenient at-grade connection to the neighborhood, AITC Blue Route and Logan Airport, and may become a stop on the MBTA's proposed Circumferential Transit (Urban Ring) service. Massport has implemented an aggressive airport access program designed to increase the use of public transport modes and decrease the reliance on private automobiles to access Logan Airport. This program is described in the *ESPR*. The *ESPR* analysis indicates that Logan Airport can accommodate the projected growth.

Code	Topic 1	Topic 2	Comment	Response
192.37	Environmental Review Process	MEPA	In 1995, the Port Authority was talking about redeveloping Terminal A through a "privatization" mechanism. Today they have apparently concluded that will not succeed, but there is no clear timetable for the redevelopment of Terminal A, the most prominent terminal at Logan, and the most problematic. While that terminal is being redeveloped, the capacity to handle passengers will go *down* unless a successful mitigation strategy can be developed. Terminal A was to have been redeveloped with a shape designed to buffer noise impacts on the nearby Jeffries Point neighborhood. In addition, and with no increase in number of gates, rumors indicate that Massport now intends to abandon the noise buffer shape, and add gates. This would constitute "segmentation." A revised scope should include Terminal A redeveloped including any options.	An Environmental Assessment/DEIR for the redevelopment of Terminal A by Delta Air Lines was filed with the MEPA Office on May 31, 2000. The terminal retains the noise buffer shape that will reduce aircraft noise impacts on the Jeffries Point neighborhood. The proposed Terminal A satellite concourse, located parallel to Harborside Drive, will act as a sound barrier for the Jeffries Point community. The project received state environmental approval in late 2000.
192.38	Analysis Assumptions/ Methodologies	Delay Model	Most of the projections in the DEIS are based on these [1993] projections. The DEIS concedes that airfield delay at Logan actually went down since 1993, but there is no effort to analyze what happened, much less to correct the computer programs to incorporate this forecasting.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
192.39	Alternatives	Runway 14/32	... experience shows that during delay conditions the FAA controllers ignore PRAS goals and utilize maximum capacity configurations, so the tripling of exposure to overflight predicted with availability of Runway 14/32 actually *understates* the likely reality. More realistic utilization estimates should be prepared, at least to provide a range of estimate.	The simulation modeling performed for the Airside Project study analysis understates PRAS only when more than one available runway configuration has sufficient capacity to accommodate demand. There is no basis for the claim that the Airside Project understates the changes in overflights resulting from Runway 14/32.
192.40	Analysis Assumptions/ Methodologies	Noise	Noise impact from aircraft is projected in the DEIS by using computer models, but citizens have complained for years that the noise levels measured by Massport microphones monitored in the field show that actual noise consistently exceeds the predicted levels.... In addition, these same models are used to predict noise consequences of the airfield proposals, so the predictions in the DEIS/R understate actual impact. The computer models should be adjusted to better simulate actual noise impacts.	Refer to response to Comment 192.5.
192.41	Analysis Assumptions/ Methodologies	Noise	... MEPA requested the preparation of 60 dB contours, ... 60 dB contours should be prepared and used in the analysis.	The DNL 60 dB contours and related data were included in Appendix L of the Airside Project Draft EIS/EIR and are also included in the Supplemental DEIS/FEIR.
192.42	Ground Transportation	Access to Logan	Credibility of environmental commitments has been undermined by MassHighway reneging on the Airport Station Blue Line commitments. In addition, the MassHighway revisions constitute a segmentation flaw in the airfield project. The MassHighway proposal should be suspended, and it and suitable alternatives incorporated into the revised scope.	The MBTA's Airport Blue Line Project is under control of a government entity over which Massport has no jurisdiction. After the submission of the Airside Project ENF, MassHighway issued a Notice Of Project Change for the Airport Blue Line Station, which documents the project's status and associated mitigation commitments.

Code	Topic 1	Topic 2	Comment	Response
192.43	Environmental Review Process	NEPA	... based on these multiple flaws, the DEIS/R scope is so out of date as to be meaningless. It should be withdrawn and a new scope developed, consistent with Environmental Justice principles.	The Draft EIS/EIR for the Airside Project responded to the FAA Scope and the MEPA Certificate, which were developed through a public comment process. Over 400 comment letters were received on the Airside Project Draft EIS/EIR document. The Supplemental DEIS/FEIR responds to additional federal and state scoping directives, which were issued in response to the public comment letters on the Airside Project Draft EIS/EIR. Refer to response to Comment 192.27.
192.44	Purpose and Need	Airfield Capacity	Because of a variety of wind and weather conditions, reliability of Logan is much higher at frequency of less than 100 movements per hour, whereas it becomes very unreliable as utilization approaches the maximum capacity of close to 120 movements per hour. Yet the DEIS/R does not provide basic information to identify the reliability of Logan at 75, 85, 95, 105, 115 movements per hour so that the trade off between frequency and reliability can be understood.	The Airside Project analysis of PPP examined an operations threshold of 110 operations per hour, which is already below Logan Airport's normal operating capacity of 120 operations per hour. There is no legitimate operational justification for imposing a peak period surcharge at an operation level significantly lower than Logan Airport's normal operating capacity which is achieved 80 percent of the year without any delays. Even at 75 operations per hour, Logan Airport would be subject to delays from northwest wind conditions. The Airside Project analysis in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR indicates that, with the Preferred Alternative, Logan Airport can accommodate existing and foreseeable future levels of demand without imposing a drastic administrative restriction to artificially revise Logan Airport's existing capacity.
192.45	Purpose and Need	Airfield Capacity	The further fundamental issue at Logan is the fact that approximately 40 percent of the airside capacity is used to accommodate small regional non-jets which carry 10 percent of the passengers...If substantial consolidation of regional flights could be achieved, Logan would operate at or below 100 movements per hour and be highly reliable.	The presence of small aircraft in the fleet mix is a reflection of Logan Airport's role as a regional hub for both local and connecting passengers from small- and medium-sized communities in New England and the northeast United States. Logan Airport's normal operating capacity is 120 operations per hour and is available approximately 80 percent of the time. When these high capacity configurations are available, current flight demand can be accommodated with minimal delay. Runway 14/32 is designed to prevent the drop of capacity that occurs during northwest winds and will increase the reliability and efficiency of the airfield.
192.46	Alternatives	Non-Construction Alternatives	[Suggests better use of Logan Airport by using a variety of operational restrictions include "jaw boning" on scheduling, peak period pricing, prioritization of larger aircraft, becoming an "all jet" airfield, or "slotted" airfield.]	Refer to responses to Comments 192.13 through 192.15.
192.47	Alternatives	Peak Period Pricing	... the analytical approach to analyzing the peak pricing seems totally flawed. The DEIS/R ... ignores the fact that the existence of even a weak peak pricing system would inhibit the "high fleet" scenario from developing at all, ... the differences in delay between high fleet and low fleet scenarios are greater than the differences in delay between the "with" and "without" Runway 14/32 within a given scenario. This leads to a conclusion that the introduction of even a weak form of peak pricing should occur immediately as suggested by EPA in 1995, so its effects can be evaluated and fine tuned.	PPP and Runway 14/32 are designed to address different causes of delay. PPP would target delays that result from airline overscheduling, while Runway 14/32 is designed to prevent delays that occur during northwest winds. Massport believes that the proposed Peak Period monitoring system would provide the necessary market signals to discourage airlines from scheduling above capacity. Refer also response to Comment 192.12.
192.48	Alternatives	Peak Period Pricing	The DEIS fails to report on the performance of the PACE program ...	Refer to response to Comments 192.16.

Code	Topic 1	Topic 2	Comment	Response
192.49	Analysis Assumptions/ Methodologies	Noise Model	The noise analysis is inappropriate, systematically understating the likely average noise impacts of the introduction of Runway 14/32. While the DEIS predicts a tripling of overflights ... the model is constrained by PRAS goals. But experience has shown the FAA control tower will ignore PRAS goals whenever there is congestion, so even greater increases are likely.	The simulation modeling performed for the Airside Project study analysis considers PRAS only when more than one available runway configuration has sufficient capacity to accommodate demand. (Refer to Section 4.3 of the Supplemental DEIS/FEIR). There is no basis for the claim that the Airside Project understates the changes in overflights resulting from Runway 14/32. Even so, Massport and the FAA are working together to improve conformance with PRAS recommendations and, as a mitigation measure, Massport is proposing a PRAS monitoring system to provide greater analysis and insight into the conditions when PRAS recommendations cannot be met. Massport is also committing to publishing system reports in the *Logan Airport 1999 ESPR* (previously GEIR) and subsequent annual reports.
192.50	Environmental Review Process	MEPA	... the addition of Runway 14/32 clearly increases the noise affected population, and thus violates the 1987 environmental cap, and should be rejected on that basis alone.	For all the alternatives, the Airside Project analysis determined that the noise-affected populations, in both 1999 and in future years, are well below the cumulative noise exposed populations that existed in 1987.
192.51	Analysis Assumptions/ Methodologies	Noise Model	It is the increase in exposure of households in the 60 dB contour who represent the most significant worsening of noise conditions, without soundproofing, but these numbers are not calculated, and the 60 dB contours are hidden in an Appendix. The benefit of compliance with PRAS is exaggerated in the DEIS/R.	The FAA as well as the Federal Interagency Committee on Aviation Noise (FICAN, which includes among its members the U.S. EPA and HUD) still recognize a DNL of 65 dB as indicative of significant noise impact and DNL levels above 75 dB as inappropriate for residential use because they are so high. The Preferred Alternative helps reduce exposure at this highest level as well as at levels above 70 dB. Nevertheless, all member agencies acknowledge that community annoyance and complaints also occur at DNL levels below 65 dB. As a result, the 60 dB DNL contours are now shown throughout the Supplemental DEIS/FEIR, and the numbers of people within the DNL 60 dB contour *are* calculated and reported in tables such as 6.2-3 through 6.2-7, 6.2-18 through 6.12-21.
192.52	Analysis Assumptions/ Methodologies	Noise Model	In addition, the selection of 1999 and 2010 distorts the [noise] comparisons, since the phasing out of all Stage III aircraft is due in 2000, and make it more difficult to understand the effect of various proposals. Including a 2001 analysis would separate this effect.	Comparing the Action Alternatives to the No-Action Alternative within the context of each projected fleet is the only appropriate way to evaluate the relative impacts of each proposed action. This does not distort the conclusion as to the relative impact of each scenario; on the contrary, only in this way is it possible to judge the effects of each alternative on delay and flexibility of runway use and in turn examine the consequence of those factors on noise. That said, the 29M Low Fleet scenario, while initially developed as a forecast in the early stages of this *Airside Improvement Planning Project*, has turned out to be a reasonable approximation of the fleet existing in the year 2000. Though the 29M Low forecast scenario includes 22 daily operations by Stage 2 airplanes and it is now true that Stage 2 operations by aircraft greater than 75,000 pounds have been phased out of air carrier fleets in response to federal regulations, a number of those Stage 2 airplanes were simply hushkitted as opposed to replaced; their noise levels are only slightly below the noise of their Stage 2 predecessors.

Code	Topic 1	Topic 2	Comment	Response
192.53	Alternatives	Reduced Approach Minima	Analysis of the Reduction in Landing Minimums is Misleading and Inadequate. The landing minimums on Runways 15 and 22 were deliberately held high pursuant to agreements with the City of Boston. The community's objective in negotiating these higher than normal decision heights was to discourage use of landing over populated areas during low visibility conditions, and to encourage instead the use of overwater approaches during low visibility conditions, by installing Category III instrument landing systems, with the lowest decision heights on the 4R and 33L overwater approaches. ... Category III ILS has yet to be installed on Runway 33L. The DEIS/R predictions of improvement of reliability during low visibility conditions is not disaggregated to identify the benefits attributable from improved instrumentation on runway approach 33L which the community supports, as distinguished from the decision height reductions on runway approach 15R and 22L, which the community opposes. ... [T]he community has always understood that low visibility conditions generally occur under low wind conditions, but the DEIS/R implies that wind direction is a factor in this proposal. No identification of the frequency of high wind/low visibility conditions, or data, is presented. Finally, the community concern with low visibility landings over populated area is with safety, and the anxiety caused by such operations in the residential population, but the DEIS/R treats it as a simple noise problem.	The reduced landing minimums do not change the approach path nor reduce the clearance between aircraft and the surface. They will increase airfield safety by allowing operations more directly into the prevailing wind and will help improve PRAS goal achievement. Low visibility is often associated with fog, especially for coastal locations such as Logan Airport, but precipitation or low clouds also restrict visibility.
192.54	Alternatives	Taxiway Improvements	The analysis of the taxiway proposals is inadequate...since the DEIS/R states that the intention of the package is to *reduce* utilization of the 4/22 runways, it is difficult to understand what delays are proposed to be alleviated.	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays, thereby reducing associated noise and emissions. Chapter 3 of the Supplemental Draft EIS/Final EIR describes several operating situations that would benefit from these improvements. Unidirectional Runway 14/32 would allow more balanced runway use, reducing the use of the Runways 4/22 from 65 to 37 percent (37.5M Low fleet scenario).
192.55	Analysis Assumptions/ Methodologies	Passenger Forecasting	... there is no analysis to show what number of passengers will be able and willing to access Logan over the next decade so the air service needs can be verified, and the timing of improved access to Green Providence via rail, and high-speed rail to New York can be evaluated in the light of more severe growth and terminal access problems at Logan.	The range of air traffic and operations forecasts considered in the airside analysis allows significant variation in current and future passenger activity levels at Logan Airport. Potential diversion of Logan Airport passengers because of high-speed rail and other regional rail projects are addressed in Section 2.7 of the *Supplemental DEIS/FEIR*. The Preferred Alternative produces substantial benefits at current activity levels and these benefits increase as activity levels grow in the future. Massport has implemented an aggressive airport access program designed to increase the use of public transport modes and decrease the reliance on private automobiles to access Logan Airport. This program is described in the *ESPR*. The *ESPR* analysis indicates that Logan Airport can accommodate the projected growth.
192.56	Environmental Review Process	MEPA	[Asks that the appendices of the history of Logan be more comprehensive in detailing airport-related events that have impacted the community.]	The Draft GEIR published in December 1991 documented the development history of Logan Airport from its inception as a military facility to its status as an international airport serving the New England region.

Code	Topic 1	Topic 2	Comment	Response
192.57	Environmental Review Process	MEPA	Given the reliance on environmental commitments in the proposed Runway 14-32, a list of "broken promises" that undercut the credibility of such assurances is worthwhile. A) Airport Blue Line station (CA/T Commitment, but Massport did not defend the honoring of the commitments to cross-platform transfers and at- or below-grade highways, when Mass Highway removed the Transit improvements and substituted very high (36' and 53' high) highway ramps.) B) Airport buffer edge (not implemented) C) Free shuttle to South Station, added Logan Express service, PeopleMover to Blue Line to increase capacity by a factor of six (now broken). D) Flight tracks and PRAS E) Landing decision heights in bad weather F) Taxiway use regulation to restrain noise exposure at the northern end of the 4-22 runways. G) The blast fence at the northern end of the Runway 22R, which Massport intermittently proposes to remove.	FAA and Massport disagree with this comment.
192.58	Open Space/ Parkland	Noise Levels	... all Section 4(f) resources affected by current operations or proposed actions should be identified. Their noise exposure today and in 2001, within all Stage III fleet should be identified, to establish a new "Base Condition" based on existing regulation, and the impact of various proposals upon 4(f) resources identified. In addition, analysis to identify "all flexible planning to mitigate adverse impact should be carried out and presented.	The proposed improvements at Logan Airport will neither incorporate land from the Section 4(f) resource nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site. Therefore, the Preferred Alternative does not constitute a use of Section 4(f) resources. In addition, the FAA has determined that there are no feasible or prudent alternatives to the Preferred Alternative that would achieve the delay reduction, safety, transportation, noise distribution, and other objectives of the Preferred Alternative. Therefore, even if the noise levels associated with the Preferred Alternative were determined to interfere with the normal activity associated with the identified Section 4(f) resources (which they do not), the FAA concludes that the sound insulation mitigation proposed for the affected Section 4(f) structures includes all possible planning to minimize harm from that increase in noise.
192.59	Cumulative Impacts		A revised DEIS/R scope should carry out an analysis of impacts on coastal zone and smart growth land resources in the South Boston Seaport area, Chelsea, Everett and Somerville.	Refer to response to Comment 192.7.

FAX TRANSMITTAL

Date : 5/4/99

LETTER 193

TO : Arthur Puglsey

OF: MEPA

FROM : Fred Salvucci

May 4, 1999

Memorandum

To: Vince Scarano

From: Fred Salvucci

Date: 5/4/99

Re: Summary of points discussed at April 29 meeting.

First I would like to thank you and John Silva for the time you took to meet with Anastasia Lyman and myself last Thursday. I thought it might be useful to summarize the major flaws in the Massport DEIS/R, which we believe make it inadequate to serve as a Draft EIS and require it to be revised substantially into a new Draft for public comment. In addition, we are urging that the revised Draft should drop further consideration of Runway 14-32, and summarize our arguments why this would be the most productive way to proceed.

Primary Deficiencies in the DEIS/R.

1) The likely and potential role of regional alternatives to Logan is not properly assessed in the DEIS. 193.1

   a) The DEIS/R identifies passenger growth at Logan from an estimate of 29 million annual passengers for 1999 to a range of 37 to 45 million passengers in 2010.

b) The DEIS/R identifies 7.5 million passengers likely to be attracted to other regional options, including high speed rail, growth in Manchester and Green, and telecommuting, but it does not adjust the basic 37 to 45 million projection downward to reflect this growth. Such a revision would seem to lower the range to 30 to 37 million for 2010, as indicated in table 2.4-9, on page 2-37. However, all the delay estimates in figure ES-3 on page ES 19 and table 4.2-7 on page 4-11 *do not make any adjustment for regional alternatives*. 193.2

c) Further development of Worcester, as recently announced by Governor Cellucci and Massport, if it would attract 50% of its natural market, as allowed for Manchester, or 75% as allowed for Providence, should represent an additional 1 to 2 million passengers. The opening of rail service to Green should expand its "natural" market, attracting a larger share of passengers. Passenger rail service to Manchester could have similar effects; a substantial part of the outside of Rte. 128 metropolitan market, estimated as 28% of Logan's current market, would likely be attracted away from Logan by the combination of high speed rail, Green, Manchester and Worcester. 193.3

d) In the context of the "hassle factor" of getting to Logan, with several years of Big Dig construction, the necessary redevelopment of Terminal A, the high cost of parking at Logan, the limit on any growth in parking supply, it is reasonable to expect that the Massport DEIS substantially overestimates 193.4

the likely growth in Logan passengers, and fails to consider aggressive further regional options as an alternative.

193.4 (cont.)

The fact is that no one anticipated in 1995 the level of success which the regional efforts of FAA in partnership with the localities who want aviation growth might enjoy. This success is to the credit of FAA, but the DEIS does not adequately reflect the predictable impact of existing initiatives nor consider the potential of new initiatives at Worcester or Manchester.

2) The DEIS translates the number of passengers expected at Logan into a range of estimates using a "high" and "low" projection of regional movements, and analyzes the effect of the proposed Runway 14-32, the proposed added taxiway, and peak pricing. But the largest differences in projected delay are between the high and low scenarios, and the analysis does not consider the impact of the alternatives considered on the overall fleet mix, and the high or low scenarios. But based on the analysis in the DEIS the "overscheduling" of regional services will not occur with peak pricing, because the market incentive to oversupply with small aircraft will be diminished. Moreover, one might expect that construction of Runway 14-32 might lead to increased use of small aircraft, by improving schedule reliability of small aircraft in comparison to large, and perversely affect the total number of aircraft movements required to serve any given number of passengers. The failure to consider these effects result in underestimating the benefits of peak pricing, and overestimating the benefits of Runway 14-32, and is a substantial flaw.

193.5

3) There is very little information about actual delay at Logan, and how it has increased or decreased over the years. The CAC believes that delay had decreased at Logan by 18% from 1993 to 1998, based on review of FAA and DOT data, but there is no clear information in the DEIS. This is a substantial deficiency. Moreover, the 1988 PACE program is mentioned, but there is no description of what impact it had in less than a year, and no analysis of what impact it might have had if continued over a longer period. 193.6

4) There is no exploration of exemption or grandfather provisions to deal with any particular economic impacts in special markets such as the Cape, even though the regional office of the EPA specifically requested this analysis in 1995. 193.7

5) There is no clear analysis of the 10% of Logan passengers in regional non-jet services who consume 40% of Logan airspace capacity, and how this particular part of the market is likely to evolve given existing growth in regional air services, and how these trends might be expected to be affected by peak pricing and by the construction of Runway 14-32. 193.8

(A) If we estimate total annual passengers at 37 to 45 million by 2010, 10% of these would be 3.7 to 4.5 million passengers. The DEIS says that 2/3 of these are not destined for Boston, but are making connections through Logan to other destinations, which is to say 2.4 to 3 million through passengers.

(B) If the dramatic improvements in airline services to smaller regional airports continue, and allow 50% of these passengers to make direct flights, these represent 1.2 to 1.5 million passengers otherwise served by non-jet commuters who would use direct services instead. This would lower the 3.7 to 4.5 million to 2.4 to 3 million passengers in regional non-jet services, somewhat *below* current absolute numbers. Because these passengers would be expected to use non jets,. At current loadings of approximately 15 passengers per flight, a reduction of 1.2 to 1.5 million passengers would represent 80,000 to 100,000 flights, more than the difference between the 1999 low and 2010 37 million high scenarios! A conservative assumption might be that current regional non-jet frequency is maintained. If the 1999 estimate of 10% of 29 million represents 2.9 million passengers, in 197,000 aircraft movements of 15 passengers per aircraft, were to remain constant, the 37 million low scenario would be *further diminished* by 50,000 flights, and the 45 million high scenario would be diminished by 100,000 flights. Which is to say the potential reduction of regional non-jet flights at Logan due to strengthening of the regional capture rate of a hypothetical 50% of connections through, non-jet flights exceeds the aircraft movement relief identified in the DEIS for regional capture of air passengers who now drive to Logan, and the two numbers are additive!

(C) Congestion at Logan actually encourages airlines to improve direct service to regional airports in order to achieve improved equipment

utilization, and encourages passengers to prefer direct flights to avoid the uncertainty caused by connection through Logan, in addition to the comfort and convenience of direct small and mid sized jet services, closer to home.

(D) If we consider the likely effect of peak pricing on these regional non-jet flights, above and beyond the flight reductions predicted by the DEIS due to cancellation of flights, and shifting to the off peak, one would expect that peak pricing would encourage passengers to use direct flight rather than routing through Logan, by providing a price incentive. In addition, peak pricing should produce an incentive to shift from non-jet to larger "small jets" scheduled less frequently, both to accommodate customer preferences for the superior aircraft and to respond to peak pricing. Essentially the peak pricing is likely to provide monetary incentives to airlines to produce (and passengers to prefer) improved regional services, instead of the congestion of Logan which now provides incentive for regionalization. 193.9

(E) By contrast, if Runway 14-32 is provided, an opposite incentive is introduced by giving small regional feeder service preferential on-time performance, at lower landing fees, but increasing delay for all the aircraft during the 80% of non northwest wind related delay. Additionally, by increasing the number of small aircraft at Logan, one would expect added delay due to vortex avoidance requirements, but that is not stated. 193.10

(F) There is no analysis of other regulatory means to encourage regional flight consolidation such as a "slot" system. Regional EPA explicitly requested such analysis in 1995, but the DEIS "stonewalled" on the issue by asserting that slots are anti-competitive. As practiced in New York, Washington and Chicago, slots may be anti-competitive, but that does not preclude considering a slot system to analyze potential reduction and noise abatement benefits. Additionally, slots could be distributed based on service criteria such as aircraft size, or a price auction in order to avoid anti-competitive effect, but no analysis was done to consider this. 193.11

(G) There is also no consideration of a system to manage delay whenever it occurs by prioritizing takeoff of larger aircraft over smaller, (with upset limits so that no aircraft is forced to wait more than a certain movement behind their "first come first served" place in line. Based on theoretical simulation, there appears to be substantial potential to reduce delay rates to both airlines and passengers, but the possibility is not considered. Such a system would also be expected to have a long range effect of encouraging direct service from regional airports to avoid Logan, and encourage consolidation of regional non-jet flights into a small number of flights in larger "small jet" aircraft. 193.12

6) There is no consideration of the ground access constraints at Logan, although the regional EPA specifically requested such an analysis in 1995. Given the Clean Air Act parking freeze at Logan, Logan cannot accommodate more auto access, so any passenger growth must occur by improved transit. This has two ramifications; 193.13

(A) For the 28% of Logan passengers originating in the Boston metropolitan area outside of Route 128, the attractiveness of regional alternatives such as Green, Manchester, or Route 128 will be substantially strengthened.

(B) The importance of transit improvements to properly serve the growing needs of the area within Route 128 is enormous, and totally inconsistent with Mass Highway's proposed reneging on improved access to the airport MBTA station, and foot dragging on Urban Ring service, and Massport's apparent indifference to this matter.

(C) Truck and auto access to the north and northwest, in particular to Chelsea and Everett, Revere, Lynn and the North Shore, are particularly problematic, and have been ignored in the current Mass Highway plans for Contract 8A which appear to make them worse.

7) The Massport DEIS does not follow the Executive Order on Environmental Justice. 193.14

(A) The tripling of overflight in East Boston and Chelsea and the Andrew Sq. section of South Boston and Roxbury clearly represents an enormous shift of overflight from overwater and/or middle income areas to low income and minority population areas, which should have triggered a process of identification of target populations, adverse impacts, alternatives, communication with affected groups, and adoption of all feasible alternatives to avoid adverse impact.

(B) In addition, the disproportionate impacts of Mass Highway's proposals for Contract 8A, which would include very high viaducts adjacent to existing and proposed parks and residential areas, adjacent to low income and minority neighborhoods, and the expansion of Logan Airfield into the "Robie" property, towards the same neighborhoods which are also adversely affected by Runway 14-32 , compounds the Environmental Justice violation.

(C) Recent information indicates that Massport intends to abandon the design for the redevelopment of Terminal A previously agreed to with the community. That design provided a shape that would buffer noise from the Jeffries Point neighborhood and Porzio Park, and provided no additional gates. The new proposal, as yet not discussed with the community, provides

no buffer of noise and added gates, and represents yet another case of segmentation and yet a further violation of Environmental Justice principles.

(D) In addition to "segmentation" issues, the application of Section 4(f) is flawed. The DEIS should identify every 4(f) park resource adversely affected by existing Logan operations and any proposals under consideration. Communication should be established with the stewards of such 4(f) resources (typically city or state park agencies, and the neighborhood people who use the parks) to identify any impacts, alternatives to avoid, and "all possible planning to mitigate" such impacts. 193.15

(E) The assertion in the DEIS that soundproofing constitutes mitigation and somehow preempts the need to conduct a 4(f) analysis or an Environmental Justice process is totally inappropriate. Soundproofing of houses is at best a very partial mitigation of airport noise. Soundproofing doesn't help the porch, the roof, the backyard or the city sidewalk or neighborhood park. The existing house soundproofing program has been difficult to implement with middle income home owners. There is no track record on how to make it work for low income tenants. Indeed, there are questions of whether it is effective at all due to difficulty in holding contractors accountable for their work. There is no way that a vague Massport commitment to "mitigate" through soundproofing can substitute for environmental rights neighbors 193.16

enjoy under NEPA, Section 4(f), Title VI, which are supposed to be *strengthened and facilitated* by the Executive Order on Environmental Justice. 193.16 (cont.)

8) For all the above reasons, we believe the Massport DEIS is totally inadequate and needs to be redeveloped as a comprehensive Draft EIS for comment, which includes the Mass Highway Contract 8A, includes the proposed relocation of "Park and Fly" and the proposed airfield expansion into the "Robie" area; and further includes the proposal to redevelop Terminal A, so that the inter-related and cumulative impacts of these inter-related projects can be evaluated in a proper Draft EIS consistent with Environmental Justice principles. 193.17

(A) We believe that the process outlined by John DeVillars is appropriate, where first a comprehensive identification of existing impacts and appropriate attempts to avoid or mitigate would be identified and then any further proposals by Massport can be evaluated in that context.

(B) We believe that a revised draft EIS/R, incorporating the Mass Highway 8A Contract, including questions of airport edge such as relocation of the Park and Fly and the expansion of Logan Airfield into Robie, the redevelopment of Terminal A, and various airfield proposals including peak pricing should reject Runway 15-32.

1) The primary efforts that will deal with Logan delays are more use of regional airports and high speed rail. Even with no airfield action, adjusting the Massport numbers to reflect the growing success in regional airport and rail options suggests that delays should decrease, so there is no crisis here. 193.18

2) The availability of Runway 14-32 is likely to undercut the benefits of regional airport improvements, by providing small aircraft better on time performance than large, and encouraging a high-fleet scenario. 193.19

3) Runway 14-32 involves such a massive shift in overflight of communities, particularly over high concentrations of low income and minority populations that it violates Environmental Justice principles. 193.20

4) The presence of Runway 14-32 plan option so influences the affected communities that it is impossible to focus attention on improved instrumentation of Runway Approach 33, and other airfield issues that might be amenable to solution, and Terminal A 193.21

redevelopment which is the most urgent matter facing the ability of passengers to use Logan with reasonable comfort and convenience. 193.21 (cont.)

5) There clearly are feasible and prudent alternatives to building Runway 14-32, indeed, we believe the runway is *counter productive* on delay. In any case, adverse 4(f) impacts can be avoided by a decision to not construct Runway 14-32, and make the injunction permanent 193.22

Again thank you for your time and attention. We would be happy to meet again to discuss this further.

Letter 193
Fred Salvucci
MIT, Department of Civil & Environmental Engineering
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
193.1	Regional Transportation	Regional Airports	The likely and potential role of regional alternatives to Logan is not properly assessed in the DEIS.	An expanded and updated discussion of the regional alternatives is presented in Chapter 2 of the Supplemental DEIS/FEIR. Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. By incorporating a broad range of current and future passenger traffic and aircraft operations scenarios, the airside analysis and recommendations encompass any reasonable future operating conditions at Logan Airport.
193.2	Analysis Assumptions/ Methodologies	Delay Model	...the delay estimates in Figure ES-3 on Page ES 19 and Table 4.2.7 on Page 4-11 do not make any adjustment for regional alternatives.	Variability in potential impacts from the regional airports on future conditions at Logan Airport is incorporated in the delay analysis through the use of a wide range of current and future passenger traffic and aircraft operations levels at Logan Airport. As a result, the recommendations contained in the Supplemental DEIS/FEIR are not dependent on a specific future environment at Logan Airport, but instead take into account a range of current and potential future passenger scenarios in addition to analysis of the current operating environment at the airport.

Code	Topic 1	Topic 2	Comment	Response
193.3	Regional Transportation	Regional Airports	...a substantial part of the outside of Route 128 metropolitan market, estimated as 28% of Logan's current market, would likely be attracted away from Logan by the combination of high speed rail, Green, Manchester, and Worcester.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR evaluate the T.F. Green/Providence, Manchester, and Worcester Regional airports and their potential impacts on Logan Airport. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the Greater Boston area. This will provide some relief to the growth pressures at Logan Airport. Nevertheless, the proposed Airside Project is necessary and provides clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Successful development of the regional airports, enhancing their ability to attract passengers that originate trips from locations outside Logan Airport's core market area represents a key element in Massport's efforts to promote an effective and efficient regional transportation network.
193.4	Analysis Assumptions/ Methodologies	Passenger Forecasting	In the context of the "hassle factor" of getting to Logan; with several years of Big Dig construction, the necessary redevelopment of Terminal A, the high cost of parking at Logan, the limit on any growth in parking supply, it is reasonable to expect that the Massport DEIS substantially overestimates the likely growth in Logan passengers, and fails to consider aggressive further regional options as an alternative.	The Airside Project analysis compared the benefits and impacts of alternatives against a broad range of current and potential future activity levels at Logan Airport. A benefit of this approach is that the findings and selection of the Preferred Alternative were not dependent on a specific future condition, but reflect consideration of different scenarios. The analysis of comparative benefits for the alternative airside projects focussed on activity levels at 29 million and 37.5 million annual air passengers. These activity levels include diversion of up to 7.3 million passengers that could be absorbed by regional transportation alternatives. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach the 29 million-passenger forecast presented in the Draft EIR/EIR until 2002 or 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015. Regional alternatives are addressed in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. Increased use of regional alternatives will not prevent the substantial drop in capacity and resulting delays that occurs during northwest wind conditions.
193.5	Alternatives	Runway 14/32 Peak Period Pricing	...based on the analysis in the DEIS "overscheduling" of regional services will not occur with peak pricing, because the market incentive to oversupply with small aircraft will be diminished. Moreover, one might expect that construction of Runway 14/32 might lead to increased use of small aircraft, by improving schedule reliability of small aircraft in comparison to large, and perversely affect the total number of aircraft movements required to serve any given number of passengers. The failure to consider these effects result in underestimating the benefits of peak pricing, and overestimating the benefits of Runway 14/32, and is a substantial flaw.	Small aircraft can be accommodated on all the runway configurations used at Logan Airport. There is no basis to assume that the construction of Runway 14/32 would stimulate an increase in regional carrier operations. Additional analysis of PPP is contained in Section 4.5 of the Supplemental DEIS/FEIR. As a mitigation measure, Massport has proposed to implement a Peak Period Monitoring System to determine if airline overscheduling is emerging based on future growth in aircraft operations. Massport believes that initiation of this monitoring program will provide the necessary market signals to encourage carriers to make efficient use of available facilities at Logan Airport. Should the monitoring program indicate that overscheduling conditions are likely to develop, Massport has developed an action plan as described in Section 4.5 of the Supplemental DEIS/FEIR, designed to address overscheduling conditions at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
193.6	Analysis Assumptions/ Methodologies	Delay Model	There is a very little information about actual delay at Logan, and how it has increased or decreased over the years. ...there is no description of what impact...[the PACE program] had in less than a year, and no analysis of what impact it might have had if continued over a longer period.	Section 1.6 of the Supplemental DEIS/FEIR contains a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. Chapter 3 of the Airside Project Draft EIS/EIR also discusses the delay analysis and the PACE program.
193.7	Alternatives	Peak Period Pricing	There is no exploration of exemption or grandfather provisions to deal with any particular economic impacts in special markets such as the Cape, even though the regional office of the EPA specifically requested this analysis in 1995.	Refer to Section 4.5 of the Supplemental DEIS/FEIR which includes an analysis of PPP with the inclusion of a conceptual small community exemption program. That program would be designed to protect greatly affected communities from losing access to the national transportation system without unnecessarily diluting the delay reduction benefits of PPP.
193.8	Alternatives	Peak Period Pricing	There is no clear analysis of the 10% of Logan passengers in regional non-jet services who consume 40% of Logan airspace capacity, and how this particular part of the market is likely to evolve given existing growth in regional air services, and how these trends, might be expected to be affected by peak pricing and by the construction of Runway 14/32.	The presence of small aircraft in the fleet mix is a reflection of Logan Airport's role as a regional hub for both local and connecting passengers from small- and medium-sized communities in New England and the northeast United States. Logan Airport's normal operating capacity is 120 operations per hour and is available approximately 80 percent of the time. When these high capacity configurations are available, current flight demand can be accommodated with minimal delay. Runway 14/32 is designed to prevent the drop of capacity that occurs during northwest winds and will increase the reliability and efficiency of the airfield.
193.9	Alternatives	Peak Period Pricing	Essentially the peak pricing is likely to provide monetary incentives to airlines to produce (and passengers to prefer) improved regional services, instead of the congestion of Logan which now provides incentive for regionalization.	Since 1996, eight out of ten new passengers in New England are using the regional airports instead of Logan Airport. The regionalization of aviation in New England is already occurring without PPP.
193.10	Alternatives	Runway 14/32	By contrast, if Runway 14/32 is provided, an opposite incentive is introduced by giving small regional feeder service preferential on-time performance, at lower landing fees, but increasing delay for all the aircraft during the 80% of non northwest wind related delay. Additionally, by increasing the number of small aircraft at Logan, one would expect added delay due to vortex avoidance requirements, but that is not stated.	The fleet mix at Logan Airport is driven by the markets that the airport serves and not by available runway configuration. The construction of Runway 14/32 would not promote continued investment in small aircraft, since air carriers make their decisions on system-wide utility and profitability. Runway 14/32 would dramatically reduce delays under northwest wind conditions when small and large aircraft must use the same runway for landing. Under other conditions, the small and large aircraft are generally able to land on different runways so delay is minimal. The effects of wake vortex separations on operations and delays are included in all simulations. The High and Low Operations scenarios reflect different assumptions on the numbers of smaller aircraft for a given future passenger level. It should be noted that current and recent activity is consistent with the Low Operations scenarios. This Supplemental DEIS/FEIR includes analysis of a RJ High Fleet scenario, which includes a higher percentage of regional jets in the fleet. Also, refer to response to Comment 193.5.

Code	Topic 1	Topic 2	Comment	Response
193.11	Alternatives	Other Non-Construction Alternatives	There is no analysis of other regulatory means to encourage regional flight consolidation such as a "slot" system.	Neither federal or state scoping directives required an analysis of slotting. Imposition of slot controls constitutes a federal policy that has been preempted to the FAA under federal law and is not within Massport's jurisdiction. PPP represents a market approach that should encourage the highest value services to use Logan Airport during periods of scarce capacity without the market disruption and other inefficiencies related to slot control. Congress determined that the slot program has a number of significant problems. The U.S DOT has analyzed options for reducing slot controls at airports. As a result, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21), which was enacted in March 2000, eliminated all slots at three of the nation's slot-controlled airports. Slots at New York LaGuardia Airport and New York JFK Airport will be eliminated by January 1,2007.
193.12	Alternatives	Other Non-Construction Alternatives	There is also no consideration of a system to manage delay whenever it occurs by prioritizing takeoff of larger aircraft over smaller.... Such a system would also be expected to have a long-range effect of encouraging direct service from regional airports to avoid Logan, and encourage consideration of regional non-jet flights into a small number of flights in larger "small jet" aircraft.	The air traffic control system of the United States, which the FAA operates, is based on a first-come, first-serve policy. Any change in this policy would require a major federal decision that would involve a major overhaul of the entire air traffic control system, including procedures, manuals, software, controller/pilot training, etc. The FAA is continually evaluating alternatives to increase efficiency of the national airspace system. However, future FAA initiatives will not eliminate the need for the proposed airfield improvements at Logan Airport. The FAA's national initiative will not prevent the decline in capacity under northwest wind conditions that occur at Logan Airport.
193.13	Ground Transportation	Access to Logan	There is not consideration of the ground access constraints at Logan, although the regional EPA specifically requested such an analysis in 1995.	The air passenger projections for the Airside Project are based upon the projections for the airport whether the Airside Project is implemented or not. Therefore, the Airside Project will neither positively or negatively affect the ground access situation at Logan Airport. Ground access patterns were studied in previous GEIRs and are discussed in the *1999 Logan Airport ESPR* (ESPR, previously GEIR). The ESPR was filed on December 15, 2000.
193.14	Environmental Justice	Cumulative Impacts	The Massport DEIS does not follow the Executive Order on Environmental Justice.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
193.15	Open Space/ Parkland	NEPA	...the application of Section 4(f) is flawed. The DEIS should identify every 4(f) park resource adversely affected by existing Logan operations and any proposal under consideration. Communication should be established with the stewards of such 4(f) resources...to identify any impacts, alternatives to avoid, and "all possible planning to mitigate" such impacts.	Section 4(f) requires the identification of resources that would be used by any alternative under consideration. Therefore, the identification of all park and historic resources currently affected by Logan Airport is not required for a Section 4(f) Evaluation. There are no parklands, historic properties or sites, or other Section 4(f) resources on the airfield in the area of the proposed runway and taxiway improvements. There are also no parklands identified in those areas where the 65 dB DNL contour for the Preferred Alternative extends beyond the 65 dB DNL contour for the No Action Alternative (Alternative 4). Therefore, the Preferred Alternative will have no direct or indirect impact on parklands. Refer to Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR for a discussion of parklands relative to the Preferred Alternative.
193.16	Noise	Soundproofing	The assertion in the DEIS that soundproofing constitutes mitigation and somehow preempts the need to conduct a 4(f) analysis or an Environmental Justice process is totally inappropriate. Soundproofing of houses is at best a very partial mitigation of airport noise. Soundproofing doesn't help the porch, the roof, the backyard or the city sidewalk or neighborhood park...There is no way that a vague Massport commitment to "mitigate" through soundproofing can substitute for environmental rights neighbors enjoy under NEPA, Section 4(f), Title VI, which are supposed to be strengthened and facilitated by the Executive Order on Environmental Justice.	The implementation of a sound insulation program for affected historic residences is the accepted FAA mitigation outlined in FAR Part 150. Refer to Sections 5.3 and 6.3 of the Supplemental DEIS/FEIR for a discussion of Section 4(f) resources relative to the Preferred Alternative. Also, refer to the new analyses of Environmental Justice in Section 6.8 of the Supplemental DEIS/FEIR, and the expanded discussion of proposed mitigation in Chapter 8 of the Supplemental DEIS/FEIR.
193.17	Cumulative Impacts and the GEIR	Landside Improvements	...we believe the Massport DEIS is totally inadequate and needs to be redeveloped as a comprehensive Draft EIS for comment, which includes the Mass Highway Contract 8A, includes the proposed relocation of "Park and Fly": and the proposed airfield expansion into the "Robie" area, and further includes the proposal to redevelop Terminal A, so that the inter-related and cumulative impacts of these inter-related projects can be evaluated in proper Draft EIS consistent with Environmental Justice principles.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts. The other projects cited in this comment are not related to the Airside Improvements Project. Any impacts associated with those projects will be addressed in individual project filings, if required under NEPA and/or MEPA and also in the ESPR (formerly GEIR) process. The ongoing state ESPR process provides information to the federal and state agencies and the general public on the environmental effects of existing and future operations at Logan Airport, on the cumulative effect of airport operations, and on the planning context for individual projects at Logan Airport. The GEIR/ESPR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR as a background document.

Code	Topic 1	Topic 2	Comment	Response
193.18	Regional Transportation	Regional Airports	The primary efforts that will deal with Logan delays are more use of regional airports and high speed rail. Even with no airfield action, adjusting the Massport numbers to reflect the growing success in regional airport and rail options suggests that delays should decrease, so there is no crisis here.	The proposed Logan Airport Airside Project is necessary and provide clear benefits at current traffic levels. Massport has long recognized that service development and increased passenger traffic at the regional airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, especially high-speed rail to Logan Airport's largest market, New York. Section 2.3 of the Supplemental DEIS/FEIR evaluates T.F. Green/Providence, Manchester, and Worcester Regional airports and their potential impacts on Logan Airport. The regional airports are expected to accommodate an increasing share of the overall growth in air travel demand within the greater Boston area. This will provide some relief to the growth pressures at Logan Airport but will not eliminate the need for airside projects.
193.19	Alternatives	Runway 14/32	The availability of Runway 14/32 is likely to undercut the benefits of regional airport improvements, by providing small aircraft better on time performance than large, and encouraging a high-fleet scenario.	Regional carriers that provide service to Logan Airport and the passengers they serve are an entirely different market than the airlines that and passengers that have generated tremendous growth at the regional airports over the past several years. As a result, regional carriers serving Logan Airport are unlikely to shift operations to the regional airports and the low-fare carriers that provide service from the regional airports are unlikely to shift operations to Logan Airport. Regional carriers serving Logan Airport carry a mix of local and connecting passengers. A significant number of passengers are either traveling to Boston or connecting to flights that are not available from the outlying airports. For example, service to Manchester would not be a viable alternative for a Provincetown passenger traveling to a location in downtown Boston. Likewise, service to Providence would not be attractive to a Provincetown passenger trying to reach Denver, since there are no nonstop Denver services at T.F. Green/Providence Airport. Market forces have been responsible for the shift in airport usage from Logan Airport to the regional airports and the induced growth at the regional airports. Regional airports have become attractive alternatives to Logan Airport because of airline decisions to increase the frequency and quality of regional airport services (i.e., jet versus turboprops), the availability of lower airfares, convenient access relative to Logan Airport, and increased public awareness of the regional airports. Until Southwest Airlines, Delta Connection and MetroJet introduced low-fare services into the region, the New England region had been one of the only regions in the United States without a significant low-fare carrier presence. The resulting stimulation of traffic at the regional airports consists of both induced demand and diversion from Logan Airport. This diversion results from a recapture of traffic within Manchester and T.F. Green/Providence airports primary markets that was previously using Logan Airport. Since 1996, when low-fare services were first established at T.F. Green/Providence Airport, eight out of ten new air travelers in New England have chosen to use the regional airports over Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
193.20	Environmental Justice	Cumulative Impacts	Runway 14/32 involves such a massive shift in overflight of communities, particularly over high concentrations of low income and minority populations that it violates Environmental Justice principles.	There are no Environmental Justice violations as described in Section 6.8 of the Supplemental DEIS/FEIR. In fact, Runway 14/32 would reduce noise to those most impacted by noise. It would shift 75,000 flights over water, while reducing total number of nighttime flights. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
193.21	Alternatives	Preferred Alternative	The presence of Runway 14/32 plan option so influences the affected communities that it is impossible to focus attention on improved instrumentation of Runway Approach 33, and other airfield issues that might be amenable to solution, and Terminal A redevelopment which is the most urgent matter facing the ability of passengers to use Logan with reasonable comfort and convenience.	The Airside Project is designed to reduce delays and increase the efficiency of Logan Airport's airfield. Massport and individual airlines are currently undertaking redevelopment of the landside (*i.e.*, terminals, roadways, etc.) portion of Logan Airport. An Environmental Assessment/DEIR for the redevelopment of Terminal A by Delta Air Lines was filed with the MEPA Office on May 31, 2000. Each of these projects will provide important benefits and address immediate deficiencies and should not be delayed.
193.22	Alternatives	Runway 14/32	There clearly are feasible and prudent alternatives to building Runway 14/32, indeed, we believe the runway is counter productive on delay. In any case, adverse 4(f) impacts can be avoided by a decision not to construct Runway 14-32	There are no adverse Section 4(f) impacts associated with the Airside Project. The proposed improvements at Logan Airport will neither incorporate land from the Section 4(f) resource nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site. Therefore, the Preferred Alternative does not constitute a use of Section 4(f) resources. In addition, the FAA has determined that there are no feasible or prudent alternatives to the Preferred Alternative that would achieve the delay reduction, safety, transportation, noise distribution, and other objectives of the Preferred Alternative.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Margaret Webster" <webster@fas.harvard.edu>
Subject: re file # 10458 EOA
Date: Thursday, April 22, 1999 15:16:25 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 194

Dear Mr. Pugsley:

I am writing you as a Cambridge resident opposed to the new runway, 14/32, proposed by Massport. Studies show that this runway will triple air traffic in our area. Wouldn't it make a lot more sense to start work on a new AIRPORT instead: one that is located further inland, where it would disturb fewer residents and would have more room to expand? In recent travels everyone I have encountered numbers Logan among the worst airports in the country, particularly in that it is nerve-rackingly hard to get to. 194.1

Thanking you for your consideration,

Yours sincerely,

Margaret Webster
17 Woodbridge Street
Cambridge, MA 02140

Letter 194
Margaret Webster
Private Citizens: Cambridge

Code	Topic 1	Topic 2	Comment	Response
194.1	Regional Transportation	Regional Airports	Studies show that this runway will triple air traffic in our area. Wouldn't it make a lot more sense to start work on a new AIRPORT instead: one that is located further inland, where it would disturb fewer residents and would have more room to expand?	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional Airports, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

LETTER 195

KROLMAN
Presentations on the Go.

Krolman Corporation ▪ 65 Elm Street, Charlestown, MA 02129-2438
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April 2, 1999

John P. DeVillars
Regional Administrator
United States Environmental Protection Agency
Region 1
John F. Kennedy Federal Building
Boston, Massachusetts 02203-0001

Dear Mr. DeVillars:

Re: Comments on the Proposed Scope of Work for Draft Environmental Impact Statement/Draft Environmental Impact Report on Logan Airside Improvements Planning Project

It is my understanding that the uni-directional use of proposed Runway 14/32 cannot be legally guaranteed by the Massachusetts Port Authority, the Federal Aviation Administration or the Commonwealth of Massachusetts.

Consistent with their proposed use, Massport has analyzed Runway 14/32 as a uni-directional runway only. However, to better satisfy the aims of the National Environmental Policy Act and the Massachusetts Environmental Policy Act. the scope of the EIR/EIS should address the possible future implementation of bi-directional use. 195.1

Yours truly,

Arthur Krolman, CFA
President

Letter 195
Arthur Krolman, CFA, President
Krolman Corporation
Private Citizens: Charlestown

Code	Topic 1	Topic 2	Comment	Response
195.1	Alternatives	Runway 14/32	Consistent with their proposed use, Massport has analyzed Runway 14/32 as a unidirectional runway only. However, to better satisfy the aims of the National Environmental Policy Act and the Massachusetts Environmental Policy Act. The scope of the EIR/EIS should address the possible future implementation of bi-directional use.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14 end. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

LETTER 196

Elizabeth A. Aberg
22 Boatswains Way
Chelsea, MA 02150
(617) 889-1724

April 18, 1999

Mr. Arthur Pugsley
Massachusetts Environmental Protection Agency
100 Cambridge St.
20th Floor
Boston, MA 02202

RE: EOEA #10458

Dear Mr. Pugsley,

I am writing to urge your agency to reject the proposed runway 14/32 project at Logan Airport. The residents of the communities surrounding Logan Airport have not been given fair consideration in this matter and will suffer greatly if this expansion is allowed to take place.

The Draft EIS/EIR statement released by Massport and the FAA focuses on the flight "delay" problem at Logan and attempts to solve this problem with the construction of new runway (14/32). However, the report contains numerous deficiencies that fail to compare the benefits of alleviating delays to the true environmental, social and medical costs of the proposed airport expansion:

Noise Pollution Impact
The widespread broadening of flights over many neighborhoods will increase noise impact to intolerable levels. Noise can cause serious health problems. It acts as a biological stressor by eliciting a response from the brain's reticular activation system that prepares the body for "fight or flight". Neural impulses then travel throughout the central nervous system and influence perceptual, motor, cognitive, behavioral, glandular, cardiovascular, and gastrointestinal functions. Therefore, noise is thought of as a *major* threat to human health.[i]

Air Pollution Impact
Chemical pollution generated by vehicles within the airport area, such as planes and transport vehicles, as well as road traffic to and from the airport will increase to unacceptable levels with the planned expansion. The EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that *any* increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult. [ii] 196.1

Construction Impact
The draft report maintains that construction period traffic during the 2000-2004 period will generate a daily average of 129 truck round trips (range 58-580/day). This increase in traffic load will go on for years and will add to the already overly congested roads that lead to and from the airport. This will disrupt the normal flow of traffic on affected roads causing traffic delays, increase traffic noise to neighboring communities as well as aggravate the existing pollution and particulate dust problem, and contribute to road erosion and structural damage.

Massport's reasoning for the construction of a new runway is to reduce flight delays. However, there is a legitimate question to ask:
Just how "delayed" is Logan Airport?
Conflicting figures from different agencies have been given - there is no consensus as to just what the exact problem is. The US Department of Transportation statistics concurs with Massport's data on flight delays. But

according to the FAA standards for calculating delays, Logan has only about 3% of its flights delayed[iii].. The FAA sensibly does not account for delays of less than 15 minutes or those that end up in flight cancellation. But, even if short delays are excessive, the US Department of Transportation confirmed that delays are not unusual for major airports, even for state-of-the-art facilities like Denver's Centennial airport, which had 29% of its flights delayed last year[iv]. According to FAA data, the delay situation at Logan has improved since 1993 and is essentially in equilibrium. In fact, Massport's Aviation Planning Director, Betty Desrosiers, admitted that delays have declined in recent years as airport planners improved scheduling with airlines. 196.2

It is clear that the Draft EIS/EIR raises more concerns than it alleviates. Logan is a physically small inner-city airport that has exceeded reasonable capacity. Expansion of Logan will only augment existing noise and chemical pollution levels for nearby communities. Most troubling is the disproportionate, biased, and significant increase in air traffic over low-income and minority communities of East Boston, Chelsea, Everett, and Roxbury, which is a violation of the Environmental Justice Act. 196.3

It is time to stop **all** expansion at Logan Airport and explore other alternatives. The interests of Massport must not be allowed to prevail over the interests of **hundreds of thousand of people** in the affected area. 14/32 is a detriment to our quality of life and a threat to our health and safety.

Respectfully,

Elizabeth A. Aberg

Elizabeth A. Aberg

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[i] **D. Dennis Hansen, M.D. and Lee A. Sanders M.D., Ph.D.** The Adverse Health Impacts of Airport Expansion with Particular Reference to Sea-Tac International Airport. Health Subcommittee of the Environmental Impact Committee of the Regional Coalition on Airport Affairs. 10/5/92. http://www.accessone.com/rcaa/health.htm.

[ii] Draft EIS/EIR vol. II:11.1

[iii] **Stephanie Ebbert.** Delays at Logan Seen as Overstated. The Boston Globe. p A1, April 3, 1999.

[iv] **Yvonne Abraham.** Massport and Foes Dispute Delays. The Boston Globe. p B1, April 4, 1999

Letter 196
Elizabeth A. Aberg
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
196.1	Air Quality	NAAQS	The EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that any increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult.	Although hazardous air pollutants (HAPs) are not specifically addressed, Section 6.8 of the Supplemental DEIS/FEIR includes a discussion of public health. Because VOCs and PM_{10} emissions are lower with the Airside Project than without it, it can be concluded that from these emissions will also be lower with the Airside Project Alternatives, when compared to the No Action Alternative.
196.2	Delay	Model	[The DEIS overstates the delay problem at Logan.]	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
196.3	Environmental Justice	Impacts	Most troubling is the disproportionate, biased, and significant increase in air traffic over low-income and minority communities of East Boston, Chelsea, Everett, and Roxbury, which is a violation of the Environmental Justice Act.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Peter Alachi" <palachi@lynx.dac.neu.edu>
Subject: EIS - EOEA #10458, Against Runway
Date: Wednesday, April 21, 1999 8:36:21 EDT
Attach: Environmental Study.PDF
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 197

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April 21, 1999

Dear Mr. Pugsley,

Enclosed is an Acrobat PDF file attachment of my Environmental Impact =
Statement regarding Logan Airside Improvements Project.=20

Massport has already spent close to $3 million in public funds on =
consultants and politically connected lobbyists to push for its airport =
expansion plan (Joe Battenfeld. Massport spent $3M to lobby for runway =
Logan. The Boston Herald. p1, April 14, 1999). And, we have just =
witnessed how quickly a generously funded business coalition with the =
obscure name of 'Citizens' for Efficient Regional Transportation, =
mobilized and picked up Massport's propaganda ads that tout the benefits =
of the new runway. This is an obtrusively obscene alliance between a =
public-sector agency, that is supposed to serve the interest of the =
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Globe. p B3, April 14, 1999).
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197.2

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fairly frightening projection for growth at Logan'' (Laura Brown. =
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P. 15, April 16, 1999). In short, failure to see the environmental =
impact of the build option will condemn hundreds of thousands of local =
residents to living with deteriorating medical, social, and =
environmental conditions. Our communities have not been given fair =
consideration in this matter.

I respectfully submit that the permanent and long-term impact damage =
visited on local communities should not be brushed aside in favor of =
profit or for alleviating petty delays. And that any money earmarked for =
Logan expansion would be better spent on alleviating current levels of =
noise and chemical pollution felt throughout the local communities.=20

Sincerely,

Peter Alachi
22 Boatswains Way
Chelsea, MA 02150
(617) 889-1724

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<DIV><FONT face=3DGaramond>Chelsea, MA 02150</FONT></DIV>
<DIV><FONT face=3DGaramond>(617) 889-1724</FONT></DIV>
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AIRSIDE IMPROVEMENT PROJECT

A DRAFT ENVIRONMENTAL IMPACT ANALYSIS

By

Peter Alachi, MS, Biology
palachi@lynx.neu.edu

Monday, April 19, 1999

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SUMMARY OF MASSPORT'S AIRSIDE IMPROVEMENT PLANNING PROJECT

The Draft Environmental Impact Statement and Draft Environmental Impact Report (Draft EIS/EIR) considers the impact of five options on flight-delay reduction and weighs the environmental impact of each. The proposed schemes, called actions in draft report, comprise:

- Constructing and operating a 5,000-foot unidirectional runway (14/32) located at the southwestern edge of the airport for use over the water only. The runway length was selected over a 4,500-foot length in order to accommodate a greater proportion of the regional/commuter carrier fleet and therefore more effective in reducing delay (I:3-1).
- Constructing and operating a 9,300-foot Centerfield Taxiway between runway 4L/22R and 4R/22L.
- Reconfiguring, improving, realigning and extending other Taxiways
- Reducing approach minimums on some runways (15R, 22L, 27 and 33L) by providing precision approach guidance to a point closer to runway touchdown. This will reduce delays and enhance operational safety.
- Peak Period Pricing or landing fee surcharges imposed on carriers during peak flight activity levels and as a result of airline over-scheduling.

The planned project was picked from a list of 5 options or alternatives (I:ES-16 - Table 1).

TABLE 1 - SELECTION OF PROPOSED ACTIONS AND DELAY REDUCTION

Alternative	Proposed Action	Percent Reduction of Delay for Year 2010 per 37.5M Passengers (Low Fleet)	Percent Reduction of Delays for Year 2010 per 37.5M Passengers (High Fleet)	Status
1	All actions	-34.1%	-53.6%	Rejected
1A	All actions without Peak Period Pricing	-29.9%	-31.3%	Accepted
2	All actions without 14/32	-14.1%	-42.7%	Rejected
3	All actions (operational and administrative) but no build	-10.3%	-41.3%	Rejected
4	No actions - allows routine maintenance and annual minor improvements	-	-	Rejected

* Based on table 4.5-2 (I:4-30) and bar graph figure ES-4 (I:ES-19).

Peak Period Pricing was not considered since current flight activity levels and over-scheduling do not exceed current airfield capacity (I:3-39).

Construction traffic during the 2000-2004 period will generate a daily average of 129 (ES:ES-27) truck round trips (range 58-580/day). Routes 1A and the Ted Williams Tunnel will be used as the major gateways. Certain designated routes on State highways would "minimize the impact on local streets" (I:ES-29).

Runway 14/32 would be permitted to operate as a unidirectional runway with all arrivals and departures occurring over Boston Harbor. As a result 15% of total airport operations would shift from flight paths over communities to flight paths over the water (I:ES-4). Upon completion, the project will reduce impacts for the most severely noise-affected communities in East Boston, Revere and Winthrop (I:ES-30).

SUMMARY OF PROJECT ENVIRONMENTAL DATA

Logan Airside Improvements Planning Project (EOEA #10458) looked at 2 areas:

- Addressing Logan's delay problem
- Enhancing safety

The two plans will be achieved with *minimal* environmental impact (I:ES-5 - Table 2).

TABLE 2 - SUMMARY OF DRAFT EIS/EIR 'S ENVIRONMENTAL IMPACT AND MITIGATION

ISSUE	DRAFT EIS/EIR STATEMENT
Noise	1. 14/32 will provide more equitable noise distribution and mitigation measures to most affected communities. 2. Communities at 65 decibels will experience a noise increase of 2%. Soundproofing will be provided. 3. Proposed plan will not affect normal activity or aesthetic value of a public park, refuge or historic sites. 4. The Taxiway system will reduce ground noise.
Air Quality/Odors	1. Air quality will improve due to 14/32 added shorter delay periods, and the Taxiway system. 2. Ambient levels of Carbon Monoxide, Nitrogen Dioxide, and volatile Organic Compounds are expected to be well within the air quality standards and are below of all considered alternatives.
Terrestrial Vegetation and Wildlife Habitat	The runway and taxiway constructions will result in the total loss of 39.4 acres of vegetation, leaving behind a total of 440 acres. See also Table 5.4-1 (I:5-60) for a list of avian species within the Logan airfield.
Endangered and Threatened Species of Flora and Fauna	The construction of the Centerfield Taxiway between runways 4L/22R and 4R/22L will result in loss of upland sandpiper (Bartramia longicauda) habitat. A plan with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) will mitigate this impact.
Soils	The reportable concentrations of S1 and S2 soil categories were exceeded in some of the soil samples for arsenic, lead, and two polynuclear aromatic hydrocarbon compounds (I:5-71 and Table 5.6-1 - I:5-72)
Water Quality	Class SB water quality standards are being met under average conditions (Table 5.5-1 - I:5-66).
Wetlands	No federal or state wetlands occur within the airfield study area (I:5-58).
Construction Impact	The construction-related work will be alleviated through "initiatives to limit traffic, noise, and air quality impacts in surrounding communities."

RESPONSE NOTES

There are legitimate questions to be reckoned with as they pertain to nearby communities' expectations. Any Logan improvement should be done in a sensible manner that will not compromise the environment, impact further on our health, irreparably disrupt our lifestyles, or detract from our property values. The submitted report contains numerous deficiencies that fail to compare the benefits of alleviating delays and cutting airline costs to the true environmental, social, economic, and medical costs of the selected scenarios. This report weighs environmental and medical impacts as compared to delay impact.

• Noise Pollution Impact

1. One of the most frequent complaints of local communities' residents is noise. The FAA's threshold of 65 decibels does not accurately assess how many people are disturbed by aircraft noise. The National Resources Defense Council (NRDC) confirmed that Denver International Airport, despite the relatively few people living within its 65 decibel noise contour, receives the highest number of monthly noise complaints from outside this area[9]. Noise can cause serious health problems. It acts as a biological stressor by eliciting a response from the brain's reticular activation system that prepares the body for "fight or flight". Neural impulses then travel throughout the central nervous system and influence perceptual, motor, cognitive, behavioral, glandular, cardiovascular, and gastrointestinal functions. Therefore, noise is thought of as a *major* threat to human health[7].

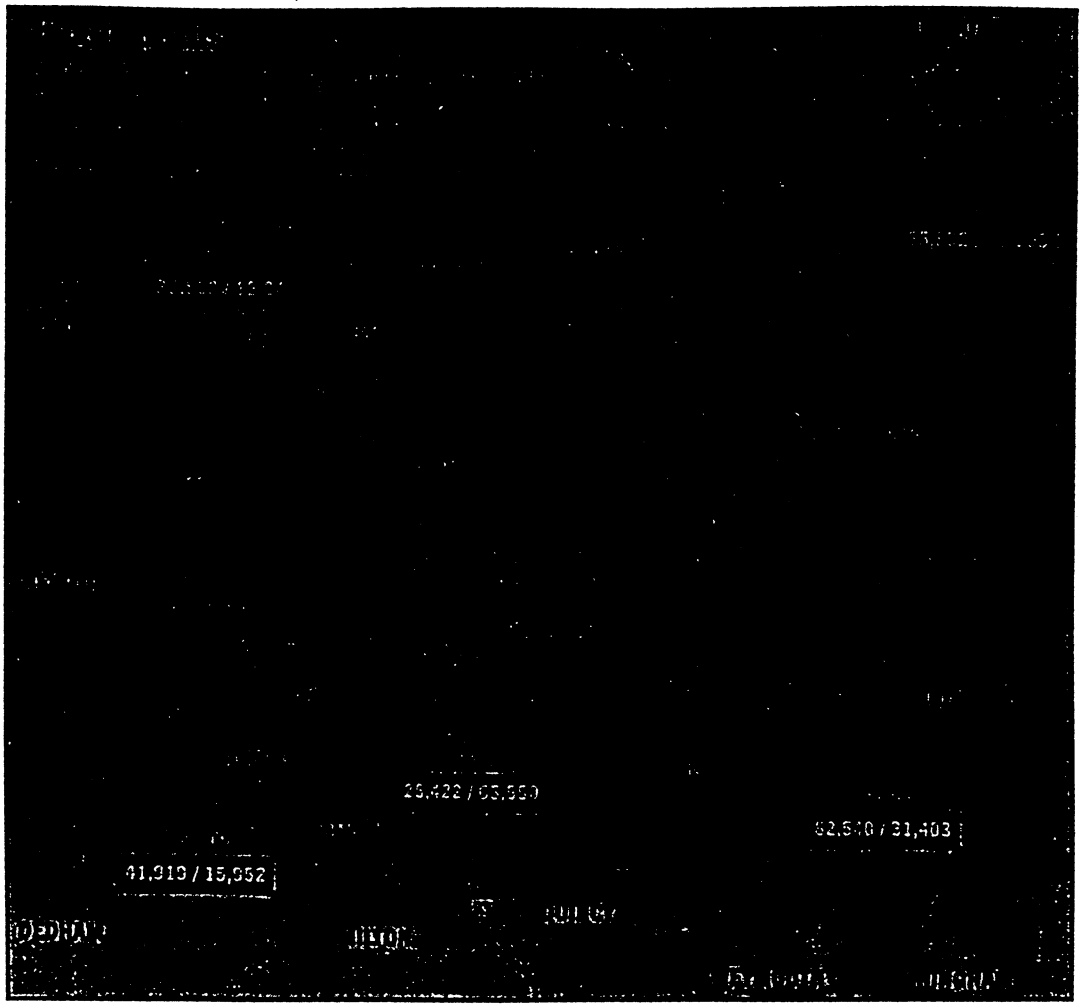
   The constant roar from jet aircraft can seriously affect the health and psychological well being of children, according to a Cornell University study[8]. Gary Evans, a professor of design and environmental analysis in Cornell's College of Human Ecology concluded that there are health problems resulting from chronic airport noise, including higher blood pressure and boosted levels of stress hormones, which may have lifelong effects. Evans contends also that New York children living near an international airport tended to be poor listeners and did not read as well as matched children in quiet schools. Mark Lawrence, an East Boston resident, who currently lives in Florida, recalls[13]:

   > "I REMEMBER being scared out of a deep sleep as a child as a jet would pass over my house so close you could see the pilot's face.
   > I REMEMBER how each year as a student all my teachers would have to pause every 5 or so minutes to allow the screeching jets to pass.
   > I REMEMBER not being able to concentrate in school because of jet noise."

   As many as 115 flights an hour pass over communities north and south of Logan Airport. In a joint public meeting by Massachusetts Environmental Protection Agency (MEPA) and the Federal EPA, Elaine McGrath of Chelsea told the board that, "The communities are speaking with one voice and telling you it's *unbearable*. Massport isn't telling you that"[19].

2. No remedy was given for the structural damage due to low-flying aircraft vibrating homes, school buildings, monuments, and industrial infrastructures within the affected communities.

3. The following flight path map obtained from the Boston Globe shows the projected impact comparing 1997, and 2001 with or without the new runway.



One obvious problem with this map's projections is that 14/32 will not be completed by 2001. According to a Massport spokesman, Jeremy Crockford, the approval process alone could take two years[20]. But a less obvious issue revolves around the increased fleet capacity projected by 2010. The numbers are therefore meaningless since those communities that are promised a relief for 2001 will not see it materialize in time and will be drowned by an eventual increase in total flights that supercedes the current level. Furthermore, if the plan is implemented, there will be a disproportionate and exorbitant increase in flights over poorer communities such as sections of Chelsea, East Boston, Everett, and Roxbury. The latter fact triggered U.S. Representative Joseph Moakley to argue that the impact statement did not address the environmental effects of the new runway on minority and low-income people in Boston that was required by a 1994 executive order issued by President Clinton[15]. 197.4

4. The Harbor Islands recreational area will suffer significant noise impact. 197.5

• Chemical Emission/Impact

Chemical pollutants emitted include cumulative chemicals generated by vehicles within the airport area, such as planes and transport vehicles, as well as road traffic leading to and from the airport.

1. Since the pollution emission predictor uses 1993 as a contrast item, an overcrowded airport year and a peak year for delays, the predicted emission reductions for year 2010 are undoubtedly minimized to favor a lesser environmental impact. Furthermore, the model predicts minor gains in reducing the levels of pollutants in the environment. But, the proposed action model predictor uses alternative 1 to attain this analytical profile (IV:Tables EI1-1-EI1-4). Since plan 1 was rejected in favor of plan 1A, these data do not necessarily fit the report's final conclusions (see Tables 1 and 3 in this report). 197.6

2. The additional combustion of gasoline and oil will increase the total Volatile Organic Compounds or Hydrocarbons (VOCs) in the atmosphere. VOCs are considered to be photochemical pollutants; a concentration of 3 ppm can result in 0.1 ppm of photochemical oxidants, a class of pollutants that includes both hydrocarbon and nitrogen derivatives.

3. The EPA's regional administrator stated that "... the number of passengers using the airport is projected almost to double current levels by 2010" (II:1). The projected increase in passenger volume to 45 million by 2010 will have an adverse effect on the local transportation and air quality by increasing the overall level of ozone in the airport region and on roads leading to the airport. Reducing ozone precursors, which includes nitrogen oxides is necessary to help the State attain the health standards for ground-level ozone (smog). Nitrogen dioxide (NO_2) is a pollutant that in concentrations as low as 0.25 ppm for one hour can blanket the horizon with reddish-brownish haze. Smog formation is initiated by the photochemical decomposition of NO_2 to NO + O. The resulting oxygen atoms then react with the more abundant species O_2 resulting in ozone (O_3). Oxygen atoms and Ozone molecules are also highly reactive with hydrocarbons, and a variety of products are eventually formed, including alcohols, ketones and aldehydes. The eye irritation, which is a familiar feature of photochemical smog, is due to the presence of compounds such as formaldehyde and acrolein. Both NO and NO_2 can also react directly with unsaturated hydrocarbons resulting in Methyl Nitrate and Peroxyacetyl Nitrate (PAN), both of which are powerful eye irritants[23].

4. Local airport traffic will also add to the problem of Carbon Monoxide (CO) emission. CO is found at normal levels between 0.025-1 ppm. In major cities, it ranges from 10-50 ppm. CO reduces the ability of the blood to transport oxygen though the body. The resulting strain on the heart and lungs can be fatal. CO can also cause dizziness, blurred vision, and distorted perception of time.

5. Sulfur Oxides, which occur chiefly as Sulfur Dioxide, Sulfur Trioxides, Sulfurous and Sulfuric Acids, can damage vegetation, fabrics, metals, and ecosystems such as lakes and ponds. Levels of 0.25 ppm or above cause irritation to human beings. Concentrations between 0.08 and 0.1 ppm for any length of time are considered unhealthy. It takes usually about 5 ppm of SO_2 for 1 hour to cause irritation to human throat and lung tissue, with accompanying bronchial constriction. But in individuals who suffer from chronic respiratory diseases, a minor increase in the concentration of SO_2 from 0.1 to 0.2 ppm can cause them to start coughing and experience severe difficulties in breathing[23]. Sulfur Dioxide is a heavy

noxious gas that can very quickly combine with water to form Sulfurous Acid (H_2SO_3). Also, Sulfur dioxide can absorb a photon of light and becomes "excited" so that if it collides with an O_2 molecule, it forms sulfur trioxide (SO_3). This is much more toxic than SO_2 and has much more affinity to water molecules in the atmosphere or lungs where it forms Sulfuric Acid (H_2SO_4), a highly corrosive acid. SO_2 emissions were not conducted since, according to the draft report, airports are not identified as significant sources of these emissions (I:6-64).

6. In addition, Sulfur compounds, Nitrogen Oxides, Lead, and various reactive volatile hydrocarbons can form other chemical complexes that are deleterious to all forms of life. These forms include a barrage of toxic and synthetic compounds whose effect on health ranges from clear-cut to suspicious. For example, NO_2 can combine with reactive hydrocarbons to form a wide range of pollutants including PAN, a major reactive pollutant. Some of these compounds are mutagenic and lead to cancer. Substances known to be cardiovascular irritants can directly be linked to emphysema, asthma, chronic bronchitis and heart attacks.

7. Suspended particles or particulates are tiny bits of matter (technically less than 0.1 millimeter) floating in the atmosphere, such as diesel smoke, fine ash, and dust. Particles which are smaller than 2.5 thousandths of a millimeter can pass through the primary, non-specific immune defenses such as nose hair and mucous membranes and may cause illness. Over a period of years, these materials attack lung tissue and increase susceptibility to such diseases as tuberculosis and lung cancer. And in urban areas, these particulates are believed to be responsible for increased asthma attacks, aggravating existing heart and lung conditions, lowering resistance to infection, and breathing problems in children. There is a direct correlation between high particulate air pollution and risk of premature mortality from heart and lung disease. The NRDC estimates that at current levels of pollution, approximately 64,000 premature deaths from cardiopulmonary causes may be attributable to particulate air pollution each year. That represents 6.5% of all cardiopulmonary deaths, which total 986,000 per year[9].

8. Many suspended particles serve as niche sites for microorganisms and their spores, including potential human pathogens.

9. High concentrations of suspended particles can cause reduced visibility caused by absorption and scattering of light. Soiled clothing and soot-covered buildings are other symptoms that are all too familiar.

10. Mixtures of atmospheric pollutants may show synergistic interactions, so that more aggregate damage is done by even small amounts than otherwise be expected. For example, the growth of pasture grasses is suppressed more by a mixture of SO_2 and NO_2 than by that of either alone[1].

11. Benzene, dioxin, toluene, xylene, and formaldehyde are known to be toxic and carcinogenic even at minute concentrations. None were monitored individually in the draft EIS/EIR study.

197.7

12. Overall health problems due to noise and chemical pollution include mental health problems, cardiovascular disease, gastrointestinal disease, compromised immune response, pregnancy and birth defects, learning disabilities, respiratory problems, and cancer[7].

13. Table 5.6-1 (I:5-72) indicates that the reportable concentrations of S1 and S2 soil were exceeded in some of the soil samples for arsenic, lead, and two polynuclear aromatic hydrocarbon compounds (I:5-71). Lead is known to be toxic in trace amounts. S1 soil category applies to those soils where there is a chance for a high frequency and high intensity of exposure to the soil by children and adults. While most of the lead assimilated comes from food and drink, some is inhaled. The residence time of lead in the bones is 78 years, whereas that of blood and soft tissue is about 30 days[6]. Lead emissions were not assessed by the draft report (I:6-64). 197.8

Ultimately, the lack of sufficient epidemiological and long-term health impact analysis due to these pollutants on people in affected communities is troubling.

TABLE 3 - COMPARISON OF DRAFT EIS/EIR ESTIMATES OF MAJOR AIR POLLUTANTS

Pollutant	Total 1993 Levels of Baseline Emissions for Logan (kg/day)	Predicted Low-Levels for 2010 (Alt 4/No Action)	Predicted Low-Levels for 2010 (Alt 1 - All Actions)*	% change from 1993 Levels with No Action (Alt. 4)†	% change from 1993 Levels with Action (Alt. 1)†
Carbon Monoxide	16,043	14,355	13,976	-10.5%	-12.9%
Sulfur Oxides	N/A	N/A	N/A	N/A	N/A
VOC	3,666	2,572	2,383	-29.8%	-35%
Nitrogen Oxides	5,002	7,078	6,919	+41.5%	+38.3%
Particulate Matter	241	280	251	+16.2%	+4.2%
Lead	N/A	N/A	N/A	N/A	N/A

* No data was given for the actual project (Alt. 1A)
† Negative data indicate a decrease in pollutant level while positive data indicate an increase.

- Construction Impact

1. The report claims no more than 0.6% overall impact on daily traffic due to trucking to and from the airport construction sites (I:ES-29). But the use of Routes 1A and the Ted Williams Tunnel will surely exceed that limit as hundreds of daily trucks enter and exit these roads. Furthermore, as to what roads are these trucks using to get to the aforementioned gateways, the report purports that 'certain' designated routes on state highways should be used to 'minimize' the impact on local streets (I:ES-29).

2. The draft report maintains that construction period traffic during the 2000-2004 period will generate a daily average of 129 truck round trips (range 58-580/day). The expected increase in traffic load will go on for years and will add to the already overly congested roads that lead to and from the airport. This will disrupt the normal flow of traffic on affected roads causing traffic delays, increasing traffic noise to neighboring communities as well as augmenting the existing pollution and particulate dust problem, and contributing to road erosion and structural damage. Nighttime construction will also occur. Winthrop's Office of the Board of Selectmen noted in a letter to Secretary Trudy Coxe, the Executive Officer

of Environmental Affairs, that "Past experience with other Logan construction projects has demonstrated their capacity to severely interrupt sleep patterns" (II:17.6).

- ## Endangered and Threatened Species of Flora and Fauna

1. The draft report mentions the loss of about 37 acres of existing grassland (I:ES-5) which is described in a later section as a net loss of 39.4 acres of "mowed grass" (I:ES-25), leaving behind 440 acres of vegetation. Of the 39.4 acres lost, 28.5 acres is due to the taxiway improvements, there is a 9% reduction in existing upland vegetation.

2. The loss of vegetation will result in loss of Upland Sandpiper (*Bartramia longicauda*) habitat due to construction of the Centerfield Taxiway between runways 4L/22R and 4R/22L. There is a mitigation plan with the Massachusetts Natural Heritage and Endangered Species Program (MNHES) to save the Upland Sandpiper. Michael Ciaranca, Natural Resource Manager of the Massachusetts National Guard stated that "... you can't simply (physically) move these birds and their nests to a different habitat."[17] Scott Melvin, from MNHES, concurred with Ciaranca that the current bird population and its nests could not be relocated but added that another site at the Massachusetts Military Reservation (Cape Cod) could serve as a new habitat that might conceptually be beneficial for the birds[21].

- ## Delays

1. The draft report chose 1993, a year in which flights peaked and Logan was overcrowded, as a base year for statistical comparison. In the short term (circa 1999), 29 million passengers were chosen to represent the fleet's annual passenger load. While for the long-term (circa 2010 and beyond), 2 sets were selected: 37.5 and 45 million passengers. At each passenger volume two fleet scenarios were analyzed, representing low and high-range levels of operation (III:Appendix E, p1). The benefits of Alternative Actions 1 and 1A were estimated to provide the greatest level of delay reduction with plan 1 reducing delays by between 29.3% and 60.3% (I:ES-18, and I:4-30). The draft report states that "a comparison of Peak Period Pricing (between 1 and 1A) under near-term, low fleet conditions is only 2 percent" (I:4-30). Table 4.5-2 shows that to be true. But, given the time-line for completing the runway, 1999 is not a realistic goal. Interestingly, the same table shows how the 'no build' option 3 under a high fleet scenario (with either low or high passenger loads) is much better at reducing delays than the 'build' 1A alternative (10% better for a low passenger load and 6.5% better for a high passenger load - see table 4.5-2, I:4-30). The EPA predicts a doubling of passenger capacity by 2010 at Logan (II:EPA Letter 1 dated Nov. 13, 1995), and Massport sees a 35.5% increase by 2010 (29 to 45 million passengers, III:Appendix E, p15), in which case the proposed plan will do little to alleviate congestion. 197.9

2. The Michael S. Dukakis Administration in 1989 imposed a form of peak period pricing which dropped congestion dramatically at the airport[2], thus, putting doubt on the draft report's contention that Peak Pricing is not helpful.

3. The US Department of Transportation statistics concurs with Massport's data on flight delays. But according to the FAA standards for calculating delays, Logan has only about 3% of its flights delayed[10]. The FAA sensibly does not account for delays of less than 15 minutes or those that end up in flight cancellation. But, even if short delays are excessive, the US Department of Transportation confirmed that delays are not unusual for major airports, even for state-of-the-art facilities like Denver's Centennial airport, which had 29% of its flights delayed last year[11].

4. According to FAA data, the delay situation at Logan has improved since 1993 and is essentially in equilibrium. Massport's Aviation Planning Director, Betty Desrosiers, admitted that delays have declined in recent years as airport planners improved scheduling with airlines[10].

CONCLUSIONS

- Massport often hides behind Federal aviation rulings and ignores community pleas to provide relief from daily disturbances living next to the airport (II:9.1). Typically, the draft report gave little to no serious attention to harmful noise and pollution impacts on the people in local communities, including residential neighborhoods, schools, parks, homes for the elderly, monuments, plants, and historic and cultural land. The proposed runway would adversely affect the noise and air quality in surrounding communities and seriously prevent or hamper many redevelopment efforts currently underway.

- The widespread broadening of flights over many neighborhoods would increase noise impact to intolerable levels. Studies indicate that noise affects one's ability to concentrate and can cause sleep deprivation, resulting in potentially deleterious effects on health and well being[7]. James Maas, professor of psychology at Cornell University and author of "Power Sleep", warned that getting enough sleep is more important than diet, exercise, or any other factor in increasing people's longevity[12].

- The draft's conclusions are drawn based on data models that fail to analyze true health impacts or to assess meaningful noise measurements. In fact, the Director of the Environment Department of the City of Boston stated that "... none of the scenarios presented can be considered to provide significant reductions in environmental impacts from airport operations. In particular, the proposed runway 14/32, touted for its unidirectional over-water approach/departure, is only marginally effective at reducing noise" (II:11.1).

- The EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that *any* increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult (II:1).

- While implementation of Peak Period Pricing was initially considered, the report claimed that "no US airport imposes a peak pricing system", and that "airline over-scheduling is not a significant contributor to delay under low fleet conditions or in the current or near-term environment at Logan" (I:ES-18). But, interestingly, the same report admits in a footnote that both New York and New Jersey Port Authorities apply a 'surcharge' to general aviation aircraft operating during peak hours. Furthermore, the Dukakis administration in 1989 imposed a form of peak period pricing which dropped congestion dramatically at the airport[2]. Recently, the Conservation Law Foundation weighed in against the runway plan, arguing that Massport could do more to alleviate flight delays by creating cost disincentives for airlines to fly at peak times[24].

- The Draft's attempt to 'divide and conquer' local communities by promising a balance in overhead flights is ill advised. In fact, the new runway and taxiway will allow the airport to grow beyond rational limits. Bennet Heart, a spokesperson from the Conservation Law Foundation, stated that "the (environmental impact statement) paints a fairly frightening projection for growth at Logan"[25]. Growth of Logan will augment existing noise and chemical pollution levels for nearby communities. Most troubling is the disproportionate, biased, and significant increase in air traffic over low-income and minority communities of East Boston, Chelsea, Everett, and Roxbury.

- The report often failed to reference the appropriate tables for the graphs shown. Given the amount of time we were allotted to provide a response, we spend precious time looking for raw data that were not referenced in the shown graphs (see bar graph ES-4: I:ES-19).

- It is clear from the data that there is no significant decrease in congestion or delays due to the proposed plan and that any minor decrease in delay is invalidated by the immense social cost to the neighboring communities. US Representative Michael Capuano wisely stated that "if 14/32 will not permanently reduce delays, we shouldn't build it. The detrimental impact on our neighborhoods is too great. The burden of proof is on Massport to explain why there is a need for 14/32 when it will drastically increase airplane noise in many communities and doesn't even represent a permanent solution to the problem."[16] Logan has reached its capacity. To obviate the build option, a regional solution should be adopted. It involves moving cargo traffic to regional airports, building a connector from Worcester Airport to MassPike, working to establish North/South rail link and services, and implementing Peak Period Pricing. Long term solutions should look into planning and building a regional airport with an eye on the origin-destination demand (Table 4).

TABLE 4 - LOGAN'S ORIGIN-DESTINATION DEMAND BY REGION

Region	% of Logan's origin-destination
Vermont	0.4%
Maine	2.8%
New Hampshire	7.4%
Connecticut	0.3%
Rhode Island	2.4%
Massachusetts, west of 495	8.8%
Massachusetts, between Rt. 128 and I-495[2]	**28.6%**
Massachusetts, inside Rt. 128 excluding Boston[2]	**28.6%**
Massachusetts, City of Boston	20.6%
Total	99.9

[1] Adapted from I:2-8 and Executive Summary Report:ES-10.
[2] Combined 57.2% of Logan's origin and destination passenger demand is drawn from these two regions.

- Massport purports the draft report to be a full disclosure document. But, it leaves many details out and obscures the major issues that can potentially affect public health which deserves full public scrutiny under The Massachusetts Environmental Policy Act (MEPA). As the project would significantly increase Logan's airside capacity, the environmental consequences would be extraordinary. Failure to see the environmental impact of the build option will condemn hundreds of thousands of local residents to living with deteriorating medical, social, and environmental conditions. These communities have not been given fair consideration in this matter.

- Given Massport's history at keeping promises[26], its current assurance[22] that runway 14/32 will be unidirectional is dubious at best (I:ES-4). The FAA and Massport can reverse this 'flight of fancy' promise at any time following runway completion.

- In the final analysis, Massport is putting a price on our heads. The Agency is gambling away the public's health in favor of alleviating what are mostly minor delays. As the level and cost of airport pollution climbs, Massport has made no apologies and has not addressed the long-term and cumulative impact of pollutants on our health and the environment in a satisfactory manner.

Massport's argument regarding the "Airside Improvement Project" is myopic: It concentrates more on the economics of cutting airline cost and business benefits but minimizes the tremendous environmental, social, and medical costs it is imposing on its neighbors. The true cost to society, in other words, is never measured properly. We respectfully submit that any permanent and long-term impact damage visited on local communities should not be brushed aside in favor of business 'profit' or for alleviating petty delays. And that any money earmarked for Logan expansion would be better spent on alleviating current levels of noise and chemical pollution felt throughout the local communities.

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Letter 197
Peter Alachi
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
197.1	Purpose and Need	Delay	I believe that 'profit' rather than 'delay' underscores the basis for this expansion.	The Airside Project analysis shows that the Preferred Alternative will significantly reduce the growth in airside delays compared to the No Action Alternative. Refer to Section 4.6 of the Supplemental DEIS/FEIR. Massport will continue to examine ways to make Logan Airport more efficient.
197.2	Air Quality	NAAQS	EPA Regional Administrator stated that the region is currently in serious violation of the National Ambient Air Quality Standards for ozone, and that any increased traffic generated by the airport will make the Commonwealth's job of attaining the ozone standard more difficult.	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
197.3	Environmental Review Process	MEPA	Massport purports the draft report to be a full disclosure document. But, it leaves many details out and obscures the major issues that can potentially affect public health which deserves full public scrutiny under The Massachusetts Environmental Policy Act (MEPA).	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
197.4	Alternatives	Runway 14/32	...communities that are promised a relief for 2001 will not see it materialized in time and will be drowned by an eventual increase in total flights that supercedes the current level.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
197.5	Open Space/ Parkland	Noise	The Harbor Islands recreational area will suffer significant noise impact.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
197.6	Air Quality	Model	Since the pollution emission predictor uses 1993 as a contrast item, an overcrowded airport year and a peak year for delays, the predicted emission reductions for year 2010 are undoubtedly minimized to favor a lesser environmental impact.	1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame.
197.7	Air Quality	Model	Benezene, dioxin, toluene, xylene, and formaldehyde are known to be toxic and carcinogenic even at minute concentrations. None were monitored individually in the draft EIS/EIR study.	Current aircraft-engine emissions data do not allow accurate modeling of these pollutants. Although hazardous air pollutants (HAPs) are not specifically addressed, Section 6.8 of the Supplemental DEIS/FEIR includes a discussion of public health. Because VOCs and PM_{10} emissions are lower with the Airside Project than without it, it can be concluded that from these emissions will also be lower with the Airside Project Alternatives, when compared to the No Action Alternative.
197.8	Air Quality	Model	Lead emissions were not assessed by the draft report (I:6-64).	Lead, in general, is not associated with airport-related emissions.
197.9	Dalay	Model	The EPA predicts a doubling of passenger capacity by 2010 at Logan... and Massport sees a 35.5% increase by 2010 (29 to 45 million passengers...), in which case the proposed plan will do little to alleviate congestion.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

LETTER 198

Monika M. Corneille
26 Admiral's Way
Chelsea, MA 02150
617-261-8459

March 10, 1999

The Honorable John Kerry
United States Senator
One Bowdoin Square, 10th Floor
Boston, MA 02114

Dear Senator Kerry:

STOP 14/32

Please take notice that I strongly support the residents who reside in the vicinity of Massport in protest against the proposed Runway 14/32. 198.1

I am urging you to examine your thoughts and to weigh the catastrophic consequences the proposed Runway 14/32 will impose on tens of thousands of residents throughout the regions of Chelsea, Revere, East Boston, Winthrop and others. Please also consider the impact on the ecology of the surrounding areas. At a critical time, where we must consider long term impact in an attempt to preserve not only our generation, but also our children's, the runway carries particular weight. We know that the ecological balance will be seriously affected everywhere in an enormously large region. In addition, we know that airplane noise levels will reach an all-time, intolerable high. The noise levels, as they exist now, have already caused serious physical and emotional damage to certain adults. Add the proposed runway, and most certainly many more adults, children, and large varieties of animal life will be affected. On top of the above, the entire region will be infused with additional toxins, be it from additional airplane exhaust, more ground transportation or anything else.

At the March 2nd Subcommittee Meeting on Transportation at Boston City Hall, Mr. **Blute** of Massport made it very clear that he has no interest in the personal welfare of the communities involved. He made it clear, simply by not mentioning any such words as: family life, succession, quality of life, and ecology. What he did emphasize, however, is that his **interest in its entirety is purely economic.** He used these words: more jobs, more business, more industry, being competitive, etc. He pointed out that tourism and commerce (the new convention center) will be seriously affected if Runway 14/32 is defeated. As to suggestions of alternative airports, he pointed out that the airport should not be further away than where it is now, that regional airports will not be utilized by the multitudes of tourists. It would be too painful for these people, and nobody would visit Boston any longer. Hence, revenue is lost. I believe that one has to live under certain

Thank you for your support in this vital life issue for our communities.

Sincerely yours,

Monika Corneille

Monika M. Corneille

cc: Mayor Thomas Menino
Senator Edward Kennedy
President Senator Thomas Birmingham
State Representative Eugene O'Flaherty
Chelsea City Council
Peter Blute
John Silva
Arthur Pugsley

Letter 198
Monika M. Corneille
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
198.1	General Opposition		...I strongly support the residents who reside in the vicinity of Massport in protest against the proposed Runway 14/32.	Comment noted.

John O'Connor
April 9, 1999

LETTER 199

Dear John,

For your information, I posted the following message on www.stop1432 under Sinergistic impacts, in response to Mark Lawrence's idea of collaborating in collecting the negative impacts these noise levels cause. I can be reached on 617-884-4232 or on e-mail under mcorneille@dttus.com at work or 3542@MSN.com at home.

Dear Mark,

I have been reading with great interest what you have to offer on the subject of the RUNWAY. I think that a collection of how the flying alarm clocks impact us is a very good idea. I am willing to collaborate on collecting harms and problems arising from noise and other pollution. Perhaps these will get someone's attention. I know that lots of people suffer emotional and physical trauma from all of these.

I have lived at my current address in Chelsea since 1987, having been fully aware that I live close to an airport. However, I have not been bothered by excessive noise until about four years ago. I had lived abroad for two years and during that time the picture changed. Ever since I repatriated, November 95, I have been making calls and writing letters to legislative bodies, Massport and the FAA.

Here is what I now experience. I now get anxiety attacks from the aggravation of the steady wake-ups and having to call Massport noise abatement early a.m., late p.m., and the middle of the night, only to receive a stupid answer such as "you have been affected by runway 33L, blah, blah, blah." Regurgitating things I already know. They also don't take down verbatim what we say to them. They monitor our comments for "quality control". I have made it clear to them that it is not quality control they monitor, but what we say to them is what they monitor, so that our anger gets curbed. We all know that if we threathen them verbally in our upset stages and something happens one day, it is us who the fingers will point to because we are already on record. As a normally non-violent person, I have been verbally aggressive and nasty to the personnel taking the calls. They know me by name and voice. My daughter lives in Jersey and drives a long way to bring the grand children to see me. THEY CANNOT SLEEP WHILE HERE - I AM NOW FORCED TO GO THERE IF I WANT TO SEE THE GRAND CHILDREN. I think that for sure is negative impact.

199.1

Let's bring these problems forth!

Regards, Monika Corneille Monika Corneille

Cc: Robert A. Durand
John De Villars

Letter 199
Monika M. Corneille
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
199.1	Noise	Impacts	[Current noise impacts in Chelsea are unacceptable.]	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.

LOUIS P. DISANO
43 BREAKWATER DRIVE
CHELSEA, MA 02150
617-887-0920

LETTER 200

April 21, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street – Room 2000
Boston, MA 02202

Dear Mr. De Villars;

It is with deep concern that I write you this letter. I am a resident in Chelsea, Massachusetts. The current AIR(Airfield Improvement Report) is not in the best interests of citizens living around the city of Boston.

Let me first say that I am in favor of economic growth and improvement in the Transportation systems of Boston. I believe in the improvement of New England, The Commonwealth of Massachusetts and the communities in and around Boston. I have lived in Boston and it's surrounding cities since I came here in 1986 to attend college. I have settled in Admiral's Hill in Chelsea with a purchase of a Beautiful Town House for two years with one major problem: Pollution of airplanes landing and taking off from Logan Airport.

I am continually disturbed and awakened from 6:00 AM to 12:30 AM from noisy planes flying overhead. My house shakes most of the time and I have a large double pane picture window with a huge crack across its width. This is a fact. Anything that can make these disturbances more frequent is completely unacceptalbe!

Any proposal must have the endorsement of the surrounding communities. The current Proposal is not adequate for the following easons: 200.1

1. FAA rules and guidelines were not followed. 200.2
2. Current data and studies were not taken into consideration
3. The originators of the proposal either have their own agenda or did not 'look outside the nine dots' and consider alternative ideas such as:

    1. A second major airport like: NY, LA, DC, Dallas, Houston, Chicago, SF/Oakland, etc.... 200.3
    2. Use of Hanscom Field Airport
    3. Regional Rail Transportation or other Modes of Transportation

This is very important to me as well as my neighbors. I ask for your help in making sure that our well being and safety are taken into consideration. I believe the politicians (Celluci, Birmingham, etc...) have been sold on this idea by big corporations and Massport. We need a Champion! Please! Before any more damage is done!

Very Truly Yours;

Louis DiSano

Letter 200
Louis P. DiSano
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
200.1	Environmental Review Process	FAA/NEPA	The current proposal is not adequate for the following reasons: FAA rules and guidelines were not followed	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. This document addresses FAA rules and guidelines.
200.2	Analysis Assumptions/ methodologies	Base year	Current data and studies were not taken into consideration.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. The appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year.
200.3	Regional Transportation	Regional Airports/Passenger Rail	The originators of the proposal...did not... consider alternative ideas such as: 1. A second major airport... 2. Use of Hanscom Field Airport 3. Regional Rail Transportation or other Modes of Transportation	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields. A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Chapter 2 of the Supplemental DEIS/FEIR provides discussion of the entire region's air transportation system and includes a discussion of alternative modes, specifically, high-speed rail and the extent of Massport's active involvement in this area. Refer to response to Comments 6.6 and 6.7.

Chelsea MA 02150-2154
Tel. (617) 887-2247

6 A.M.Sunday, March 7th,1999

Secretary of Environmental Affaitrs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02025

John C. Silva
Manager, Environmental Programs
Airports Division, ANE -600
New England Region
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Betty J. Desrosiers
Director, Aviation Planning
& Development
Massachusetts Port Authority
One Harborside Drive , Suite 200S
East Boston, MA 02128-2909

LETTER 201

Re: MassPort's Draft EIS/EIR (Logan Airside Improvement Planning Project ("Project")

The major obstacle to harmonious conflict resolution is the inadequacies of verbal (oral & written) communication ,e.g.:
I) each side unwittingly using identical terms for quite different meanings; with the consequence that both sides are partially correct and partially incorrect. But each side is only aware of their "correct " position and quite oblivious to, or tend to deny, their "Incorrect" points and the opposition's "correct" points.

II) Ambiguous terms which are crystal clear to one side but unclear, confusing, to the other.

Example of I above::

For rhetorical purposes a possibly theoretical case: a Chelsea City Councilor claims that Massports' predicted decibel contours have been and are wrong. Theoretical reality.: Massport opponents privately get decibel readings > 100. Massport claims 70. Opponents are using individual readings. Massport is using decibel averages. Maybe some readings did exceed 100 decibels but others were only 50 so average is 70. Both sides correct within their own context but incorrect in their opponents.

Examples of both I and II II above: A) unidirectional, B) capacity, C) quality of life.

A) Unidirectional - (Massport's meaning: "over the water,") Yet "unidirectional's" liability is its inevitable collateral bi-directionality; i.e.,the aviation version of "What goes around, - comes around.," "What lifts off. - must land." except for NASA space probes. But what lifts off 14 can't land there. It has to land on 9/27 or 15/33 Conversely what lands on 32 can't lift off there but also must do so on 9/27 or 15/33. That is the source of the increased flights over land.

Incidentally, "over the water" only solves the problem for densely populated areas off 9/27 and 15/33. But spend an hour on Long Island in the harbor when Logan is using 15 and 27 and you will experience the same debilitating effects as the densely populated areas. The only difference is that the population of Long Island is:

1) homeless,
2) Substance abusers
3) Pine St. Inn annex
4) Boston Fire Dept. Training area
5) Boston Police Dept. firing range.

201.1

So much for relative "quality of life".

B) Capacity

1) FAA - 200 operations/ hour 2) Massport- 120 operations/hour 3) Opponents - current operations/ hour. (A strict interpretation of the last criterion would mean that Logan was at capacity from the day it launched its first flight.)

C) Quality of life. How does one evaluate this? Is qualiity independent of quantity? or are they interdependent?
e.g. infrequent incursions on tranquility might not unduly desecrate a given "quality of life" whereas perpetual disruptions would completely destroy it.

Is this a dichotomy? or is there a transitional zone? And if so, how do you deal with it?

The above questions plague the controversy, yet need to be resolved to the satisfaction of all parties.- an extremely complex and frustrating task Hopefully the above makes a contribution to this challenge.

Respectfully submitted. Charlie Ferguson

Charlie Ferguson

Letter 201
Charlie Ferguson
Soldiers' Home
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
201.1	Noise	Runway Use	"over the water" only solves the problem for densely populated areas off 9/27 and 15/33. But spend an hour on Long Island in the harbor when Logan is using 15 and 27 and you will experience the same debilitating effects as the densely populated areas.	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.

Re: Hanscom/Logan

6 A.M.., Wednesday, April 14th, 1999

LETTER 202

My qualifications for speaking to the above titled subject are:

I flew a single engine land, tail wheel, fabric covered plane, naturally no de-icers, about 4 times/ year for 5 years from Lansing,Mich, across S. Ontario from Port Huran, Mich.-Niagara Falls.Invariably I hit lake effect weather in Ontario, blizzards in winter and cumulo-nimbus electrical storms the rest of the year

Twice I was forced down in Ontario pastures , fortuneately scaring cattle out of the way when landing and taking off. However, while studying my air charts and trying to determine my position the cattle would come and lick the fabric with their coarse tongues.I was afraid they would rupture it. .

Regardless, that was how I learned, not by trial & error, there was no room for error, but just dumb luck, how to jump a plane off a short field. Off course I had already learned in the same fashion, how to make a forced landing in short space.One of them was in late March with a wet snow falling. The snow loaded the leading edge of my wings so drag overcame lift. I could give it full take-off throttle and orientation but it would just mush along in level flight.

Another time I practically flew into the mouth of a hangar at Schenectady, NY, cutting the throttle and touching down rods from it. After refueling, 1 man sat on the tail while 2 others clung to the wing struts and they walked me a few 100 yards down the runway and turned me around, so I wouldn't ground loop.The man got off the tail , I gave it full throttle, the tail lifted off, the wingmen let go and I rose backwards like a hot air balloon, waving to my handlers as I rose. At 600' I made a U-turn and was on my way.

But I miscalculated. I neglected to allow for the fact that I would fly out ahead of the 70 mph tail wind, which I did shortly after take-off, over the Berkshires. My destination was Marlboro, but by the time I arrived it was too dark to land safely so I diverted to Hanscom, making my 1st ever landing there at night. I lacked a radio and navigation lights so they never even knew I came in.. So much for my flight experience

Both Hanscom and Logan squander their respective facilities. Planes which don't require the full runways should only be allowed one (1) take-off and landing/day; i.e., they could be based at those respective fields if that was convenient for their owner/operators, but do their business elsewhere.

There are 15, give or take a few, alternate regional ports which can handle probably at least 1/2 the traffic at both Hanscom and Logan ; Beverly/Danvers, TewMac, Lawrence, Nashua, Minuteman in Boxboro, Ft. Devens? despite Industrial Park and active military training base, could it still handle "touch & go's"?, Fitchburg, Long Hill? in Bolton, Sterling, Marlboro, Grafton, Norwood, Fall River, Otis and S. Weymouth. 202.1

Even discounting the de-commisoned segment of the ex-US Naval Training Station in S. Weymouth, most of the field and enough runway to handle smaller planes exist in Abington/Rockland. It is claimed that facility could interfere with Logan traffic. How did it manage when it was an active Naval Training Station?. or have planes grown larger and need more maneuvering space?.. Even so, it must be a mighty close call because it is not much closer to Logan than Hanscom, which bears no such complaint. 202.2

Bedford Depot on the old Bedford/Fitchburg rail line is 1.5 mi. from Hanscom. Active Lincoln Station with trains running to N Station frequently during rush hours, and regularly in between on the Fitchburg line, is < 5 mi. from Hanscom. Numerous options; bus shuttle service to both Bedford Depot and Lincoln. Three (3) Large Huey type passenger helicopter and Hover Craft routes; from Hanscom to Logan, and 1 loop each S & N. in the 128-495 corridor

Establish 2-way, incoming and outgoing, transfer stations at Goose Bay & Gander, Newfoundland, Guantanamo Bay, Hawaii and Anchorage ,AL.where U.S. arriving passengers could be Customized, i.e. pass customs, sorted for the appropriate destination, i e. Hanscom or Logan , and passengers departing H/L could be sorted for those respective transfer stations. .

Only Jumbo Jets, Huge heliocopters and Hover Craft would use Logan. The verticals, i.e., helicopters and Hover-Craft, could have their own vertical tube flight paths in the dead spaces between runways.. Would narrow tunnels under the runways for access to these vertical tubes be possible, or would the runways collapse under the impact of the Jumbo Jets? If so I believe thre is sufficient space to locate these "tubes" where no runways would require crossing.

Re: Hanscom/Logan

Conducting "touch & go's" at Hanscom is courting disaster! Not at Hanscom, but elsewhere. On a long runway you can make 2 "touch & go's" in 1 pass. Also the pilot surrenders control to the tower so s/he is not responsible. But once these pilots get their "wings" they will be operating primarily in and out of non-controlled ports, thus making them responsible for their own flight paths and those of other planes using the same field. They need to know the "rules of the air" and how to apply them. They won't learn that at Hanscom as long as the tower provides all this for them. They will only learn it thru experience at the non-controlled ports. Thus it follows that all "touch & go" practice should be done at the non-controled fields and not at Hanscom.

To summarize; only planes requiring the Hanscom and Logan long runways are allowed regular flight service at these 2 Massport Fields. Everyone else is allowed one (1) take-off and landing/day if they wish to be based at H/L but conduct their business at the respective alternate ports. .

202.3

Two (2) final ?'s which Massport should answer are:

1) Whatever became of the STOL (Short Take-of and Landing) Eastern Air Lines experiment of '69-'72?

2) What was the cause of the precipitous drop in activity at Worcester? e..g., why did it originally thrive if access is so poor? Was it the Mass. Pike giving quicker access to Boston? Wouldn't want history to repeat itself; i.e., revive Worcester only to have it wilt again like flowers in periodic droughts.

Respectfully, Charlie Ferguson

Charlie Ferguson
Soldiers' Home
91 Crest Ave
Chelsea, MA 02150
Tel: [illegible]

Letter 202
Charlie Ferguson
Soldiers' Home
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
202.1	Regional Transportation	Regional Airports	[Massport should divert flights to]... Beverly/Danvers, TewMac, Lawrence, Nashua, Minuteman in Boxboro, Ft. Devens....	These airports are equipped to handle only general aviation activity, which represents 5 percent of Logan Airport activity. Most general aviation activity at Logan Airport is corporate jets and the destination of the passengers is downtown Boston.
202.2	Regional Transportation	Regional Airports	It is claimed that [South Weymouth] could interface with Logan traffic. How did it manage when it was an active Naval Training Station? ..or have planes grown larger and need more maneuvering space?... Even so, it must be a mighty close call because it is not much closer to Logan than Hanscom, which bears no such complaint.	Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport (as of January 15, 2000). Massport plays no role, however, in the decisions of private airlines regarding air service routes or service levels. As proprietor of Logan Airport, Massport's primary responsibility is to supply, operate, and maintain Logan Airport's infrastructure which includes the runways, taxiways, terminal buildings, parking facilities and access roads. As a recipient of federal airport grants, Massport must adhere to grant covenants that require it to operate Logan Airport in such a way so as to ensure access and availability for public use on fair and reasonable terms and without unjust discrimination.
202.3	Regional Transportation	Regional Airports	[To reduce congestion Massport should require]...only planes requiring the Hanscom and Logan long runways are allowed regular flight service at these 2 Massport Fields. Everyone else is allowed one (1) take-off and landing/day if they wish to be based at H/L but conduct their business at the respective alternate ports.	Refer to response to comment 202.1.

April 11, 1999
200 Captains Row
#101
Chelsea, MA. 02150

LETTER 203

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge St.
Boston, MA.02133

Dear Mr. Durand:

I am opposed to the runway 14/32 expansion at Logan Airport. The time has come to "share the wealth" with other, wealthier communities like Lexington, Bedford, and Concord. Instead of building another runway at Logan, other sites should be used. I will not support any politician who panders to the wealthier communities. 203.1

Sincerely yours,

Patricia Grasso

Patricia Grasso

Letter 203
Patricia Grasso
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
203.1	General Opposition		I am opposed to the Runway 14/32 expansion at Logan Airport.	Comment noted.

LETTER 204

February 28, 1999

Secretary Robert Durand
c/o MEPA
100 Cambridge Street
Boston, MA 02202

RE: **Runway 14/32 EIR Public Comment**
Kowalczyk - 37 Winnisimmet Chelsea

Dear Mr. :

As a Resident and Home Owner in Chelsea, my specific request is concerning the environmental burden borne by my resident community. You are aware of the local traffic patterns and noise generated by the proximity of the MASSPORT's Logan Airport. I am requesting that the following be addressed in the EIR prior to approval:

- Local Traffic Patterns - The volume of additional traffic generated by the airport expansion should be specifically quantified and impacts on local traffic patterns should account for the fact that Chelsea bears the burden of the economic and time savings most commercial operators use in determining routing. Accommodations for the new tunnels and the central artery depression will have little impact on reducing traffic flow through Chelsea. Please include considerations for accelerating the approval for the Haul Road around Chelsea. 204.1

- Noise - The quantification and monitoring of noise will have little effect on any decision to expand the runway once the approval is given. Tangible mitigation of noise must be included in the EIR which specifically addresses the impact to our community. Recommendations for noise attenuation such as sound proofing windows or regional traffic pattern control to provide relief though allocation of fly over patterns during specific times are two opportunities to share environmental burdens. 204.2

My appeal to MASSPORT lacks the extensive documentation other opposition groups may have amassed during the EIR process. My appeal is with MASSPORT's conscious to respect communities such as Chelsea which will bear the burden of Project 14/32 while greater Boston realizes the economic benefits. MASSPORT is empowered with the public trust, the conscious of the common good. Rules and regulations not with standing, MASSPORT is faced now with an increasing balance of political and economic compromise. The EOEA faces the same pressure.

The economics of large public sector infrastructure is not new to engineers. What is new is the realization that environmental burden can be quantified. Subjective impacts such as vehicle traffic, noise, and air quality assume real dollar value. Historically these quality of life issues have succumbed to lack of technical measurement and political fillerbustering. Today as result of continuing public outcry to quantify the values assigned to these burdens, public agencies are less likely to compromise and endorse projects for mutual exchange among more politically savvy representatives. Today an educated public presents their own engineering opinions and requires increased accountability for the once sacred cow of best engineering judgement.

Apparently the message has been already been received by individuals who have expressed their opposition to MASSPORT's plans such our local representative, the respected Preston G. Galarneau, Jr.. Be that as it may, we have a long way to go before the values of environmental burden are equally shared and any proposal for a second airport within the Hub area is considered seriously. The underlying theme of "Jobs, Jobs, Jobs" has a way of influencing the most unbiased of candidates and in the end it will be our community leaders and representatives who decide and decide they will based on MASSPORT's and EOEA's negotiated concessions.

My opinion of the expansion plans for MASSPORT's runway 14/32 is one of many who have attended public meetings and written to you. But I am not empowered with the authority of decision. You are the authority. You are our conscious, our vested partner in the millennium to come, our overseer. You will decide the impact of the future environmental risk Chelsea will bear.

Understand full well that we are a community already burdened with environmental compromise - noise, traffic, air quality, parking, and sewerage. You and no one else will present your best engineering judgement of the values these burdens bear on our future quality of life. We all know your values will fall far short of any value Chelsea can express at this time. No one can measure the price of a compromised quality of life. We can only ask for our share of environmental equity. If history is any indication, the plans for any environmental relief follow a far different approval process when supported only by special interest groups lacking the driving economic pressure which industry will use to lobby approval of project 14/32. Chelsea has no other option than to lobby EOEA to make the mitigation proposals an integral part of the project approval itself. No other plan will be acceptable. Separating environmental equity from the economics of our regional politics will not be tolerated. If we are to suffer for the greater Boston Regional common good then let us be compensated for our burdens here and now with the approval process for 14/32.

204.3

Consider your options and know this, 'if EOEA's politically compromised understanding of the current environmental burdens borne by Chelsea is less than MASSPORT's economic gain then rest assured like our forefathers who boarded the British ships and tossed the tea into the harbor - the Residents of Chelsea will do the same on MASSPORT's runway'.

Thank you again for your time and understanding of our matters.

Very truly yours,

Joseph S. Kowalczyk, P.E.
37 Winnisimmet Street
Unit 3L - Owner & Resident
Chelsea, MA 02150

cc: Honorable Thomas F. Birmingham, Senate President
Preston G. Galarneau,Jr. , District 8 Chelsea City Councilor
Jeffery Buck, President Chelsea Waterfront Association
Meridian Wharf Condominium Association

Letter 204
Joseph S. Kowalczyk
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
204.1	Ground Transportation	Access to Logan	...The volume of additional traffic generated by the airport expansion should be specifically quantified and impacts on local traffic patterns should account for the fact that Chelsea bears the burden of the economic and time saving most commercial operations use in determining routing.	The Airside Project does not result in additional demand for ground access services. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan, targeted HOV shares, forecasted Vehicle Miles Traveled, and trips by mode for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis. The *Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR) provides a status report on Massport's ground access initiatives and HOV ridership for 1999.
204.2	Noise	Mitigation	Tangible mitigation of noise must be included in the EIR which specifically addresses the impact to our community.	To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.
204.3	Alternatives	Runway 14/32	Chelsea has no other option than to lobby EOEA to make the mitigation proposals an integral part of the project approval itself.... If we are to suffer for the greater Boston Regional common good then let us be compensated for our burdens here and now with the approval process for [Runway] 14/32.	Massport's mitigation measures are reinforced through compliance with M.G.L. Chapter 30A, Section 61 and through specific state and federal certificates approving projects that have mitigation. The status of the Section 61 Finding commitments are tracked and reported in the *Logan Airport 1999 ESPR* (previously GEIR). See also the Proposed Section 61 Findings in Section 8.7 of the Supplemental DEIS/FEIR.

February 28, 1999

LETTER 205

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street - Room 2000
Boston, MA 02202

RE: **Runway 14/32 Expansion Plans**

Dear Mr. Secretary:

As a Resident and Home Owner in Chelsea, my specific request is for your office to consider the overwhelming environmental burden borne by the City of Chelsea. I am requesting that the following be addressed prior to any expansion plan is supported:

- Local Traffic Patterns - The volume of additional traffic generated by the airport expansion should be specifically quantified and impacts on local traffic patterns should account for the fact that Chelsea bears the burden of the economic and time savings most commercial operators use in determining routing. **Considerations for accelerating the construction of the Haul Road around Chelsea must be accelerated.** 205.1

- Noise - Tangible mitigation of noise must be included in the EIR which specifically addresses the impact to our community. **Recommendations for noise attenuation such as sound proofing windows are necessary even without the expansion.** 205.2

- Alternative Airports - Boston's infrastructure can no longer bear the burden of Logan's expansion demands. Alternative studies completed by Massport have erroneously written off Hanscom, Providence, Worcester, and Manchester Airports to support business and area growth by distributing the environmental burdens. **An "independent committee" must be assigned to develop their own opinion of Massport's 14/32 expansion using professionals and experts others than those now "coaching" Massports "findings".** 205.3

Please know that I support economic growth for Boston, the Commonwealth, and new England but not at my Community's expense. Stop the runway, investigate alternate airport expansions and support equitable sharing of the environmental burdens among the Commonwealth.

Thank you again for your time and understanding of our matters.

Very truly yours,

Joseph S. Kowalczyk, P.E.
37 Winnisimmet Street
Unit 3L - Owner & Resident
Chelsea, MA 02150

Letter 205
Joseph S. Kowalczyk
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
205.1	Ground Transportation	Access to Logan	...The volume of additional traffic generated by the airport expansion should be specifically quantified and impacts on local traffic patterns should account for the fact that Chelsea bears the burden of the economic and time savings most commercial operators use in determining routing.	The Airside Project does not result in additional demand for ground access services. Refer to the *Logan Airport 1994/95 GEIR* which includes Massport's Ground Access Management Plan, targeted HOV shares, forecasted Vehicle Miles Traveled, and trips by mode for the 37.5 million and 45 million passenger levels that were studied in the Airside Project analysis. The *Logan Airport 1999 Environmental Planning and Status Report* (previously GEIR) provides a status report on Massport's ground access initiatives and HOV ridership for 1999.
205.2	Noise	Mitigation	Tangible mitigation of noise must be included in the EIR which specifically addresses the impact to our community. Recommendations for noise attenuation such as sound proofing windows are necessary even without the expansion.	To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, and also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR*. For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.

Code	Topic 1	Topic 2	Comment	Response
205.3	Regional Transportation	Regional Airports	Alternative Airports – Boston's infrastructure can no longer bear the burden of Logan's expansion demands. Alternation studies completed by Massport have erroneously written off Hanscom, Providence, Worcester, and Manchester Airports to support business and area growth by distributing the environmental burdens. An "independent committee" must be assigned to developed their own opinion of Massport's 14/32 expansion using professionals and experts other than those now "coaching" Massport's "findings".	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies have concluded that The Airside Project at Logan Airport, the expansion of the regional airports, and the implementation of high-speed rail are all necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of regional transportation alternatives to Logan Airport and steps Massport has taken to foster increased use of these alternatives. Massport has a history of engaging in cooperative regional transportation planning and continues its efforts to promote an efficient and balanced regional transportation system. Massport's most recent endeavors include its co-sponsorship of the Regional Transportation Summit of New England Governors in November 1999, attendance at a second summit in December 2000, and its assumption of operating responsibility for the Worcester Regional Airport in January 2000. Refer to Section 2.9 of the Supplemental DEIS/FEIR for a discussion of Massport's initiatives in support regional transportation alternatives.

100 CAPTAIN'S ROW CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

LETTER 206

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the 100 Captain's Row Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project. 206.1

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over head, a salt pile on another side, oil tank and asphalt facilities on our shores. and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood. 206.2

First and foremost, the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The real data, obtained by a permanent noise monitor located on Admiral's Hill, indicates we should be eligible for soundproofing based on current noise levels! The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely the noise impacts on our area. We also feel that soundproofing does little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park, does not help 206.3

us as we try to enjoy a sea breeze through open windows in the summertime and does not prevent us from interrupting conversation as we enjoy our pool area.

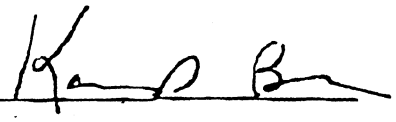
We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants – always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate. 206.4

Naturally we were upset to learn that other alternatives such as a thorough regionalization plan including ALL other options was not included. Additionally, we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered because 115 operations per hour understates the true benefit of this alternative. Why wasn't a second airport examined? 206.5

While Massport refuses to admit the Airside Improvement Planning Project will expand capacity at Logan, Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations. Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea. 206.6

Chelsea is undergoing a modern day renaissance. We have had to fight harder than most to turn the City around. As this proposal is being examined we are watching the value of our homes rise. We have a new school system and a local government committed to undoing the past. We were recently honored as an "All America City," in recognition for our ability to address the problems confronting us. Our budget is balanced for the first time, and we are investing millions in our infrastructure in order to move forward into the next century. The proposed expansion of Logan Airport is the single largest threat we face. If this runway is built, years of hard work could be undone in an instant.

Sincerely,

Karen Brown
Trustee, 

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

LEEWARD HEIGHTS CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the Leeward Heights Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over head, a salt pile on another side, oil tank and asphalt facilities on our shores, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood.

First and foremost, the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The real data, obtained by a permanent noise monitor located on Admiral's Hill, indicates we should be eligible for soundproofing based on current noise levels! The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely the noise impacts on our area. We also feel that soundproofing does little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park, does not help

us as we try to enjoy a sea breeze through open windows in the summertime and does not prevent us from interrupting conversation as we enjoy our pool area.

We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants – always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate.

Naturally we were upset to learn that other alternatives such as a thorough regionalization plan including ALL other options was not included. Additionally, we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered because 115 operations per hour understates the true benefit of this alternative. Why wasn't a second airport examined?

While Massport refuses to admit the Airside Improvement Planning Project will expand capacity at Logan, Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations. Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea.

Chelsea is undergoing a modern day renaissance. We have had to fight harder than most to turn the City around. As this proposal is being examined we are watching the value of our homes rise. We have a new school system and a local government committed to undoing the past. We were recently honored as an "All America City," in recognition for our ability to address the problems confronting us. Our budget is balanced for the first time, and we are investing millions in our infrastructure in order to move forward into the next century. The proposed expansion of Logan Airport is the single largest threat we face. If this runway is built, years of hard work could be undone in an instant.

Sincerely,

James Bradley
Trustee,

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

CLIPPER CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the Clipper Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over head, a salt pile on another side, oil tank and asphalt facilities on our shores, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood.

First and foremost, the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The real data, obtained by a permanent noise monitor located on Admiral's Hill, indicates we should be eligible for soundproofing based on current noise levels! The use of the same model to predict the impact of the dramatic increase in flights over our heads will surely the noise impacts on our area. We also feel that soundproofing does little to mitigate the noise impact. Sound insulation does not protect our children when they are playing in the park, does not help

us as we try to enjoy a sea breeze through open windows in the summertime and does not prevent us from interrupting conversation as we enjoy our pool area.

We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants – always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate.

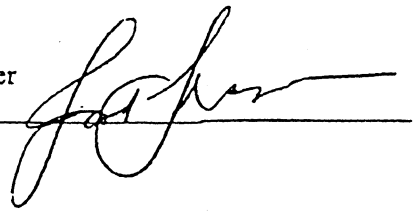
Naturally we were upset to learn that other alternatives such as a thorough regionalization plan including ALL other options was not included. Additionally, we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered because 115 operations per hour understates the true benefit of this alternative. Why wasn't a second airport examined?

While Massport refuses to admit the Airside Improvement Planning Project will expand capacity at Logan, Federal planning policy establishes that this project must be considered and evaluated as stimulating growth in aircraft operations. Nothing has been done to determine the traffic impacts associated with expected increases in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea.

Chelsea is undergoing a modern day renaissance. We have had to fight harder than most to turn the City around. As this proposal is being examined we are watching the value of our homes rise. We have a new school system and a local government committed to undoing the past. We were recently honored as an "All America City," in recognition for our ability to address the problems confronting us. Our budget is balanced for the first time, and we are investing millions in our infrastructure in order to move forward into the next century. The proposed expansion of Logan Airport is the single largest threat we face. If this runway is built, years of hard work could be undone in an instant.

Sincerely,

Jack Fraser
Trustee,



CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

ADMIRAL'S WAY CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the Admiral's Way Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over head, a salt pile on another side, oil tank and asphalt facilities on our shores, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood.

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Sincerely,

John Marsh, III
Trustee

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

BREAKWATER CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the Breakwater Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

It has come to our attention that the new runway will allow for a tripling of flights over Chelsea. Enough is enough! Our health is currently jeopardized by hundreds of thousands of vehicles travelling over the Tobin Bridge on one side, airplanes arriving and departing over head, a salt pile on another side, oil tank and asphalt facilities on our shores, and an onslaught of heavy truck traffic associated with all of them. We can not accept another assault on the quality of life in our neighborhood.

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We are also disturbed about the DEIR/S' lack of consideration of the Environmental Justice issue. Chelsea is a City of immigrants – always has been and always will be. We believe it is not coincidence that we have been targeted with the brunt of the noise impact of the proposal. But what about the other impacts on the low income, minority residents of Chelsea? Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on us. In this sense the document also seems woefully inadequate.

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Sincerely,

Richard Trauth
Trustee,

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

100 COMMANDANT'S WAY CONDOMINIUM TRUST
c/o Lundgren Management Group, Inc.
121 Captain's Row
Chelsea, MA 02150

April 22, 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Logan Airside Improvements Planning Project, Boston, MA
EOEA #10458

Dear Secretary Durand:

As a trustee of the 100 Commandant's Way Condominium Trust of Admiral's Hill in Chelsea I am writing to voice the association's opposition to Massport's "Logan Airside Improvement Planning Project."

The Draft EIR/S contains many discrepancies and inadequacies and fails to address our concerns regarding the health impacts of a new runway on our neighborhoods. For the reasons detailed below, and we are sure many more, we encourage you to find this document inadequate and respectfully request the FAA withdraw support for the project.

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Sincerely,

Sheila Cherkas
Trustee,

CC: Mr. John Silva, FAA
Mr. John DeVillars, EPA

Letter 206
Lundgren Management Group, Inc.
Private Citizens: Chelsea

100 Captain's Row Condominium Trust – Karen Brown, Trustee,
Leeward Heights Condominium Trust – James Bradley, Trustee,
Row Condominium Trust – Karen Brown, Trustee,
Clipper Condominium Trust – Jack Fraser, Trustee,
Admiral's Way Condominium Trust – John Marsh, Trustee,
Breakwater Condominium Trust – Richard Trauth, Trustee,
100 Commandant's Way Condominium Trust – Sheila Cherkas, Trustee

Code	Topic 1	Topic 2	Comment	Response
206.1	Environmental Review Process	MEPA	....we encourage you to find this document inadequate and respectively request the FAA withdraw support for the project.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
206.2	Public Health	Effects	[The proposed project would have adverse cumulative impacts on Chelsea.]	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
206.3	Noise	Model	...the method used to measure the noise impact is inaccurate. We have learned through numerous conversations with Massport and the FAA that the yearly average noise level "predicted" by the integrated noise model has consistently underestimated the actual noise levels affecting Chelsea. The real data, obtained by a permanent noise monitor located on Admiral's Hill, indicates we should be eligible for soundproofing based on current noise levels!	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR.* For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.
206.4	Environmental Justice	Impacts	Nothing was done in this report to address the Environmental Justice issue regarding the negative health impacts on [Chelsea].	The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Environmental and health studies relating to the City of Chelsea were reviewed to assess the potential for other cumulative or multiple adverse exposures, since the increase in population within the 65 dB DNL contour associated with the Preferred Alternative is primarily within this community. A review of issues within Chelsea indicated a concern regarding toxic discharges from industrial facilities, truck emissions, and contamination of Chelsea Creek. While it is true that sound insulation does not alleviate noise exposure outside, it is an effective technique that has been implemented effectively, not only at Logan Airport, but also at numerous other airports throughout the United States.

Code	Topic 1	Topic 2	Comment	Response
206.5	Alternatives	Peak Period Pricing	...we believe a peak-hour pricing plan analyzing the delay effects of 80, 90, and 100 operations per hour should have been considered because 115 operations per hour understates the true benefit of this alternative. Why wasn't a second airport examined?	The Airside Project analysis of PPP examined an operations threshold of 110 operations per hour, which is already below Logan Airport's normal operating capacity of 120 operations per hour. There is no legitimate operational justification for imposing a peak period surcharge at an operation level significantly lower than Logan Airport's normal operating capacity which is achieved 80 percent of the year without any delays. Even at 75 operations per hour, Logan Airport would be subject to delays from northwest wind conditions. The Airside Project analysis in the Airside Project Draft EIS/EIR and in the Supplemental DEIS/FEIR indicates that, with the Preferred Alternative, Logan Airport can accommodate existing and foreseeable future levels of demand without imposing a drastic administrative restriction to artificially revise Logan Airport's existing capacity. Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.
206.6	Public Health	Effects	Nothing has been done to determine the traffic impacts associated with expected increase in operations associated with this proposal. Chelsea can expect nothing but a dramatic increase in airport related heavy truck activity. The effect of these trucks on health is well documented by the EPA, yet the Draft EIR/S does not address the negative impacts of more truck traffic and congestion on Chelsea.	Cargo activity, which is associated with truck traffic, is not expected to increase as a result of any of the alternatives.

LETTER 207

April 22, 1999

Secretary of Environmental Affairs: MEPA Office
Mr. Arthur Pugsley
100 Cambridge Street
2oth Floor
Boston, MA 02202

Re: EOEA No. 10458: Massport Runway 14/32 Proposal

Dear Mr. Pugsley,

Attached are my comments on Massport's Joint EIS/EIR on Runway 14/32, with appendices. I appreciate the environmental agencies' careful consideration of the public and community comments on this proposal. After careful review, I urge either the withdrawal of the plan or its rejection as a proposal that is inconsistent with the requirements of the National Environmental Policy Act, and unresponsive to the scoping directives of the secretaries and to the concerns of the public. 207.1

Sincerely,

E McGrath

Elaine McGrath
40 Beacon St.
Chelsea, MA 02150

Enc: Comments, w/7 Appendices

INTRODUCTION

Massport's Draft EIS/EIR on its 14/32 proposal is inconsistent with the letter and the spirit of the National Environmental Policy Act(NEPA).Furthermore, it has failed to respond to specific scoping directives in the Letters and Certificate issued by EPA, MEPA and DEP in 1995. 207.2

NEPA requires agencies to take a hard look at the environmental consequences of their proposals, and to conduct a detailed and thorough anaylsis of alternatives and to make this information available to the public. Massport has not done this. There are fatal flaws with its analyses of impacts, alternatives and environmental justice. The result is that this proposal gives the wrong impression of the human, environmental impacts of its current and proposed operations. The ground and air impacts of its operations are not extrememly limited or tolerable and Massport's mitigation is not as effective as they claim. The analysis systematically understates the noisy, unhealthful, dirty, dangerous and ugly aspects of Logan. 207.3

The proposal specifically fails to respond to directives intended to uncover these impacts, in the scoping letters of Secretaries Coxe and DeVillars, as well as DEP. Among Secretary Coxe's directives were: the need for the Draft EIS/EIR to be sensitive to the issue of environmental justice; detailed analysis of noise impacts; the need to address the effectiveness of alternative methods of achieving PRAS goals which do not rely on airfield improvements; the need for elaboration of the big picture issues regarding mitigation (Vol. II, C1-35). Secretary DeVillars emphasized the tremendous impact on communities and the region in terms of air quality, traffic and noise from Logan; the significant increases in cargo operations, with instructions 207.4

to assess the impact on Chelsea, and, in a related matter, asked Massport to evaluate major roadway intersections for air quality violations. The EPA also recommended that Massport fully disclose impacts to the communities and address mitigation options including restrictions on operations. (Vol. II, Letter 1). DEP emphasized parking issues in Chelsea (Vol. II, Letter 2.3). Massport omits many of these issues from its analysis, or simply evades the inquiry (see Vol. II. 1-12,2-3 Responses).

Regarding the analysis contained in the proposal, there are at least 3 critical flaws: systematic understatement of impacts, and related to this, failure to do a meaningful alternatives analysis or a sensitive environmental justice analysis.

IMPACTS ANALYSIS

Massport's impacts analysis understates impacts in a number of ways that have the cumulative effect of systematically minimizing Logan's impacts on the surrounding communities:

- -failure to account for the context and intensity of growth in airport operations, both land and air
- -unreliable modeling of impacts
- -inadequate and inaccurate monitoring of impacts and of mitigation
- -failure to report or take into account community feedback
- -persistent use of data known to be flawed, and unwillingness to correct mistakes
- -systematic and knowing selection of data so as to minimize the appearance of impacts.

207.5

The impacts analysis is essential to understand how a proposal will affect the environment and the people who live with the impacts. The context and intensity of the impacts are a first, crucial part of this analysis. Anyone unfamiliar with the communities surrounding the airport would be severely challenged to extract the big picture from this proposal, where information on the communities is buried in repeated PR for Massport's preferred alternative. Where is the accounting for the environmental damage in places like Chelsea, East Boston, Revere and Winthrop: the hundreds of thousands of passenger and cargo vehicles every day, the community disruption of hours of low-level landings and take-offs every day, every weekend, all day, and all night? To read this proposal is to wonder why Winchendon and Bedford and Concord were so upset at the prospect of an airport, since Massport asserts that overall, things aren't so bad and they're getting better, because of Stage 3 aircraft.

In the first place, as a matter of common sense, Massport's assertion that noise exposure from current flyovers is less and will be less than it was in the peak, baseline year of 1993, is symptomatic of the problem with Massport's credibility and the quality of its analysis. In 1993, there were 493,000 operations; in 1998, 507,000 (Vol. I, 1-9). Despite the increased number of operations, Massport claims that the noise exposure is less because of increased use of quieter Stage 3 aircraft (Vol. I, 6-9 amd passim). However, what they fail to highlight, but what their 1994/1995 GEIR states explicitly, is that Stage 3 aircraft are not appreciably quieter on landing and take-off, the noisiest operations which are the ones that affect the surrounding communities. Contrary to Massport's disingenuous assertions, Stage 3 aircraft do not and cannot reduce the noise exposure of the surrounding communities, which are bludgeoned with the noise of take-offs and landings; Massport actually admits this, in a buried paragraph in its noise analysis, which otherwise invokes the Stage 3 mantra (Vol. I, 5-24). For operations to increase by 14,000 will increase, not decrease noise exposure. 207.6

Another common sense problem with Massport's impacts analysis is its claim that routing 14/32 flights over the water will provide relief. Massport states, in a meaningful but too subtle way, that when 14/32 flights go over land, as they have to inevitably, they will over fly over communities now affected (Vol. I, 6-10). This means more impacts on already strained communities, not less.

Another basic source of understatement is more indirect: the use of outdated PRAS goals to justify impacts as "community-approved". This is misleading in the extreme. PRAS goals are repeatedly invoked as a justification for increasing impacts to certain neighborhoods, such as Chelsea, in an 207.7

attempt to achieve a "rough justice" of pain, by moving the problem of impacts around. However, these goals were developed in 1982-83 (Vol. I, 5-17,5-20), when airport land and air operations were a fraction of what they are now. Furthermore, it is inappropriate to call them "community-approved" in the face of community criticism of the way they were set and are used by Massport. In 1982, the number of operations was 275,000; in 1998, it was 507,000 (Vol. I, 1-9) In 1982, Massport handled 503,000,000 lbs of air cargo (think 18-wheeler trucks in your neighborhood!); in 1998, there were 970 MM (Vol. I, 1-9). PRAS goals also exclude non-jet operations (Vol. I, 5-18), and thereby do not account for all operations. In addition, the PRAS system has no ability to adjust automatically to changes in demand; whatever changes were made in 1996's "enhanced PRAS" to deal with this skewing is unclear from this proposal (Vol. I, 5-20,5-21).

Whatever choice community residents were given in the early 1980's regarding operational goals at Logan, the use of outdated PRAS goals when operations have risen 112% from 1977-1997 (Vol. I, 1-9), is not appropriate. It is a different orderof magnitude to absorb 30 or 40% of 275,000 vs. 507,000 operations. It is disingenuous of Massport to invoke such outmoded "community" goals in the face of the current volume of its operations, and the long-standing protests from communities that they can't take any more (see Vol. II, Letter 10). The communities have been clear that current operations impose unacceptable and destructive air and noise pollution on residents. The PRAS goals are not the community goals; the community goals are relief, "sufficient relief" (a Massport concept) from the nuisance of airport ground and air operations, the right to quiet enjoyment of their homes,which is guaranteed by law, and livable communities. Those are the community goals.

207.8

Any model is only an estimate. In addition to the above problems with inputs to its model, Massport's INM noise modelling has fallen short of actual impacts in several instances. (See, e.g., failure to follow ROD Runway 27 allocation, which undersated 65 dB DNL contours; Chelsea City Councillor Galarneau's Beacon St. monitor test at 70 DN_L in 1998; Vol. I, 5-24). The INM, state-of-the-art computer-generated noise contour map (Vol. I, 5-3,5-12, 5-15) stands in the face of experience to the contrary, and the deficiencies of Massport's modelling are only aggravated by its inadequate and amateurish monitoring.

In Chelsea, for example, the noise contour map asserts that no one currently, or for many years, has fallen within the 65dB cutoff (App. 1). The city itself has protested this as untrue (Vol. II, Letter 16). The numbers of people in Chelsea who are routinely subject to 65dB airplane noise are well above Massport's estimates, in several spots: the waterfront east of the Tobin Bridge, Admiral's Hill, Bellingham Square and the peak streets on the hills. Massport's modelling doesn't reflect this. Its monitoring either doesn't monitor thsese spots at all or else understates impacts by allowing monitors to do down without repairing them for up to 2 years (App. 2).

When and where monitoring has been done in Chelsea, readings are routinely in the 90-100 dB range (see App. 3), and meet the 70 dN_L standard for average noise (based on readings at Monitor 15 at Admiral's Hill, and readings from temporary monitor on Beacon St. in 1998). However, actual noise impacts are not adequately or consistently monitored at some hot spots, again depressing the impact numbers. For 2 years, Massport's noise monitor on Admiral's Hill in Chelsea was down, including the entire baseline year of 1993 (see App. 2). The same problem occurred for 2 weeks during the short period in 1998 when Councillor Galarneau had a temporary monitor on Beacon St.

Furthermore, noise impacts are also understated because monitors are not placed to capture the full impacts of Massport's noise and air pollution (see Vol. II, 31-45). Chelsea, for example, has only 1 noise monitor, on Admiral's Hill, and 1 air monitoring station, at the Soldier's Home on Powderhorn Hill. These hills are 2 of the high points in the city, each removed from the most severe impacts of Massport's operations. As planes take off or land, they pass over the waterfront at altitudes well below 300 feet and drop, or rise as they approach Admiral's Hill. The impacts recorded on the hill are less than what the waterfront residents experience, for this reason. The 18-wheeler blitzkrieg occurs outside the gated, truck-exclusion Admiral's Hill area, again on the waterfront. The air and noise pollution from hundreds of 18-wheelers on their way to the airport via the Beacon Street off-ramp, travelling through densely-populated 50-ft. streets every day, plus the millions of passenger vehicles to the airport every year, all travel through the waterfront area. This area is at the other end of Chelsea from the Powderhorn Hill monitor. The waterfront hot spot is simply not monitored; and Massport is allowed to claim that no monitoring means no impacts.

If you fail to maintain monitors in working condition for as long as 2 years, if you manipulate calculated vs. measured LDN values in your presentation of data (compare App. 2 with Vol. I, Table 5.2.4), and if you do not monitor noise hot spots, then your statistics are all skewed so as to minimize the true extent of impacts.

To arrive at its numbers, Massport has also disregarded another source of information that is a reality check on its modelling and monitoring: public feedback. In Chelsea,

and in other affected communities, residents have complained for years that impacts have been unbearable. One flight path tracks the street where I live in Chelsea: Beacon Street. Planes fly almost daily, and routinely on Saturdays and Sundays starting at 6 a.m., for hours (14.5 this summer was a record), often past midnight, and throughout the night. They fly at intervals of 60 seconds or less very often, and this is for hours. On the Chelsea waterfront, planes fly right above the roofs of 3-story 45-ft brick rowhouses. A Massport official at the Chelsea City Council meeting of March 3, 1999, stated that planes coming in for a landing over the waterfront (on 15R/33L) are at approximately 268 feet. They are closer than that to the roofs. The screaming, booming, thundering jet noises are painful and profoundly disruptive to normal life. It is impossible to hear someone speaking to you from 3 feet away. You cannot hear conversation, TV, music or yourself think; this is indoors. It is difficult to fall asleep or stay asleep. Brick houses vibrate. Bones vibrate. All the health effects of extreme noise exposure, and the consequences of constant triggering of the "flight or fight" response define the quality of life in the areas around the airport. Chelsea's waterfront is one of the oldest parts of the city, settled in the 1600's. Many of the rowhouses were built in the 1800's; the house where I live was built in 1865. These buildings were not designed to withstand the repeated impacts of jumbo jets flying overhead at less than 300 feet. The EPA goal of a DNL of 45 dB inside a home (Vol. I, 6-57) would be a welcome relief on the waterfront; of course, Massport chooses to use the significantly higher FAA standard of 65.

Massport officials know that more people in Chelsea are subject to much more noise than their modelling captures in the noise contour, or their 1 monitor shows. Massport

representatives, including Peter Blute and Betty Desrosiers, have conceded this as a matter of public record in Chelsea City Council meetings and at the presentation at the Chelsea YMCA on 1/19/99. But Massport has not let information get in the way of their analysis.

The failures of Logan's modelling and monitoring have been raised for years by many communities. They are known to Massport and the FAA, who do not reflect them in this proposal and did not respond to them in the "Responses" to Comments (see, e.g., Vol. II, 10.9, 13, 14.12, 16.6, 31.47, and Vol.1, 6.5). The agencies have in fact denied any community disruption (Vol. I, 6-5). Massport does not include in its proposal the persistent community protests, the noise complaint data from its hotline, or present in a coherent way its own track record of inaccurate noise measurement. Even protests from local, state and federal representatives are not used as a check for the numbers that Massport wants to use (see, e.g., Vol. II, passim). 207.9

Massport's modelling and monitoring fail to capture reality. Massport knows this. The communities have presented evidence for years that agreed-upon flight paths are not followed, that noise impacts are far worse than the imaginary noise contour maps suggest (it's not unusual for the map to draw the contour line in a place like the middle of Chelsea Creek), and that monitoring stations do not fully capture the real impacts of flyovers because of their inadequate placement and maintenance. As community residents consistently testified at the April 7 and 8 public hearings, they are much more disturbed than Massport will admit.

Despite the protests, none of the communities' pleas have persuaded Massport to revise its noise contour map, until

it was useful to do so as part of this proposal. In Chelsea, despite what Massport has conceded to be understatement of impacts, currently and for many years, no one in Chelsea fell within the 65 dB noise contour. Furthermore, the waterfront area, including Beacon Street, is not on the map under the 14/32 proposal (Vol. I, 5-3). This is so, even though Massport uses numbers of several thousands of people in Chelsea in the 65dB, up to the 75dB range, in its hypothetical 1993 baseline for the city.

207.10

Because of the way that Massport conducts its community relations, even complaints are low, although they do provide another useful check on Massport's numbers. The unwillingness of Massport to honestly report on impacts extends to the operation of the Noise Complaint Hotline. Community feedback has highlighted the many problems with this hotline: inadequate staffing (from 9-5 weekdays, there is a dedicated number; nights, weekeends and holidays, you are transferred to operations), the line is frequently busy or out of commission (especially during blitzkriegs), often hostile staff who argue with you or fail to take information correctly. My own experience is that it is a discouraging experience to even register a complaint, and that Massport makes it difficult. Often, details about the duration, frequency or height of flyovers is omitted through careless or intentional editing of complaints. Of course, this is important information that could be used as a check on impact numbers. Instead, people often experience the complaint hotline as "insult added to injury" and stop registering their complaints. With such hostility and frequent unavailability of the line, the extent of neighborhood disturbance isagain understated. It is worthwhile to remember that, as a rule of thumb, where

1 person has the gumption to complain about a disturbance, at least 10 others have been disturbed but have not complained. (See, for illustrative purposes, App. 4).

There are still more sources of bad statistics and understatement. One is the omission of significant data through failure to coordinate with other agencies with necessaryexpertise, such as the Department of Public Health, the State Transportation Department, including public transportation gurus and highway departments, or through failure to report available information. For example, in disregard of EPA and DEP directives (Vol. II, Letters 1, 1.12,1.15,2.3), Massport doesn't take into specific account the noise and air pollution caused by through drivers to Logan: 18-wheeler, Logan Equipment, passengers, parking lots. Cargo traffic grew from a 1981 low of 498,000,000 lbs to a high of 974 million lbs in 1997 (Vol. I, 1-9). This moves at night primarily, on cargo planes that fly between 10 p.m. and 6 a.m. They rumble like air cargo planes do, when they fly over at 4 a.m. (Vol. I, 1-10). Down at the ground, what this means is that the Chelsea and East Boston waterfronts, and parts of Charlestown, the North End,etc. have become truck routes for thousands of 18-wheeler long haul drivers, that run all day and nightthrough densely-populated residential neighborhoods. These are diesel trucks. The air and noise pollution from this operation, which Massport actively encourages, is not monitored. Readings by Massport/Tobin Bridge of truck noise on the Beacon Street ramp registered upwards of 100 dB, less than 30 feet from residences. The 1 air monitor in Chelsea from DPH is at Soldier's Home, as far away as you can get from the air and ground traffic to the airport. There's a concentrated impact area. It's not monitored. These impacts are not accounted for in the proposal, and they will only get worse if Logan's oper-

207.11

207.12

ations are allowed to increase. Of course, Stage 3 aircraft won't help with this. In addition to the trucks and drive-through flyers, towns become parking lots. 2500+ parking spaces for employees and passengers, 2 car rental lots, and an Official Airport Overlay District designation is a lot of presence. It should be monitored independently, perhaps with funding from Massport to DPH to do an epidemiology study (see Vol. II, Letter 45.8& work with DPH instead of passing the buck (Vol. II, 45.8). DPH is underresourced, the environmental agencies are strained financially. Residents have requested additional monitors (Vol. II, Letters 17.5 and 45. 8), and an epidemiology study. Massport, which has spent $3 million on PR and consultants, as well as budgeting $200,000 for an ad campaign, and which has contributed $100 million to the Big Dig, shouldbe able to fund a DPH assessment of health impacts in the surrounding communities.

207.13

As it is, Massport has failed to provide information requested in the scoping directives, or to inform the public about the consequences of Massport's operations. (See Vol. II, Letters 1, 1.12,1.15,2.3). The public has been in the position of informing everyone else of the real impacts.

Another unknown but overstated factor: the effectiveness of Massport's mitigation efforts, and the final source of understated impacts in this analysis. Massport's numbers are also low because of its incorrect assumption that its mitigation is effective. The proposal only mentions 1 test of the adequacy of Massport's testing of mitigation effectivess (Vol. I, 5-10), apparently of soundproofing of single rooms, the most extreme soundproofing done, in 1984!

Residents who have undergone soundproofing have complained

that it is ineffective against the planes, and that Massport has failed to honor its commitments to mitigate; one speaker on April 7, 1999 compared it to holding up a wet tea bag (Vol. II, Letters 14.12, 36). It's also unclear from the analysis, what percentage of the eligible population have even received it. (see Vol. I, 5-11-a total of 4602 units have been soundproofed without a breakdown of types of soundproofing or follow-ups on effectiveness, or # eligible.)

Massport does not reflect these complaints in its analysis of mitigation. The complaints mean that even where Massport has tried to mitigate its impacts, it hasn't been able to. Nor does Massport identify any measures to assess whether the soundproofing works (Vol. II, Letter 31.13). In Chelsea, double-pane windows are worthless against the noise of low-flying jets (and trucks). Earplugs don't always work. The most extreme measure offered by Massport is soundproofing of one room. It's important to realize that, even if effective, this would hold you hostage in your home. Only one room would be livable. Home life in 1 room, no community life, is not mitigation. It is not a reasonable solution to the problem of excessive plane noise to make people prisoners in their own houses. This is not the normal life through soundproofing that Massport asserts (Vol. I, ES-5, 5-10). 207.14

Because of all the elements that tend to produce understated impacts on the people who live around the airport, the agency has underestimated the number of people who live with 60dB, 70 dB, 80-past 100dB routinely; the air and noise pollution its total operations produce; the social, economic, health and esthetic damage it does. By not verifying its models, and failing to take into account information from residents, Massport has submitted an impacts analysis that is statistical nonsense. It is misinformation. 207.15

A second critical flaw in the proposal, and one affected by the faulty analysis of impacts, is Massport's failure to propose meaningful, reasonable alternatives and to conduct a thorough study and detailed description of them. This is in part a reflection of the bias in Massport's choice of "problem". Delay is as much a symptom of an airport operating beyond its effective capacity, as a problem per se. In fact, delay is only one of the problems at Logan. In 1993, the baseline year, Logan was the 6th busiest airport in the country. Air traffic controllers have made an issue of understaffing and inadequate equipment, leading to radar outages, a serious safety concern. (See App. 5). Noise and air pollution, traffic overload, parking lot sprawl, the threats to human health and safety, neighborhood degradation, and the failure to achieve a workable regional transportation policy, are all problems at and around Logan. 207.16

Logan has a nameplate capacity of 120 flights per peak hour. With 5 current runways, its current average 3-runway capacity during visual flight rules (VFR), is 120 planes per hour over 80% of the year (Vol. I, ES-16). Its annual average 3-runway capacity across all weather is 115 (Vol. I, ES-16). For the communities and Logan, even these numbers, so close to rated capacity, are too much, or we wouldn't be here on a proposal to increase capacity. Logan is subject to the constraints of wind and weather , which in turn are exacerbated by the volume of small planes using the airport, now 45% of the traffic (Vol. I, 4-5). By its own admission, almost 5 million people who drive to Logan every year are closer to other regional airports (an environmental crisis in itself) (Vol. I, 2-19).

Notwithstanding its stated intent to the contrary, the effect

of Massport's efforts, including the $3 million spent on PR and consultants, and an ad campaign at Logan and in the media, will increase the airport's capacity and "improve" that 115 statistic. (See Vol. II, Letters 10,39). Massport has given short shrift to everything but its preferred alternative. What its analysis demonstrates is a "straw man" approach to alternatives that might reduce its operations: a reluctant and ultimately rejecting consideration of peak pricing, a 1-paragraph dismissal of a second airport (Vol. I, 2-4), a competitive and grudging assessment of other regional solutions (in fact, the rail, regional airport and telecom "alternatives" can be considered part of the No Action alternative). No Action, while it is required as an alternative under NEPA analysis, is not a reasonable option for the communities, inconsistent with the goal of environmental protection, and not responsive to issues such as safety. To allow Massport to conduct this analysis without proposing a significant alternative to the growth of the airport is to make a mockery of NEPA. Whatever Massport thinks the capacity should be, community residents from at least 28 cities and towns have been vociferous in their many meetings with Massport and the FAA, in their noise complaints, and through their local, state and federal representatives, that the human carrying capacity in this area has been exceeded-a critical point left out of Massport's analysis.

207.16 (cont.)

207.17

This is not an alternatives analysis, as that term is ordinarily understood. For the public, as Betty Desrosiers' presentations made clear, there is no real alternative. Massport's promise is blunt: flights will come and go, more and more (22,000 more in Chelsea), the growth will be vigorous, and the only choice is whether this growth occurs with or without Runway 14/32.

Alternatives must be evaluated in terms of their context, the challenge of a reasonable transportation policy for Boston and the region. If the problem that Massport chooses to deal with is delay, at least one of its alternatives should focus on a solution that would solve delays while minimizing or avoiding environmental impacts. The environmental secretaries directed Massport to explore ways of accomplishing its goals without airfield improvements (Vol. II, ENF Cert.), and to consider operations restrictions as a mitigation measure (Vol. II, Letter 1.21). These directives are ignored or minimized in the alternatives analysis. 207.18

Massport has overlooked an important alternative that deserves consideration from both the airport and community perspectives. A meaningful alternative that would accommodate travelers and communities would be to reassess the effective capacity of Logan with the goal of shifting traffic now, and creating a well-functioning, right-size airport in the context of livable communities. It is not in the city's or the region's interests to reduce the quality of life in 28 communities, to destabilize areas such as Chelsea, or to impose additional environmental burdens on a population that is already pleading for relief. Airport capacities have been modified, and there is no reason those modifications cannot be downward, in line with public health and safety; business pressure and the convenience of the traveling public have to be secondary concerns to safety and health. 207.19

Using a workable capacity cap, Logan could reduce its delays and begin to remediate the environmental damage to the surrounding communities. This alternative would provide an incentive to reroute traffic to other airports that could accommodate them (the regionals have a market penetration rate of 51%- Vol. I, 2-21). The cap of 120 that Massport

aspires to, after all, represents a choice, a model really. It was set notwithstanding all the "constraints" that Massport claims prevent a new cap (see Vol. II, Letters/Non-Responses 30.08, 31.53, regarding caps and forcing mechanisms to shift traffic). Logan's capacity needs to be set at a workable level.

In addition to the above concerns about the "Preferred Alternative" alternative, I take issue with the analysis of Reduced Minimums as a method of reducing delay. Consistent with its goal to increase capacity statistics, this proposal would reduce the altitude minimums for when pilots could rely on instrument flight rules rather than visual flight rules, for landings (IFR vs. VFR). Currently, 1 of 5 runways is used for IFR landings. The proposal would extend IFR to 4 other runways. The FAA asserts that this would ensure the greatest availability of runways during poor weather, consistent with current industry practice for major commercial airports (Vol. I, 3-36). The critical difference from current practice, is that the current mimimums would be reduced by half, so that the point at which a pilot must see the runway will be closer than now.

This proposal ignores the fact that Logan is not like most major commercial airports. It's very small, it's surrounded by homes and downtown Boston, and its flight paths over these areas pass many hazards. Densely-populated residential neighborhoods come up to the airfield. Along the flight paths, planes fly over a major power plant, an LNG facility, several oil tank farms, the Tobin Bridge and 2 other bridges that are major thoroughfares into East Boston and downtown Boston, and hills. Whatever safety advantages there are to flying on IFR are cancelled out by the increased risks of flying over this terrain without a visual check.

207.20

Once again, a measure has been proposed without adequately considering the specific environment of this airport, rather than a modelled, hypothetical "major commercial airport". Many airports do not present the obstacle course that Logan's surroundings do. The extra measure of safety that VFR provides for these densely-populated communities is the real safety issue. As it is, the landings and takeoffs over the roofs of homes in Chelsea, East Boston, Revere and Winthrop are heart-stopping. There is no margin for error; we are already flirting with disaster.

The proposal admits that reduced minimums will have an insignificant impact on delay (Vol. I, 8-2). The real point of this alternative seems to be to boost the numbers of runways that can be used in adverse weather. That is, of course, precisely when you should not be flying over power plants, LNG and oil tank facilities, bridges and densely-populated residential ares at under 300 feet, without a visual check as well as every other kind of check you can manage. In 1995, Massport and the FAA did not respond to these safety concerns raised by residents (see Vol. II, Letters 12.1, 14.10, 30.1) The lack of awareness and respect for the surrounding communities that this alternative reflects is symptomatic of the myopia of Logan's planning. I urge the FAA to withdraw this proposal, or the reviewing agencies to reject it as inadequate in its analysis.

207.21

ENVIRONMENTAL JUSTICE ANALYSIS

Massport's Environmental Justice (EJ) analysis is also flawed. Both within the specific poverty and race guidelines of the Presidential Order, and a broader analysis based on the principle of proportionality, Massport's proposal fails the test of environmental justice. 207.22

Because this analysis is based on noise contour maps, its numbers are understated and unreliable. It is impossible to know from its analysis how many people who are minorities or below the poverty line (BPL) are disproportionately affected by its operations. Massport's noise contour map excludes significant numbers of people in Chelsea, including poor, minority and immigrant populations. For example, one of the areas in Chelsea most affected by Massport's air and ground operations is the waterfront, specifically the areas to the east of the Tobin Bridge. According to a study funded by EPA, these areas contain large populations that are BPL and minority (App. 6). These figures are not reflected in Massport's analysis, which has all the intellectual rigor of a schoolkid writing "There is no EJ issue here" 100 times on a blackboard. 207.23

There is another EJ issue that Massport fails to acknowledge. The principle of EJ is based on the notion of proportionality and the reality that certain populations are disproportionately affected by polluting activities. There is a huge issue of EJ having to do with the current, disproportionate impact of Massport and other government and private operations on the communities around Boston Harbor. 207.24

After 3 careful reviews, I cannot recognize my neighborhood in this proposal. Chelsea is the smallest city in the state. At 1.8 square miles, it suffers environmental assault out of all proportion to its ability to absorb it. Residents

experience: millions of passenger and commercial vehicles every month on the Tobin Bridge (2,000,000 vehicles a month@ Massport), and Routes 1 and 16 (within 50 feet of residences for the bridge), the downwind emissions of Sithe/Mystic Power Plant, one of the state's Dirty Dozen, an LNG facility on its border with Everett, thousands of 18-wheelers on residential streets carrying air cargo to Logan (an operation that Massport has encouraged, and that runs within 25 feet of residences on the densely-populated Chelsea and East Boston waterfronts, without any attempt by Massport to reroute it), the largest salt pile in the Northeast, which is uncovered and which supplies Massachusetts cities and towns/ running 18-wheeler dump trucks through residential streets in Chelsea), truck traffic to the New England Produce Center which supplies New England and eastern Canada, several oil tank farms, an asphalt facility, 44 c. 21E toxic sites, thousands of parking spaces on the waterfront for Logan employees and passengers, and lots of dirty businesses, such as recyclers of toxic materials. The public health statistics for Chelsea show elevated levels of illness and disease. The noise and air pollution is obvious and distressing on any visit to the city. Massport's proposal does not give you a clue as to this context and the role it plays in the continuing assault on the safety, health and quality of life for people who live in Chelsea. And this is the target area for Massport's improvements. Massport and the FAA are "committed" to maximizing the use of the runways that currently blitz Chelsea: 15R/33L,for late night flights in particular, between midnite and 6 a.m. (Vol. I, 5-12) and to run the greatest number of additional flights:22,000,overhead. To allow Logan to expand its operations, air and ground, through communities like Chelsea, is unconscionable. In environmental terms, it is to institutionalize a sacrifice area. No community should have to endure this.

207.25

Similarly, the other communities most affected by Logan's ground and air operations are also communities which bear more than their share of activities that nobody wants but everyone needs: the MWRA sewage plant (Winthrop), several major highways (Revere, E. Boston, Chelsea, Charlestown), the Callahan and Sumner Tunnels (E. Boston), a coal and oil-burning power plant (Everett and downwind communities such as Chelsea and Charlestown), the Tobin Bridge (Charlestown and Chelsea), an LNG facility (Everett), oil tank farms (Chelsea, E. Boston), thousands of parking spaces for Logan (E. Boston, Revere, Chelsea), MBTA bus depots (Roxbury), dozens of 21E sites and brownfields (throughout the area; 44 21E sites in Chelsea alone), the Big Dig (downtown Boston, Fort Point, North End),.....These are communities that have borne a disproportionate environmental burden for city and regional projects. As necessary as these projects are, the communities and the people who live in them have a limited capacity to absorb this environmental assault. To go from bad to worse, with or without Runway 14/32, is to go in the wrong direction. More of the same is not an environmentally sound policy or responsible community planning in this matter.

This entire context is omitted in Massport's analysis of EJ. Massport gives a very different picture of what is at stake. "Within the box" of Massport's analysis, the agency continues its m.o. of understating impacts and overstating benefits; it fails to give an accurate picture of the context in which growth is occurring. "Outside the box" of its analysis, there is a world of pain that Massport needs to take responsibility for: hours of screaming jets over residential neighborhoods, day, night, weekends, and holidays, at altitudes below 300 feet, excessive truck traffic in residential neighborhoods, millions of passenger vehicles overburdening an already polluted environment, and the destabilization and blighting of neighborhoods.

Instead, Massport informs us that 507,000 operations isn't enough, and that this traffic will increase dramatically, but that there will not be any cumulative impacts to speak of. This is not justice, it's nonsense, it's dumping. To allow Massport to grow beyond a well-functioning capacity makes it unworkable and makes the communities around it unlivable. This is just the situation that the principle of EJ is meant to address. It is no more acceptable to allow disproportionate impacts in areas with working-class, poor, minority, immigrant and diverse urban populations than it is to allow continued dumping in areas that meet the bright-line criteria of 50% of population BPL or minority. Environmental justice is an encompassing principle; a key element is the concept of proportionality and that is exactly what the areas around the airport represent now-disproportionate impact. We need protection from the destructive growth of Logan, with or without 14/32.

Massport must be given incentives to create a workable airport and to remedy neighborhood damage it creates. It does not, for example, consider increasing the percentage of Stage 3 aircraft despite its claims for them (Vol. I, 5.8), restricting night time flights despite the disturbance they cause (Vol. I, 5.9). Justice is not served by denial of impacts or inadequate mitigation. Justice is something that every community has the right to expect, whether it is in Winchendon, Chelsea, Bedford, E. Boston, Dover, Revere, Roxbury, or Winthrop. What would be justice for the communities around the airport?

CONCLUSION

The evaluation of this proposal cannot be solely about the terms that Massport and the FAA have set it in: delay. Delay is as much a symptom of the problem as the problem itself. The root problem is that, even operating at an annual average over all conditions of 115 operations per hour, Logan is operating beyond its effective capacity. For some time, it has been operating well beyond the carrying capacity of the communities whose residents eat its impacts. Even the airport has problems accommodating growth of 112+% over 20 years. Human beings simply can't take the air and noise pollution, the disruption of home and community life that has come with this explosive growth. This proposal needs critical attention and the communities need your protection, because at stake here is much more than the hypothetical $313 million delay costs to airlines and passengers and Logan's standing in the delay statistics. At stake is the livability of the 28 surrounding communities whose long-standing protests against Logan's environmental damage have been ignored. The goal of accommodating 120 flights per hour is a preconceived notion of what a safe, environmentally sound, workable capacity is for this airport in this place. Quality of life is not just a slogan for the people who live with the airport's impacts. In Chelsea, where I have experienced these impacts for several years, what is at stake is the viability of a community that is a sacrifice area otherwise, as far as polluters are concerned; and Massport is chief among those polluters.

207.26

Something is wrong when modeling and monitoring fail to reflect reality and do so in ways that systematically understate impacts. Something is wrong when an analysis fails to account for community feedback on the reliability of

your data. Something is wrong when an alternatives analysis gives us the choice of whether to accommodate growth that is beyond human and airport capacity, with or without a new runway. Something is wrong when an environmental secretary's directive to conduct a sensitive Environmental Justice analysis produces a 3 and 1/2 page mechanistic use of a flawed noise contour map to conclude that there is no EJ issue in areas known to be environmental dumping grounds for private and public business. Something is wrong when Massport's proposal provides disinformation, fails to respond to specific scoping directives, and produces a picture of local conditions that bears little or no resemblance to reality.

The communities need reliable information, remediation, and your protection (see App. 7). What needs protection here are the physical and human environments of the communities that suffer Logan's impacts. These communities have protested for years that the impacts are worse than Logan will admit, and that those impacts threaten the public health and safety.

What does not need protection here are business interests, which are highly elastic, and which have a flexibility that neighborhoods do not; they can and will adapt, market style, to shifts in operations, reduced capacities at Logan, or the need to go to another airport to get to Boston.

What also does not need protection here is the desire of Massport and the FAA to achieve a better standing in delay statistics. This is not a football game, this is a matter of how this airport will fit into this city, and the safety, health, economic, aesthetic and social impacts on people's lives.

Finally, this cannot be an exercise to protect the power of a government agency to spend $3 million plus of public money on PR, consulting and advertising in order to design a pre-ordained "Preferred Alternative".

What this proposal was supposed to do, but has not, was to accurately inform the public and the environmental agencies about actual impacts of current and proposed operations, propose meaningful alternatives including effective mitigation, and conduct a sensitive environmental justice analysis. Unless we hold Massport to basic standards of accuracy and comprehensive, reasonable planning, we allow a bad situation to get worse. We create a disincentive to create a responsive, imaginative solution to Logan's problems as an urban airport, And we condemnm the surrounding neighborhoods to further degradation, loss of community viability, and the disruption of health and quality of life. We need the informed environmental consideration that NEPA guarantees. Massport's record demonstrates that it is either unwilling or unable to account for the actual impacts of its operations or to remedy them. Among the information and initiatives that are needed are: coordination and funding of agencies to provide data on air and noise pollution and epidemiology, such as the Department of Public Health and the state transportation departments, especially the regional and highway departments; adequate and accurate monitoring of air and noise pollution in areas that reflect those impacts; consideration of improvements such as a ban on night flights and rerouting of passenger and truck traffic away from residential areas; a collaborative process that gives the communities a real influence over airport operations that affect them, and that reflects real alternatives to Logan growth as part of a regional transportation policy; and ways to ensure that there is

207.27

an independent, competent assessment of Logan's impacts. Massport has "...become the prisoner of (its) tactics, seldom looking behind them at the strategies." (Jane Jacobs, The Death and Life of Great American Cities, p. 322, Vintage 1992). Residents cannot afford such short-sighted planning. We need what Massport calls "sufficient relief", and this ain't it.

Given the defects in its proposal, it would be appropriate for Massport to withdraw it and go back to the drawing board for planning that will achieve a workable airport and livable communities. If Massport will not do that, I urge you to reject this proposal as inadequate, under NEPA and the scoping directives of the environmental secretaries. We can do much better than this. We have to.

"We cannot solve the problems we have created with the same thinking that created them."

Einstein

APPENDIX 1

Table of Noise-Exposed Population by Community, 1994/1995 Logan GEIR Updates

Table 6-3
Noise-Exposed Population by Community

Year	80+ L_{dn}	75-80 L_{dn}	70-75 L_{dn}	*65-70 L_{dn}	Total (65+)	60-65 L_{dn}
Boston**						
1987	0	533	6,436	40,020	46,989	NA
1990	0	0	1,778	28,970	30,748	NA
1993	0	0	264	2,820	3,084	NA
1994	0	106	265	7,698	8,069	30,895
1995	0	106	851	8,815	9,772	33,765
1996	0	106	374	8,775	9,255	40,992
1999	0	48	58	3,413	3,519	16,020
2010***	0	48	58	1,398	1,504	12,107
2010†	0	48	58	1,926	2,032	12,804
Chelsea						
1987	0	0	2,635	4,457	7,092	NA
1990	0	0	0	4,813	4,813	NA
1993	0	0	0	0	0	NA
1994	0	0	0	0	0	8,510
1995	0	0	0	95	95	9,750
1996	0	0	0	0	0	8,744
1999	0	0	0	0	0	4,490
2010***	0	0	0	0	0	2,788
2010+	0	0	0	0	0	3,065
Everett						
1987	0	0	0	287	287	NA
1990	0	0	0	0	0	NA
1993	0	0	0	0	0	NA
1994	0	0	0	0	0	0
1995	0	0	0	0	0	0
1996	0	0	0	0	0	0
1999	0	0	0	0	0	0
2010**	0	0	0	0	0	0
2010+	0	0	0	0	0	0

APPENDIX 2

3/98 Massport Measured Ldn Noise Levels Report 1991-1997

Mar-98

Measured Ldn Noise Levels Report

Summary of Measured
Day-Night Equivalent Sound Levels
Summary to Date

Area	Location	Site No	1991	1992	1993	1994	1995	1996	1997
South End	E Dedham	1	66.0	64.6	66.2	66.3	65.9	66.4	65.8
S Boston	Bolton St	2	69.9	68.1	67.5	68.1	68.2	69.0	69.4
S Boston	SB Yacht Club	3	67.8	69.4	69.3	68.2	68.1	66.8	67.1
Winthrop	Grandview	4	80.0	79.7	79.8	79.1	79.6	78.8	80.4
Winthrop	Faun Bar	5	72.5	72.7	73.3	72.0	71.7	71.7 *	71.1
Winthrop	Somerset	6	71.7	71.1	71.1	71.5	71.0	71.1	71.4 *
Winthrop	Loring Rd	7	74.1	74.1	74.1	74.1	73.4	73.8	74.4
Winthrop	Morton St	8	68.7	67.6	68.4	66.6	67.2	67.8	68.2
E Boston	Annavoy	9	75.1	75.8	75.6	76.0	75.8	75.7	76.0
E Boston	Shawsheen	10	71.4	71.2	71.3	70.6	70.2	70.8	71.9
E Boston	OH Hill	11	Not in	Not in	Not in	Not in	Not in	66.4 *	66.8
E Boston	EB Yacht Club	12	73.9	73.2 *	Down	71.7 *	71.6 *	72.7	72.7
E Boston	EB High	13	68.4	66.5	64.9	65.4	66.4	66.5	67.1
E Boston	JP Yacht Club	14	69.1	67.5	67.4	65.7	66.6	66.9	67.0
Chelsea	Admiral's Hill	15	69.1	Down	Down	67.0 *	67.2	68.5	67.6 *
Revere	Bradstreet	16	71.8	71.3	71.4	69.9	71.8	72.3	71.9
Revere	Carey Circle	17	66.4	67.2	66.4	66.8	66.7	66.7	66.7
Nahant	CG Rec Facility	18	68.8	68.3	69.1	66.2	66.7	66.7 *	65.8
Swampscott	Smith Lane	19	58.7	57.6	58.8	56.8 *	56.8	56.7	56.9
Lynn	Flax Pond	20	65.5	59.3 *	60.6	59.4	58.8	59.9	59.2
Everett	Prescott	21	60.6	62.4 *	62.9	60.2	60.6	60.7	61.0
Medford	Magoun	22	61.7	61.3	59.6	59.6	60.2	60.0	60.7
Dorchester	Myrtlebank	23	63.8	63.4	63.6	63.2 *	62.8	62.5	62.7
Milton	Cunningham Pk	24	60.6	60.9	61.8	60.7	60.6	60.6	60.6
Quincy	Squaw Rock Pk	25	58.5	58.6	59.5 *	56.6 *	57.2	57.9	60.1
Hull	Hull HS	26	72.0	65.0	65.7	64.1	63.7	63.6	63.7
Roxbury	Bos Latin Academy	27	Not in	Not in	Not in	Not in	Not in	Not in	64.7 *
Mattapan	Lewenberg School	29	Not in	Not in	Not in	Not in	Not in	Not in	59.4 *
East Boston	Piers Park	30	Not in	Not in	Not in	Not in	Not in	63.6 *	63.4

* Partial

TABLE 5.2-4 1993 CALCULATED DNL, LeqN and Lmax VALUES

Identity	Location	DNL (dB)	LeqN (dB)	Lmax (dB)
1	Andrew St., South End	57.9	49.6	91.3
2	B & Bolton, South Boston	66.2	57.9	101.6
3	S. Boston Yacht Club, S. Boston	64.1	53.9	94.4
4	Bay View & Grand View, Winthrop	78.1	68.4	120.5
5	Harborview & Faun Bar, Winthrop	71.5	62.2	99.7
6	Somerset & Johnson, Winthrop	68.0	58.8	89.7
7	Loring Rd. near Court, Winthrop	78.0	68.1	104.7
8	Morton & Amelia, Winthrop	68.5	56.7	103.6
9	Bayswater & Nancia, E. Boston	73.8	62.3	110.0
10	Bayswater & Shawsheen, E. Boston	68.2	57.5	96.5
11	Don Orione, E. Boston	63.3	53.1	90.3
12	E. Boston Yacht Club, E. Boston	72.7	63.7	93.0
13	E. Boston High School, E. Boston	68.5	61.8	103.4
A	Summer near Lamson, E. Boston	63.0	55.2	81.8
14	Jeffries Point Yacht Club, E. Boston	64.5	56.2	84.8
15	Shurtleff & Essex, Chelsea ?	66.6	59.9	102.7
16	Bradstreet Ave. & Sales, Revere	70.6	60.3	104.1
17	Carey Circle, Revere	60.4	50.2	92.3
23	Myrtlebank/Hill Top, Dorchester	53.3	43.4	81.1
24	Cunningham Park, Milton	52.4	43.1	77.3
25	Squaw Rock Park, Quincy	50.8	41.4	78.7
26	Hull High School, Hull	55.6	47.7	86.0
E	Farragut @ 2nd, S. Boston	64.4	54.2	94.5

Table 5.2-5 summarizes the data for night time above (TAN) and 24-hour time above (TA24) for noise thresholds ranging from 55 to 95 dB. Note that the minutes in TAN are contained in those presented for TA24. These data give an insight into the statistics of the noise in terms of sound level and duration. The positions which appear to have the highest values of TA24, based on thresholds of 75 dB and over are NMS #s 4 (Bay View & Grand View), 5 (Harborview & Faun Bar), and 7 (Loring Road near Court) in Winthrop and NMS #s 9 (Bayswater & Nancia) and 12 (East Boston Yacht Club) in East Boston. These five locations also have the highest values of DNL. Further, the noise at NMS # 7 and 12 exceeds 55 dB for over 50 percent of the 15 hour day from 7:00 AM to 10:00 PM, and 65 dB for about 25 percent of the day. Both of these locations receive noise from operations on several runways.

APPENDIX 3

4/99 Boston Magazine:Massport Statistics on Max dB

friends established the Marblehead Cancer Prevention Project to combat some of their area's environmental hazards. "We were standing in her garden talking about how brave and amazing Norma had been when we asked, Why should we have to be brave? Why can't we be safe?" recalls *Boston Globe* columnist Linda Weltner, a Marblehead resident and one of the group's founders. "In that setting, we made a date to get together and talk about what could be done."

When the group of nine was founded a year and a half ago, one member had cancer, and is now in chemotherapy. Two have since been diagnosed—one with breast cancer and one with melanoma, both caught in the early stages. The cancer prevention group's cancer ratio is itself now an alarming one in three.

"Norma's activism spoke to a large number of people, and because of that, we had a great concern to keep it going. She was an instigator," says Christina Ryke, a group member who survived breast cancer in the late '80s. A few years ago, she was diagnosed with cancer again — this time, ovarian. "I had lived in a neighborhood where I felt there was a high incidence of cancer, and started writing down where people lived and what they had back in the late '80s. I found there was a lot of cancer in one little block. It's very intimidating, very scary. We are due for an enormous look at this because there's no question there's something happening."

THESE ARE THE KINDS OF STORIES AND STATISTICS THAT ARE increasingly catching the attention of people all over the country, and nowhere more so than in eastern Massachusetts. After all, it was here that ominous questions about the effects of environmental toxins were made larger than life by the book and John Travolta film *A Civil Action*, based on the plight of eight Woburn families who lost children to leukemia they believed to have been caused by trichloroethylene (TCE) in their water supply.

But Woburn is not the only area with a so-called cancer cluster, or potentially hazardous pollution. Nor are such problems limited to gritty industrial towns or low-income areas. Melanoma rates in Concord, Cohasset, and Orleans are even higher than in Marblehead. In Newton, an unusual number of residents have contracted cancer in a small area adjacent to a chemicals-laden dump. And Cape Cod has been recognized for years as an area dotted with cancer clusters, believed by some to be linked in part to a military base at the start of the peninsula.

"There's only one plausible explanation: There's something in the environment," says David Ozonoff, a physician and chair of the department of environmental health at Boston University. "The other two factors are genetics and lifestyle. There's no difference of lifestyle there—they eat the same crap there that everyone else does. And genetically they're not any different. It's not as if it's an isolated population in the Galapágos Islands. The only explanation here is that there's some factor or factors in the environment."

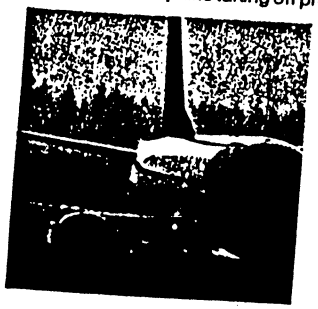
Scientific acronyms like TCE, PCB, and DDT are not just for scientists anymore: they're becoming household names as communities seek more information on the toxins in their towns that are suspected of causing sickness and death. Some are concerned about illnesses that seem to crop up in high numbers around their neighborhood, some raise questions about suspicious dumping sites nearby, and some are even nervous about effects of environmental hazards on their property values.

As public awareness grows, so does a hunger for information. The state Department of Public Health fields about 3,000 requests a year from concerned citizens asking for investigations of suspected cancer clusters, so many that the agency admits it can't keep up. "There's a triage system by which we try to determine which seem to be the cases most worth putting in time and resources," says Mark Leccese, the department's director of public affairs. "But at the same time, there are other unnoticed areas where we might have reason to suspect something even if the numbers don't suggest it. A certain illness or cancer might be at the expected level, but what if it all occurs in children born in the same year?"

In the adjacent foldout chart, *Boston Magazine* has juxtaposed statistics on some of the most common cancers with information about

SOUND CHECK

Maximum aircraft noise, in decibels.
(A typical lawnmower produces about 90 decibels; an airplane taking off produces 140.)



Winthrop	120.5
East Boston	110.0
Revere	104.1
Chelsea	102.7
South Boston	101.6
South End	91.3
Hull	86.0
Dorchester	81.1
Quincy	78.7
Milton	77.3

SOURCE: Massachusetts Port Authority

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APPENDIX 4

Logan Complaint Log 1976-1996

Historical Aircraft Disturbance Complaints Logan International Airport 1976-1996

	1976	1977	1978	1979*	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991**	1992**	1993	1994	1995	1996
Arlington	1	4	2	21	32	6	3	9	2	0	2	4	1	8	2	10	8	3	0	2	3
Belmont	0	9	6	20	7	5	9	1	4	0	0	2	0	0	0	0	6	5	0	0	1
Boston (Total)	380	786	921	3629	1856	936	828	413	434	325	357	523	493	509	422	1480	1579	1016	1016	931	866
Brighton	0	0	50	16	3	0	0	0	1	0	0	0	1	0	1	4	1	1	1	0	3
Charlestown	8	2	2	7	7	2	0	6	1	2	2	5	1	1	0	2	4	2	4	9	7
Dorchester	21	9	42	423	60	12	7	6	4	1	5	39	11	13	14	37	43	17	13	36	10
East Boston	145	481	338	1061	577	324	403	263	284	175	141	159	153	282	193	234	466	475	539	381	361
Hyde Park	0	0	1	29	13	6	2	21	5	1	4	1	0	0	0	11	3	0	3	0	1
Jamaica Plain	72	135	139	560	293	152	151	45	51	56	93	195	224	96	84	289	243	123	98	106	107
Roslindale	4	0	14	120	210	92	69	21	30	29	21	22	11	17	4	19	87	34	9	16	22
Roxbury	25	10	28	118	48	39	21	13	17	7	20	11	13	10	13	11	6	20	10	15	7
South Boston	72	77	213	855	368	207	88	9	14	20	22	55	42	41	47	250	299	96	111	117	201
South End	0	23	27	296	140	41	35	10	4	6	1	4	6	2	28	545	349	207	192	104	100
West Roxbury	6	0	41	97	68	56	39	10	9	22	33	14	7	24	4	35	6	9	1	6	10
Other	27	49	26	47	69	5	13	9	14	6	15	18	24	23	34	43	72	32	35	141	37
Braintree					15	0	0	0	0	0	3	0	2	4	5	32	47	22	24	18	8
Brookline	7	13	33	426	158	21	13	4	6	5	5	13	8	12	12	84	225	20	5	13	32
Cambridge	25	54	27	170	37	6	9	9	1	3	22	18	24	14	14	34	49	31	13	33	19
Chelsea						14	27	11	6	2	8	3	5	17	16	11	27	18	17	24	485
Cohasset				0	146	7	10	20	16	10	6	2	2	2	0	0	6	0	1	1	4
Dedham				0	17	8	1	1	0	0	2	0	0	1	1	5	2	2	2	3	4
Everett	11	0	9	26	10	7	27	10	10	5	2	0	1	3	5	4	16	2	0	4	24
Hingham	1	0	4	112	97	21	23	6	4	1	1	2	4	4	3	14	42	16	15	4	5
Hull	1	0	63	361	1330	144	68	33	16	13	13	22	22	20	21	41	72	78	45	44	27
Lynn	1	6	36	37	61	45	25	10	4	2	11	15	6	3	4	2	3	3	2	2	2
Malden	8	4	3	19	5	0	32	9	4	1	1	2	1	0	4	1	8	3	4	1	7
Marblehead	0	0	0	0	3	1	0	0	0	3	15	4	2	1	2	0	2	0	2	2	4
Medford	26	56	24	58	118	105	65	29	13	11	10	28	37	23	15	15	36	3	5	24	19
Melrose	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	3	1	2	2	1
Milton	1	0	308	1392	583	387	163	165	114	70	105	117	98	77	149	586	308	425	249	204	369
Nahant	5	8	80	22	17	12	0	10	1	0	13	8	10	5	2	23	206	292	74	102	152
Needham	4	3	3	120	238	10	27	30	29	27	25	37	22	2	0	9	9	1	3	19	3
Newton	3	8	2	78	24	4	14	3	3	1	0	4	3	3	5	28	29	5	2	7	1
Quincy	71	34	4527	4525	860	218	109	97	104	63	79	53	38	34	16	92	72	51	16	17	39
Revere	27	46	157	319	129	93	27	78	39	20	99	41	57	47	132	109	165	798	918	199	476
Saugus	0	0	0	3	0	0	0	0	0	0	2	0	0	0	1	7	4	6	0	2	0
Scituate	0	0	0	0	135	10	5	10	3	1	2	0	1	2	2	2	0	1	3	0	1
Somerville	15	30	8	86	23	7	7	12	3	1	5	17	3	6	5	8	50	18	13	15	16
Swampscott	0	0	0	0	0	4	1	125	106	71	167	82	29	12	26	27	3	36	2	0	8
Weymouth	0	0	1	11	22	7	13	19	134	160	30	91	137	85	104	75	170	113	138	109	213
Winchester	11	49	23	24	16	0	12	2	1	1	10	5	1	6	1	1	2	0	0	12	10
Winthrop	75	96	589	2278	1303	648	288	211	240	107	277	795	389	663	1003	817	542	899	664	717	938
Woburn	0	9	8	20	0	0	2	0	0	0	1	1	0	0	1	11	12	2	3	0	4
Other	52	32	213	243	160	27	24	21	25	3	20	20	38	51	50	70	87	63	44	34	172
TOTAL	725	1247	7047	14000	7402	2753	1832	1348	1322	906	1294	1909	1434	1615	2023	3599	3790	3933	3282	2545	3913

Alternative flight tracks were being tested on Runway 22.

* Alternative flight tracks were being tested on Runway 27 (Nov. & Dec. 1991, Jan. & Feb. 1992).

APPENDIX 5

Boston Globe 6/18/98 ATC Article: Radar Outages/
Understaffing

Air traffic controllers tell of computer problems

FAA
Continued from Page A1

Radar outages worry air traffic controllers

By Matthew Brelis
GLOBE STAFF

Air traffic controllers directing planes flying at igh altitudes over New England and upstate New ork say that their radar screens have gone blank or ozen up almost daily since April and that there are ot enough technicians to keep the system running.

The cause of the malfunctions is a computer sys- m installed in 1972 that is failing with increasing equency.

While the Federal Aviation Administration ac- owledged problems with the computer system in e Boston Center and at other facilities around the untry, a spokesman said that the air traffic system s safe and that the agency has no records of daily lures.

Controllers and technicians, however, say the sys- n is being stretched to the breaking point.

"The system is falling apart," said William Johan- , president of the local chapter of the National Air affic Controllers Association, representing control-

FAA, Page A35

lers at the Boston Center in Nashua.

The most recent example of the problems came Tuesday afternoon, when a controller in Westbury, N.Y., momentarily lost track of Air Force Two's speed and altitude as the plane carrying Vice President Al Gore approached Newark International Airport. The DC-9 was 12 minutes from landing when crucial data – the plane's call sign, altitude reading, ground [illegible]nd angle of descent – disa[illegible] from the com-

Controllers rely on the computers and radar in their effort to maintain a safe distance between aircraft.

"The agency has now placed the national airspace system in jeopardy by allowing staffing in the radar unit to fall well below recognized norms," said Ed Dressell, the Boston Center's local president of the Professional Airways System Specialists, the union representing the technicians.

FAA spokesman Jim Peters said

'The agency has now placed the national airspace system in jeopardy by allowing staffing in the radar unit to fall well below recognized norms.'

ED DRESSELL
President, Professional Airways System Specialists

that safety has not been compromised by the computer failures. "Like any piece of equipment, you will experience problems on an intermittent basis," he said, adding that a back-up system has performed whenever the computer failed.

Peters also said a special team was assigned to the Boston Center to find the cause of the problems and fix them. An FAA document obtained by the Globe, however, indicates that any repair is at least six months away.

Peters also said the center has adequate manpower.

Two years ago, seven certified technicians worked at the Boston Center to keep the computer system running. Today only three specialists are assigned to maintain a system that has to run 24 hours a day, every day of the year. As a result, in the last month alone, the three technicians have been ordered to work more than 60 hours of overtime. One of the technicians is eligible for retirement and Dressell said "burnout is becoming an issue," as the hours required to service the aging system begin to increase.

The lack of trained technicians was caused partly by the retirement of many who were not replaced in the last decade because the FAA believed a new system would obviate the need for so many technicians. That new system, however, is still at least two years away.

On May 29, the technicians' union asked the FAA to declare an emergency situation at the Boston Center. That move would have been embarrassing but would have given the agency greater flexibility in staffing. Instead, the agency earlier this month called the repeated failures of the system a "substantial operational situation."

Meanwhile, Johannes said the outages have been occurring at an "alarming rate," and last anywhere from 12 seconds to two and a half hours. In 12 seconds, a plane can travel more than two miles. When longer outages occur, controllers use a limited back-up system, which requires a more time-consuming process to "hand off" a plane from one controller to another.

Controllers also are concerned that the back-up system may be down for routine maintenance when the primary system crashes. "If that happens, we won't have radar contact with anyone," Johannes said.

But, countered the FAA's Peters, even in that unlikely situation controllers would have radio contact with the airplanes and could slow all air traffic down considerably and increase the separation between planes to ensure there is no midair collision.

Air Force One, the plane used by President Clinton, disappeared twice in recent months from radar screens off New Jersey because of problems with the radar system.

"Air Force One is not the only plane disappearing from radar screens," said Scott Hayden, the local union vice president. "Unfortunately, these things happen every day to other aircraft as well."

Boston Globe 6/18/98

APPENDIX 6

11/96 EPA/Massachusetts Toxics Campaign Fund Study:
Industrial Pollution in Chelsea

INDUSTRIAL POLLUTION IN CHELSEA

AN ENVIRONMENTAL SURVEY BY

THE MASSACHUSETTS TOXICS CAMPAIGN FUND

November 1996

Funded by the U.S. Environmental Protection Agency

INDUSTRIAL POLLUTION IN CHELSEA

Summary

* From 1987 to 1994, as part of normal production, industrial companies in Chelsea reported that they released 666,188 pounds of toxic chemicals into the environment, or 83,274 pounds each year. Nearly all of this amount was released directly into the air. Over 95% of the air releases were made of three toxic chemicals: 1,1,1-trichloroethane, xylene, and toluene. These three chemicals can seriously damage human health. These companies are located mainly in the industrial area in the northeastern part of the city near Revere and the Chelsea River.
* Seven companies reported emergency releases of toxic chemicals (mainly fuel) during the 1987-1995 period. Some of these releases were very large. One was greater than 200,000 pounds of fuel. These companies are located mainly along Eastern Avenue and the waterfront area.
* Numerous other small, non-emergency releases of toxic chemicals took place, not only in industrial areas, but at several schools, too. High concentrations of lead and other toxins were turned up at the Williams and Shurtleff Schools.
* Chelsea is home to 44 toxic waste sites, also called "21E" sites, scattered throughout the western industrial area (near Everett) and the eastern waterfront industrial sections. Some of these sites contain hazardous waste, while most contain petroleum waste. These areas are known as "brownfields". Most of these sites are still far from being cleaned up.
* Chelsea's four biggest users of toxic chemicals used over 2.5 million pounds of reproductive toxins in 1993. These chemicals can damage the human reproductive system.
* Higher levels of pollution appear to be present in neighborhoods with a higher percentage of low income residents - particularly in low-income communities of color - while fewer sources of industrial contamination are found in higher income neighborhoods.

Scope of the Study

This study examines the extent of industrial pollution in Chelsea and its possible relation to socioeconomic status of Chelsea residents.

Lead poisoning is considered to be the main environmental health hazard in Chelsea, due to high incidence of older housing stock containing lead paint. In this study we do not quantify the extent of lead contamination and its health effects. We do recognize, however, the strong link between lead poisoning and a general lack of education about lead hazards and the lack of financial means among low income residents to have lead dangers removed.

Instead, we examine the extent of industrial toxic releases and their relation to socioeconomic status of Chelsea residents. Industrial and commercial pollution in Chelsea occurs in several ways:

1) As a frequent release into the environment from a factory or other business establishment. Businesses large enough are asked (voluntarily) to report what they emit into the environment each year to the U.S. Environmental Protection Agency. This information is compiled annually in the federal Toxic Release Inventory.

2) As an accidental release or spill. These are single events, not continuous or frequent releases over the period of one year, as is reported in the Toxic Release Inventory. Sometimes these releases are reported as an emergency, particularly if they are big. Other times, when they

are small and are not thought to pose a threat to the public, they are reported as non-emergency spills or releases.

3) As a "21E" waste site. 21E is a designation given by the Massachusetts Department of Environmental Protection to sites where significant amount of petroleum waste or hazardous waste have accumulated.

In addition, toxic chemicals used in production, and stored on-site at factories, are considered to be a potential health hazard, even if they are not actually released into the community.

Reported Toxic Releases from Industrial Production

According to the federal Toxic Release Inventory (TRI) Chelsea has experienced significant industrial toxic releases since reporting began in 1987. **Tables 1 and 2** show toxic releases from the Toxic Release Inventory for each year from 1987 to 1994. Total reported environmental releases have risen from 53,555 lbs. in 1987, to a peak level of 167,539 lbs. in 1989, then declining somewhat through 1992, before dropping off significantly in 1993 and 1994. Nearly all of the pounds released were released to the air.

The three major pollutants - 1,1,1-trichloroethane, xylene, and toluene - are chemicals which, at high enough levels, can seriously damage human health, including causing cancer. See **Table 3** for a brief description of the health effects from exposure to these chemicals.

The sources of this pollution are six industrial facilities. The largest emissions came from Emtex, Inc., and Glyptal, Inc., both located in the northeastern part of the city, near Chelsea Creek. At its peak, the largest polluter, Emtex (181 Spencer Ave.), released 140,844 pounds of 1,1,1-trichloroethane into the air in 1989 and 113,656 pounds into the air in 1992. Since 1992, however, there are no reported toxic releases from Emtex.

Glyptal (305 Eastern Ave.) released a peak level of 20,164 pounds of 8 chemicals into the air in 1989. Since then its releases have gradually dropped down to around 10,000 pounds in 1992-1994. The company's major pollutants are xylene and toluene.

Accidental Releases or Spills: Emergency and Non-Emergency

Seven companies reported emergency response releases or spills during the period of 1987-1995 (see **Table 4**). Most of these companies are located in the industrial areas along the Chelsea River. Nearly all of the releases or spills were gasoline or oil. Several releases were very large. Gulf Oil (281 Eastern Ave.) released 68,961 pounds of gasoline in 1992 and 13,200 pounds of kerosene in 1990. Amoco Oil (111 Eastern Ave.) released 203,000 pounds of fuel oil in 1993. B.A.T. Transportation (281 Eastern Ave.) released 15,250 pounds of gasoline in 1993. Coastal Oil (at Chelsea Dock) released 50,040 pounds of asphalt in 1994.

There were numerous smaller, non-emergency releases of toxic chemicals in the past several years alone, as documented by the Mass. Department of Environmental Protection. **Table 6** locates these smaller releases by census tract. Some of these smaller releases include heavy metals - such as zinc, copper, and lead - and relatively small amounts of fuel oil or petroleum hydrocarbons. Several releases are notable. The Shurtleff School (76 Congress Ave.) experienced a release of petroleum hydrocarbons (860 parts per million) and lead (490 parts per million) in June, 1995. There was a release of lead at a very high concentration (13,000 parts per million) at the Williams School (170-180 Walnut St.) in September 1994.

"21E" Waste Sites

Chelsea is home to 44 "21E" waste sites, as identified by the Department of Environmental Protection (see **Table 5**). Most of these waste sites contain petroleum waste, while seven sites contain non-petroleum hazardous waste alone, and 12 sites contain both petroleum and hazardous wastes. These sites are in various stages of clean-up (or "remediation"). But it appears that most of the sites are not close to being cleaned up. The waste sites are located at a wide variety of facilities, from the Williams School to Amoco Petroleum to Forbes Lithographic to the Chelsea Housing Authority. They are found largely in the city's western industrial area and the northeastern industrial area along the Chelsea River.

Many of these sites are considered "brownfields". This means that they are on vacant land, contain abandoned or vacant buildings, and have a slight or moderate degree of contamination. Brownfields are typically not seriously contaminated waste sites, such as a "Superfund" (as designated by the U.S. Environmental Protection Agency). Rather they are lands that could be put to other uses after an effective cleanup takes place. What should happen to these brownfields in Chelsea after they are cleaned up is an important issue.

Toxic Chemicals Used in Industrial Production

In addition to toxic releases and waste sites, many companies use toxic chemicals in their day-to-day production activities. **Table 7** shows the four biggest industrial users of toxic chemicals in Chelsea. Each of these companies also uses toxic chemicals which have been proven to cause reproductive damage in humans. Biltrite Corp., Emtex, Glyptal, and Marson Corp., together used 2,511,424 pounds of reproductive toxins in their production activities in 1993, as documented by MASSPIRG and the Greater Boston Physicians for Social Responsibility (1996). Reporting of amount of toxic chemicals being used or stored or produced at a facility is not a strict legal requirement; reporting is only voluntary. This means that numerous other businesses in Chelsea, especially small businesses, are probably using or releasing toxic chemicals without reporting it.

Pollution and Socio-Economic Status

The most significant industrial pollution sources in Chelsea are found in the city's eastern sections, in close proximity to residential neighborhoods, and in the sparsely populated western industrial section. The northeastern section of the city (census tract 1605) has the highest percentage of communities of color living below the poverty line. According to the 1990 Census (see **Table 9**), 49% of African-Americans, 50% of Asians, and 50% of Hispanics lived below the poverty line in Census Tract 1605. This tract experienced the highest level of continuous toxic releases (from the Toxic Release Inventory) (see **Table 8**). Also located in this section of the city are three auto body shops and two dry cleaners, potential sources of highly toxic releases which typically go unreported. In addition, a greater incidence of petroleum fuel spills and leaks occurred in this section than elsewhere in the city.

The two census tracts with the highest percentage of Hispanic residents, tracts 1602 and 1604, also demonstrated a higher incidence of toxic releases than other parts of the city. Percentage of Hispanics living below the poverty line was 41% and 47% in these two tracts.

Recommendations

1) The Chelsea Fire Department should check the Toxics Use Reduction chemicals (used in industrial production) against their files in order to ensure emergency preparedness.

2) Exact status of 21E waste sites should be made known to Chelsea residents by the Department of Environmental Protection. It is not clear as to how close to completion of cleanup each of these sites is.

3) There needs to be far better public access to information on industrial toxic hazards. The Department of Environmental Protection's online database is not yet very user friendly. Getting access to environmental information at DEP is a very time-consuming process; the average citizen does not have this kind of time.

4) The companies releasing toxic chemicals into the environment need to be tracked further. For example, whatever happened to Emtex, Inc., which was once (up to 1992) the biggest releaser of toxic chemicals into the environment in Chelsea. Emtex is no longer reporting. Did the company move? Better tracking is critical. The City of Chelsea should help track these companies and provide that information to residents on a yearly basis.

5) There needs to be a closer examination of the proximity of current residential neighborhoods and schools to industrial environmental hazards.

For further information, contact:

Thomas Estabrook
Massachusetts Toxics Campaign Fund
(617) 666-1326 (eves.), (508) 934-3397 (days)
or write us at:
160 2nd Street
Cambridge, MA 02142

Information on waste sites and toxic releases can be obtained from:
Massachusetts Department of Environmental Protection, (617) 292-5500.
Ask for the waste site cleanup department, the air quality division, or the toxics use reduction department.

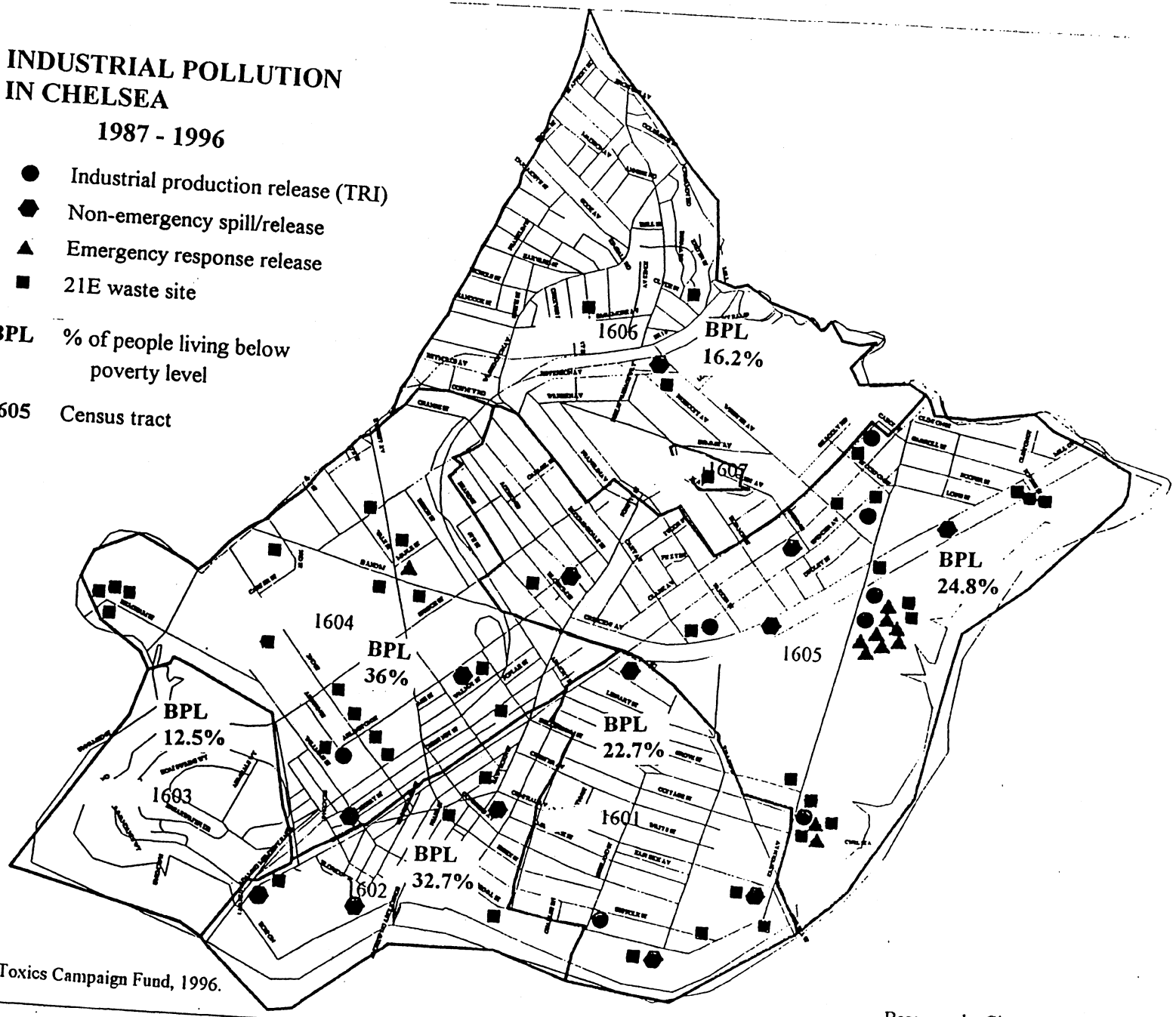
INDUSTRIAL POLLUTION IN CHELSEA

1987 - 1996

- ● Industrial production release (TRI)
- ⬢ Non-emergency spill/release
- ▲ Emergency response release
- ■ 21E waste site

BPL % of people living below poverty level

1605 Census tract



Mass. Toxics Campaign Fund, 1996.

Base map by City of Chelsea, 1995.

Table 9:

Chelsea Census Data (1990)

Census Tract	Number of Persons	% of Population	% Below Poverty	Median Family Income
1601	6,036	53.3 % White	10.4 % White	29,493
		6.3 % Black	14.9 % Black	
		7.2 % Asian	58.2 % Asian	
		41.63 % Hisp.	32.5 % Hisp.	
			22.7 % - ALL	
1602	3,823	58.4% White	25.6% White	22,772
		5.7% Black	22.7% Black	
		4.5 % Asian	39.4 % Asian	
		56.3 % Hisp.	41.2 % Hisp.	
			32.7 % - ALL	
1603	1,155	85.9 % White	11.2 % White	49,048
		4.9% Black	38.6% Black	
		4.6 % Asian	0% Asian	
		4.6 % Hisp.	22.6 % Hisp.	
			12.5 % - ALL	
1604	2,787	54.6 % White	27.9 % White	17,011
		9.2 % Black	45.5 % Black	
		1.3 % Asian	14.7 % Asian	
		62 % Hisp.	47.2 % Hisp.	
			36.0 % - ALL	
1605	7,754	72.5 % White	15.4 % White	29,675
		9.2 % Black	49.3 % Black	
		7 % Asian	50% Asian	
		19.8 % Hisp.	49.97 % Hisp.	
			24.8 % - ALL	
1606	6,903	89.3 % White	11.8 % White	36,667
		3.4 % Black	35.1 % Black	
		2.7 % Asian	47.1 % Asian	
		8.5 % Hisp.	71.4 % Hisp.	
			16.2 % - ALL	
1607	252			

Note: For % of population, the percentages add up to greater than 100% because Hispanic respondents in the census sometimes considered themselves to be both Hispanic and white.

We need a pause the like of which we've never had in Western civilization. We need to halt at watershed junctures, like this one involving the disposition of Utah's public lands, and ask not only what is fair, just and reasonable, but what is enduringly wise.

The durable wealth of "public lands" lies beyond private bounty. Our principal task should not be to create new wealth but to manage the wealth we already have and which, for a variety of reasons, we cannot perceive.

In theory, publicly owned lands are publicly managed lands. In practice, the managing public comprises two opposing forces that government must reconcile: those with a specific economic interest and those without. As politics changes in the United States, one or the other of these two factions construes itself more (or less) influential in shaping public land policy. Neither group, of course, is ever in an unassailable position of authority, but public land decisions show a clear pattern. Land of little or no perceived economic utility tends to get protected; land showing any potential for economic profit—because it may support grass

or timber or may harbor minerals or water—is contested. (It is also true in an economy like ours that the imperative to develop inevitably forces a subdivision of the public land under consideration, thus ensuring that at least some land is always released for development.)

We need a pause in Western society because the decision to develop a stretch of public land can't be reconsidered, and at present, we're making these irrevocable decisions in preemptive, fearful haste. Nearly anyone who has attended a public land hearing, in which opposing sides square off over economic issues and what are quite accurately called spiritual issues, is appalled by the rudeness and contempt that often characterize testimony. A disinterested observer feels saddened and embarrassed by the witless rhetoric, the false airs and vituperative retorts, the blind allegiance of some individuals in government, in the environmental movement, in industry. Citizens who speak from their hearts instead of their wallets are too often dismissed by hearing committees as "irrational."

We are not, of course, in dire need of roads, transmission towers, dams, reservoirs, and gas pipelines. We are in dire need of courtesy. We are in dire need of a broadly intelligent conversation about human fate. We are in need of a thorough and piercing review of our plan for human economic development, a plan that at best is a hugely expensive speculation about human needs.

APPENDIX 7

Barry Lopez Article from Testimony-Writers of the West Speak on Behalf of Utah Wilderness 1996

We are not debating "wilderness" here in trying to decide the fate of Utah's undeveloped public lands. The term is too restrictive. We're debating the future direction of Western civilization, and our issue could not be more serious. A brutal, pointed lesson of human history is that unhealthy civilizations die. Civilizations that are physically, spiritually, or economically corrosive fall apart. Their people wither. If we do not want to pass away as a civilization, let alone as a Western nation, we need to recast our discussion so that it is this, not "wilderness," that is at stake. We need to see what a grave decision the release of public land for development is. If our central concerns remain who "wins" in these disagreements, or what sorts of "concessions" will please the most people, twenty years from now we'll be looked upon as fools. In a moment that called for discerning intelligence, we will be seen as people who settled for a fight over control, a venal and pedestrian aspiration.

The wisest thing now, it seems to me, is to regard undeveloped lands as an asset and to protect every acre of land possible. American culture, more than any other in the world, has been shaped by the image of private exploration of public land. The opportunity to still have that experience is deeply important to our sense of hope. And what you might call the principal, what's left in the account, is down to a pittance.

If we do not take the time now to understand where the diminishment of wilderness in America is taking us, the day will soon arrive when it will not matter. We will have given up a vision of heaven to bet we're not embarked on a trip to hell. The United States is a nation of staggering wealth. We can easily afford to conserve what we've been given and to wait patiently for a wisdom that so far has eluded us, a wisdom that will enable us to convey this gift, not simply consume it.

BARRY LOPEZ
(B. 1945)

Letter 207
Elaine McGrath
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
207.1	Environmental Review Process	FAA/NEPA	...I urge either the withdrawal of the plan or its rejection as a proposal that is inconsistent with the requirements of the National Environmental Policy Act, and unresponsive to the scoping directives of the secretaries and to the concerns of the public.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
207.2	Environmental Review Process	FAA/NEPA	Massport's Draft EIS/EIR...has failed to respond to specific scoping directives in the Letters and Certificate issued by EPA, MEPA and DEP in 1995.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
207.3	Environmental Review Process	FAA/NEPA	NEPA requires agencies to take a hard look at the environmental consequences of their proposals, and to conduct a detailed and thorough analysis of alternatives and to make this information available to the public. Massport has not done this. There are fatal flaws with its analyses of impacts, alternatives and environmental justice.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. A total of twelve meetings were held. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts.
207.4	Environmental Review Process	NEPA/MEPA	The proposal specifically fails to respond to directives intended to uncover these impacts, in the scoping letters of Secretaries Coxe and DeVillars, as well as DEP.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. Twelve meetings were held. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts. The other projects cited in this comment are not related to the Airside Improvements Project. Any impacts associated with those projects will be addressed in individual project filings, if required under NEPA and/or MEPA and also in the ESPR (formerly GEIR) process. The ongoing state ESPR process provides information to the federal and state agencies and the general public on the environmental effects of existing and future operations at Logan Airport, on the cumulative effect of airport operations, and on the planning context for individual projects at Logan Airport. The GEIR/ESPR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR as a background document."

Code	Topic 1	Topic 2	Comment	Response
207.5	Analysis Assumptions/ Methodologies	Studies	Massport's impacts analysis understates impacts in a number of ways that have the cumulative effect of systematically minimizing Logan's impacts on the surrounding communities: • failure to account for the context and intensity of growth in airport operations, both land and air • unreliable modeling of impacts • inadequate and inaccurate monitoring of impacts and of mitigation • failure to report or take into account community feedback • persistent use of data known to be flawed, and unwillingness to correct mistakes • systematic and knowing selection of data so as to minimize the appearance of impacts.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's ESPR (formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan." The emission inventory results show that the Airside Project, including the Centerfield Taxiway, would lead to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. The small changes in emission concentrations at Bayswater Street, East Boston, and Winthrop will meet federal standards for hydrocarbon emissions. Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings.

Code	Topic 1	Topic 2	Comment	Response
207.6	Noise	Stage 3 Aircraft	...Stage 3 aircraft are not appreciably quieter on landing and take-off, the noisiest operations which are the ones that affect the surrounding communities. Contrary to Massport's disingenuous assertions, Stage 3 aircraft do not and cannot reduce the noise exposure of the surrounding communities,....	Manufactured Stage 3 airplanes are definitely quieter during both takeoff and landing than are old Stage 2 airplanes that have been hushkitted to meet Stage 3 noise limits. Massport agrees that as long as hushkitted aircraft remain in the fleet, they will be perceived as the primary cause of noise.
207.7	Noise	PRAS	...the use of outdated PRAS goals to justify impacts as "community-approved". ...is misleading in the extreme.	The PRAS goals were established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations. As demonstrated in the Supplemental DEIS/FEIR, there have been no significant demographic changes since the time of the establishment of the PRAS goals. An update of the PRAS goals is therefore not warranted. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.
207.8	Noise	Model	...Massport INM noise modeling has fallen short of actual impacts in several instances.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.

Code	Topic 1	Topic 2	Comment	Response
207.9	Noise	Model	Massport does not include in its proposal the persistent community protests, the noise complaint data from its hotline, or present in a coherent way its own track record of inaccurate noise measurement. Even protests from local, state and federal representatives are not used as a check for the numbers that Massport wants to use....	Massport reports noise complaints annually in its ESPR (formerly GEIR) and each Annual Update. This is published and distributed widely and presented to the Massachusetts Secretary of Environmental Affairs who reviews the documents under MEPA requirements. Letters and comments specific to this project and the responses to those comments are published in Volumes 5-10 of this Supplemental DEIS/FEIR.
207.10	Noise	Model	...the waterfront area, including Beacon Street, is not on the map under the 14/32 proposal...This is so, even though Massport uses numbers of several thousands of people in Chelsea in the 65dB, up to the 75dB range, in its hypothetical 1993 baseline for the city.	Refer to the updated graphics in Chapters 4, 5 and 6 of this Supplemental DEIS/FEIR. Graphics have been updated, supplemented and corrected.
207.11	Analysis Assumptions/ Methodologies	Studies	There are still more sources of bad statistics and understatement. One is the omission of significant data through failure to coordinate with other agencies with necessary expertise, such as the Department of Public Health, the State Transportation Department., including public transportation gurus and highway departments, or through failure to report available information.	The model and methods used to develop these data were based on EPA- and DEP-approved guidelines and show that the NAAQS will not be violated.
207.12	Air Quality	Monitoring	The 1 air monitor in Chelsea from Department of Public Health is at Soldier's Home, as far away as you can get from the air and ground traffic to the airport. There's a concentrated impact area [around truck routes]. It's not monitored. These impacts are not accounted for in the proposal, and they will only get worse if Logan's operations are allowed to increase.	The DEP monitor at Soldier's Home is the closest station to Logan Airport that measures ozone. The closest DEP monitoring site to Logan Airport is at Bremen Street. Several pollutants are monitored at this site: CO, NO_2, SO_2, and PM_{10}. Background concentrations were obtained primarily from the Bremen Street site. Massport also has several NO_2 monitoring stations in the Chelsea area.
207.13	Public Health	Effects	...Massport ...[should fund a DPH] epidemiology study...of health impacts in the surrounding communities.	Public health issues are discussed in Section 6.8 of the Supplemental DEIS/FEIR. Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.*
207.14	Noise	Soundproofing	Massport does not reflect these complaints [regarding soundproofing] in its analysis of mitigation. The complaints mean that even where Massport has tired to mitigate its impacts, it hasn't been able to. Nor does Massport identify any measures to assess whether the soundproofing works.....	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.

Code	Topic 1	Topic 2	Comment	Response
207.15	Noise	Model	Massport has underestimated the number of people who live with 60dB, 70 dB, 80-past 100dB routinely; the air and noise pollution its total operations produce; the social, economic, health and esthetic damage it does. By not verifying its models, and failing to take into account information from residents, Massport has submitted an impacts analysis that is statistical nonsense.	Tables 6.2-4 and 6.2-5 show the noise exposed population for the 29M Low and 37.5M High Fleet scenarios respectively. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).*

Code	Topic 1	Topic 2	Comment	Response
207.16	Environmental Review Process	FAA/NEPA, MEPA	...Massport ...[has failed] to propose meaningful, reasonable alternatives and to conduct a thorough study and detailed description of them...To allow Massport to conduct this analysis without proposing a significant alternative to the growth of the airport is to make a mockery of NEPA.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
207.17	Alternatives	Preferred Alternatives	Whatever Massport thinks the capacity should be, community residents from at least 28 cities and towns have been vociferous in their many meetings with Massport and the FAA, in their noise complaints, and through their local, state and federal representatives, that the human carrying capacity in this area has been exceeded-a critical point left out of Massport's analysis.	Comment noted.
207.18	Alternatives	Other Non-Construction alternatives	The environmental secretaries directed Massport to explore ways of accomplishing its goals without airfield improvements...and to consider operations restrictions as a mitigation measure...These directives are ignored or minimized in the alternatives analysis.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
207.19	Alternatives	Other Non-Construction Alternatives	A meaningful alternative that would accommodate travelers and communities would be to reassess the effective capacity of Logan with the goal of shifting traffic now, and creating a well-functioning, right-size airport in the context of livable communities...Airport capacities have been modified, and there is no reason those modification cannot be downward, in line with public health and safety; business pressure and the convenience of the traveling public have to be secondary concerns to safety and health.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of the Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
207.20	Alternatives	Reduced Approach Minima	Along the flight paths, planes fly over a major power plant, an LNG facility, several oil tank farms, the Tobin Bridge and 2 other bridges that are major thoroughfares into East Boston and downtown Boston, and hills. Whatever safety advantages there are to flying on IFR are cancelled out by the increased risks of flying over this terrain without a visual check.	The primary benefit of Runway 14/32 is to reduce delays during VFR conditions when strong northwesterly winds current limit Logan Airport to a single arrival stream. During IFR conditions, landings on Runway 32 would be limited by obstacle clearance—ship masts in the harbor and buildings in Boston. No approach lighting pier is planned for Runway 32 since it could not improve the landing minimums below 400 to 500 feet. Moreover, under IFR conditions the capacity of the Runway 33L/32/27 configuration would be compromised by the need for diverging missed approach and departure paths and the crossing of both Runway 32 and Runway 33L by Runway 27 departures.
207.21	Alternatives	Reduced Approach Minima	The lack of awareness and respect for the surrounding communities that ...[reduced minimums] reflects is symptomatic of the myopia of Logan's planning. I urge the FAA to withdraw this proposal or the reviewing agencies to reject it as inadequate in its analysis.	The agreement between the City of Boston, the FAA and Massport stipulates that any modification of the existing minimums requires completion of an EIS/EIR, even though the setting of minimums is otherwise categorically excluded from the EIS/EIR process. The reduced minimums will, in fact, enhance safety by providing precision guidance to a point closer to touchdown and reducing reliance on Runway 4R under poor weather conditions, when winds may favor use of an alternate runway.
207.22	Environmental Justice	Impacts	Massport's Environmental Justice (EJ) analysis is also flawed. Both within the specific poverty and race guidelines of the Presidential Order, and a broader analysis based on the principle of proportionality, Massport's proposal fails the test of environmental justice.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
207.23	Environmental Justice	Impacts	Because...analysis is based on noise contour maps, its numbers are understated and unreliable. It is impossible to know from its analysis how many people who are minorities or below the poverty line (BPL) are disproportionately affected by its operations.	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively
207.24	Environmental Justice	Demographic Data	There is another EJ issue that Massport fails to acknowledge. The principle of EJ is based on the notion of proportionality and the reality that certain populations are disproportionately affected by polluting activities.	The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Refer to Section 6.2 and Section 6.8 of the Supplemental DEIS/FEIR, respectively, for additional information on noise impacts and environmental justice.
207.25	Public Health	Effects	Massport and the FAA are "committed" to maximizing the use of the runways that currently blitz Chelsea: 15R/33L, for late night flights in particular, between midnite [sic] and 6 a.m. ...and to run the greatest number of additional flights: 22,000, overhead. To allow Logan to expand its operations, air and ground, through communities like Chelsea, is unconscionable. In environmental terms, it is to institutionalize a sacrifice area. No community should have to endure this.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
207.26	Cumulative impacts	Delay	The root problem is that, even operating at an annual average over all conditions of 115 operations per hour, Logan is operating beyond its effective capacity. For some time, it has been operating well beyond the carrying capacity of the communities whose residents eat its impacts.	Comment noted.
207.27	Environmental Review Process	Public Process	Among the information and initiatives that are needed are: coordination and funding of agencies to provide data on air and noise pollution and epidemiology such as the Department of Public Health and the state transportation department, especially the regional and highway departments; adequate and accurate monitoring of air and noise pollution in areas that reflect those impacts; consideration of improvements such as a ban on night flights and rerouting of passenger and truck traffic away form residential areas; a collaborative process that gives the communities a real influence over airport operations that affect them, and that reflects real alternatives to Logan growth as part of a regional transportation policy; and ways to ensure that there is an independent, competent assessment of Logan's impacts.	Public health issues are discussed in Section 6.8 of the Supplemental DEIS/FEIR. Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.*

LETTER 208

April 19, 1999

Massachusetts Environmental Protection Agency
Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Mr Durand:

I would like to take this opportunity to point out that the Draft EIS/EIR for runway 14/32 and the Centerfield Taxiway is inadequate and request that it be judged so for the following reasons:

1. Outdated studies and figures (potentially misleading) were used by Massport
2. FAA modeling guidelines were not adhered to by Massport
3. There were a lack of alternative studies in the report, such as:
   Better use of regional airports such as Hanscom, et al
   Study for a Second Airport
   Regional Rail Transportation Planning

208.1

As a resident of the greater Boston community, I ask that you consider social justice and fairness as related to the environmental effects in the short and long term of this proposal for the good of all residents and visitors. 208.2

Logan Airport is the only inner-city airport, that is looking to expand, without a sister regional option for overload & future capacity; the regional area is the only one that I know of in this country without a second major airport and a regional plan. As a frequent traveler I expect that when I travel I will have a commute in the range of one hour when I am traveling from the airport to the downtown of a major city, I belive that travelers will still come to Boston if they have a fourty minute drive to/from the Worcester area. Why should we continue to support this antiquated airport location at the expense of our overall environment, taxing our communities and infrastructure only to see a future with limitations at Logan Airport? 208.3

With it's unique and challenging location, Logan Airport should be utilized to its fullest extent with the current configuration; future growth and delay scenarios should be resolved through a regionalized planning effort. All that are affected should have proper time to review the facts and be given a chance to vote on this matter. 208.4

Massport is a public agency, as a member of the public we are all "stockholders" in this corporation. Let it be a matter of public record that this "stockholder" believes that Massport has not followed the rules, will not follow the rules and is acting in it's own interest, not the interest in which it serves

If you have any questions, please feel free to call me at 617-889-1400.

Thank you for your consideration,

Ron D. Morgese
65 Breakwater Drive
Chelsea, Ma 02150

Letter 208
Robert D. Morgese
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
208.1	Environmental Review Process	FAA/NEPA, MEPA	... Draft EIS/EIR for Runway 14/32 and the Centerfield Taxiway is inadequate and request that it be judged so for the following reasons: 1. Outdated studies and figures (potentially misleading) were used by Massport 2. FAA modeling guidelines were not adhered to by Massport 3. There were a lack of alternative studies in the report, such as: better use of regional airports such as Hanscom, et. al; Study for a Second Airport; Regional Rail Transportation Planning	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. Consistent with the request made by the EOEA in its Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. The High and Low Fleet scenarios for 37.5 and 45 million passengers represent a range of possible future activity—both levels and fleet mix—at Logan Airport. So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years. Consequently, the NLA was not included in the Future Fleet scenarios. DELAYSIM is a unique model that simulates how Air Traffic Control uses an airport's runways over time based on actual weather patterns and expected demand conditions. The FAA does not have an equivalent model, but uses a simplified (and less precise) procedure of weighting delays based on percentage of time different weather conditions exist. As part of the Airside EIS/EIR process, Massport explored several regional alternatives to determine the extent to which passenger diversion to other airports and travel modes or the elimination of demand through advances in telecommunications technology can solve Logan Airport's current and future delay problems. These alternatives have potential to absorb a portion of the growing demand for Logan Airport air services, but they will not provide sufficient relief to eliminate the need for airside projects. Chapter 2 of the Supplemental DEIS/FEIR includes a complete discussion of the regional transportation planning context.

Code	Topic 1	Topic 2	Comment	Response
208.2	Environmental Justice	Impacts	...I ask that you consider social justice and fairness as related to the environmental effects in the short and long term of this proposal for the good of all residents and visitors.	The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Refer to Section 6.2 and Section 6.8 of the Supplemental DEIS/FEIR, respectively, for additional information on noise impacts and environmental justice.
208.3	Purpose and Need	Airfield Capacity	... Why should we continue to support this antiquated airport location at the expense of our overall environment, taxing our communities and infrastructure only to see a future with limitations at Logan Airport?	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions.
208.4	Regional Transportation	Regional Airports	...future growth and delay scenarios should be resolved through a regionalized planning effort.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "moses" <moses@tiac.net>
Subject: runway 14/32
Date: Tuesday, April 13, 1999 5:57:22 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 209

Material here was first printed as a letter to the editor in the Chelsea Record

Has Peter Blute told three lies?

Peter Blute has told the public and the politicians several things about runway 14/32.

At least three of them seem to be lies.

<bold>Only a new runway will be able to take care of the increasing delays at Logan airport:

>ld>

The FAA lists the delay per 1000 operations at Logan on its web pages under Airport Data.

In 1992 the delay rate was less than four percent (3.923%).

By 1996 the delay rate was about two and one half percent (2.519%). Peter Blute is new to his job.

A reasonable question would be ...

What did Peter Blute do that made the delay rate go back up after 1996 ?? 209.1

Another would be ... Why has he not given the 97, and 98 rates to the FAA for posting on Its web site?? 209.2

Another would be ... Why are we worried about a delay rate less than 4%?? 209.3

the fact that Massport did not use established FAA methods of determining delays is proof of a disregard for the

truth and the general public.

<bold>The new runway will be uni-directional:

</bold>

The FAA web site states that the plan is to construct a new runway 32

<bold>AND</bold> to extend runways 15r/33l and runway 9.

There are three runways involved.

And the FAA would have the final say about directions for takeoff and landing.

A reasonable question would be ... How can Peter Blute promise something that he can not lawfully deliver? 209.4

Before construction can begin something must be done about the migratory birds that nest at Logan.

An article in the Herald disclosed that Massport is prepared to spend a quarter of a million dollars to move the birds from Logan to Otis Air Force Base. 209.5

<bold>Massport claimed it had the cooperation of the Mass Audubon Society for this move.

</bold>

A spokesperson at the office of Mass Audubon disclaimed any such agreement.

A reasonable question would be ... How can the public trust anything that Massport says?

for this, and any number of reasons as contained in the Draft Environmental Impact Analysis by:

Peter Alachi, MS, Biology

<bold>the Draft by Massport must be rejected out of hand!!!</bold>

Letter 209
R. E. Moses
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
209.1	Purpose and Need	Delay	...What did...[Massport] do that made the delay rate go back up after 1996?	Refer to Section 1.4 and Appendix C of this Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
209.2	Purpose and Need	Delay	...Why has ...[Massport] not given the 97, and 98 [delay] rates to the FAA for posting on its website?	The FAA delay statistics on the FAA web site are collected by the FAA and not by Massport. Refer to Section 1.4 and Appendix C of the Supplemental DEIS/FEIR for a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.
209.3	Purpose and Need	Delay	...Why are we worried about a delay rate less than 4%?	Refer to response to Comment 209.1.
209.4	Alternatives	Runway 14/32	...How can ...[Massport] promise [to control the directions of takeoffs and landings]?	The Runway 14/32 concept under review in this Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

Code	Topic 1	Topic 2	Comment	Response
209.5	Ecosystems	Rare Species	Before construction can begin something must be done about the migratory birds that nest at Logan. An article in the Herald disclosed that Massport is prepared to spend a quarter of a million dollars to move the birds from Logan to Otis Air Force Base. Massport claimed it had the cooperation of the Mass Audubon Society for this move. A spokesperson at Mass Audubon disclaimed any such agreement.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "moses" <moses@tiac.net>
Subject: Runway 14/32
Date: Tuesday, April 20, 1999 11:27:39 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 210

On 4/20/99 the Boston Herald Reported complaints of Airline passengers.
Airport delays were not on the list.
Passengers complain about the way they are treated by the Airline.

Massports delay statistics are not the point for airline travelers.

1. Massport claims that last year there were over 120,000 hours of delay at Logan.
2. There are less than 9000 hours of real time in a year.
3. It is obvious that they are counting delays more than once.
4. This is not the accepted method of delay counting according to the Federal Aviation Agency.
5. Since Massport has lied with statistics in its EIS Draft the draft must be rejected out of hand.

210.1

Letter 210
R. E. Moses
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
210.1	Delay	Model	1. Massport claims that last year there were over 120,000 hours of delay at Logan. 2. There are less than 9,000 hours of real time in a year. 3. It is obvious that they are counting delays more than once. 4. This is not the accepted method of delay counting according to the Federal Aviation Agency. 5. Since Massport has lied with statistics in its EIS Draft, the Draft must be rejected out of hand.	The results for 1998 presented in the Airside Project Draft EIS/EIR were based on preliminary data. The Supplemental DEIS/FEIR contains updated information for 1998, including total annual runway delays of 129,500 hours. These are cumulative delays for all 513,800 flights, or an average of 15.1 minutes per flight. The Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays, including a description of FAA and DOT delay measures and their limitations. Estimated delay reduction is one of the primary factors used by the FAA for approving aviation investment projects.

40 Beacon Street
Chelsea, MA 02150
LETTER 211
April 21, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOAO No. 10458
100 Cambridge Street
Boston, MA 02202

Dear Mr Pugsley:

This was a video taped by a local resident,Elaine McGrath of Beacon St.,Chelsea, to demonstrate to local officials some of the crippling effects of truck traffic leaving the Tobin Bridge, exiting on to narrow Chelsea streets because they are considered Truck Routes by Mass Highway. This video was shown on Chelsea Community Cable April 1998 and also filmed that month. (April is a'slow' truck traffic time since few dump trucks going to the salt pile and fewer heating fuel trucks going to the many tanks in Chelsea, but the Air Cargo trucks know no slow season.) It waw purposely filmed when planes weren/t over head because they are the only noise that is capable of drowning out the Air Cargo truck noise, but a few planes directly overhead do slip in halfway through the film. As a result of tremendous effort by our City Councilors and local residents, there may be a late night ban on truck traffic on some of these roads, but we have been told that trucks will always use this ramp because it is a route to the Airport.

Vol.1,ES-27: "Truck traffic associated with the desired airside improvements...average about 129 round-trip truck trips daily. Trucks will be prohibited from using local streets and thus will not impact local residential streets in communities surrounding the airport. Construction vehicles will be required to use state highways and/or main airport roadways which are designated truck routes."

a) Massport needs to let us know how 129 ("average,about") truck trips was chosen. As you may know from recent hearings/readings Massport has difficulty using accurate numbers for what has already occured, let alone giving us a number as a projection. Massport is not good in giving an accurate accounting. Their truck numbers are a very important issue to us. In the EIS 58 to 500+/day truck trips are projected,which is it? Is is in addition to? 211.1

b) Many streets in surrounding airport communities are designated truck routes, done years ago by major state agencies, Iwould hazard a guess, working together on occasion to speed up truck traffic to the Airport. I have seen how many years it takes to even limit a few trucks for a few hours on one of these streets. (The cost of residents hours working to limit Logan's impacts on their lives is also not given in the EIS,nor considered a problem by the writers of the EIS)

c) Construction vehicles will be using the roads seen in this film which Massport uses presently for their airport traffic, air cargo, and Big Dig dump trucks (Massport told us no Big Dig trucks on this route, the drivers drinking coffee in 'Christies' told us otherwise...we just thought someone was digging a very bid garden out in Boston)
Chelsea will be the city for Logan's trucks, traffic, noise and air pollution, dented cars, accidents.

"vehicles will be required..." By Whom? Who has this authority or a desire to use it? Who will enforce it? Massport Police? Local police; shortstaffed, overworked-out there stopping trucks? Who? Who will keep these trucks out of residential neighborhoods? (which the neighborhood on the film is so called residential/commercial)

So here's the popcorn, sit back and watch-this is Chelsea Waterfront not at its best but getting there-brick rowhouses built 1860's, formally filled with seafaring folk now populated with a diverse population of many color, creeds, age, land of origin-you name it and we've got it-and it works! But unfortunately, it is not mentioned in the EIS when it faces the Environmental Justice analysis because Chelsea was taken off the Noise Contour Map because of inaccurate monitoring (noted in many reports on your desk I'm sure) by Massport.
Chelsea should be a hotbed of Environmental Justice concerns and it is being addressed with the many other polluting businesses in Chelsea but we can't get Chelsea's minorities and low-income earners even in the EIS. Why?

Thank you for your time and hard work on this issue-it's really life and death to us here in these towns-we don't want to become a ghost town,polluted unliveable so that Massport can take more land for its parking lots and air cargo hangers.

Respectfully,

Mary Jane Quinn

Video + letter 4-22-c

M. J. Quinn
40 Beacon St
Chelsea MA
#10458

Traffic Count

Organized by Chelsea Green Space and Recreation Committee
Conducted by Environmental Crew
July 24, 1997
2p.m. - 3:30 p.m.

Intersections of
Broadway/ Beacon / Williams, CHELSEA, MA

Totals

Cars	~~Diesel~~ Trucks	Buses
1144	413	18
Total	1575	

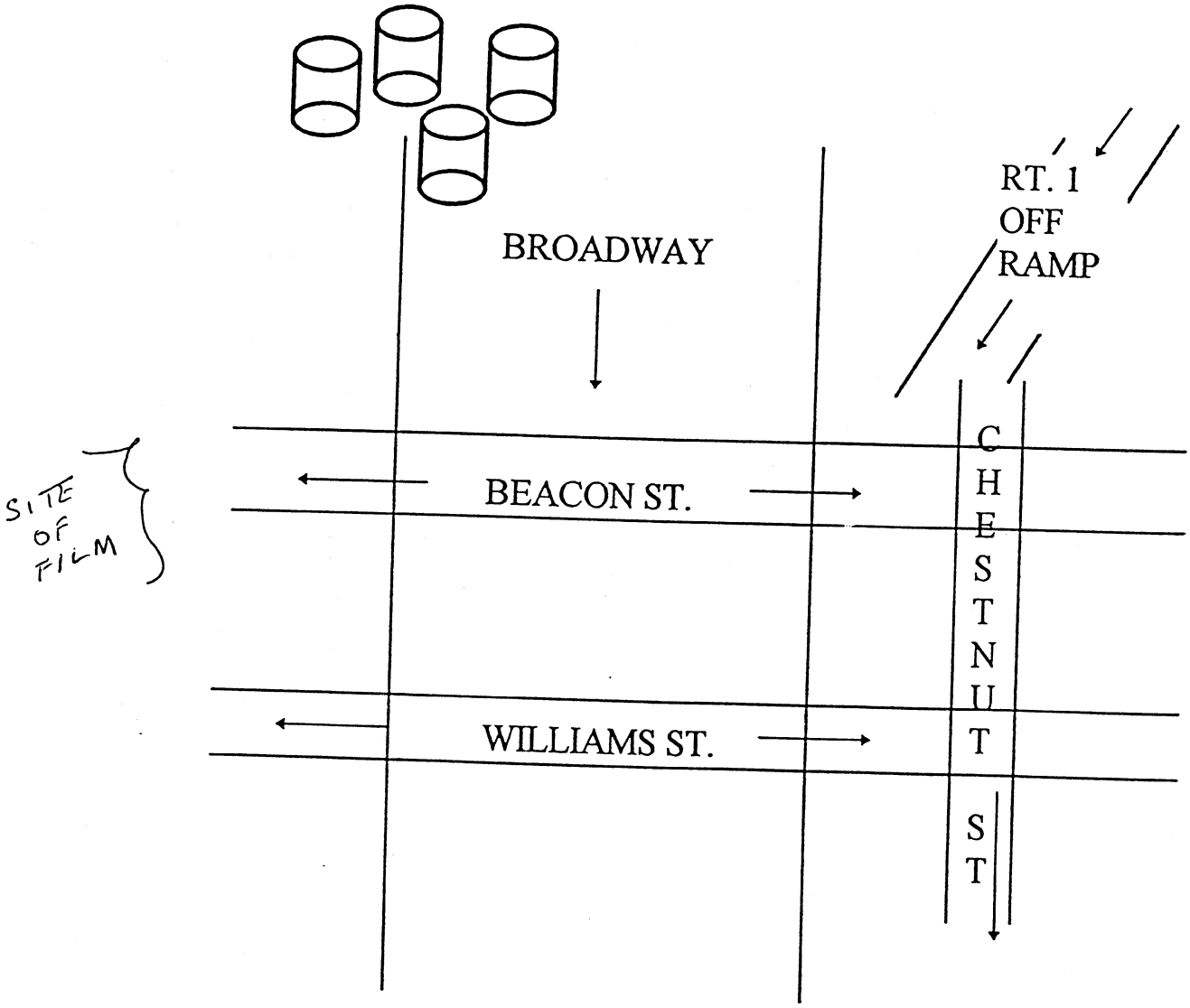
for 1½ h
in July

(in the winte
months —
↑ Dump truc
+ Diesel
↓
Tank Farm

3.6
Tobin Bridge 1/98 916,000
~~30-~~23,000/day wrk days ONE WAY

study for MTC 1/16 150,000 day

Traffic Count
Organized by Chelsea Green Space and Recreation Committee
Conducted by The Environmental Crew
July 24, 1997
2p.m. - 3:30 p.m.



Traffic or Pedestrian Counting Chart

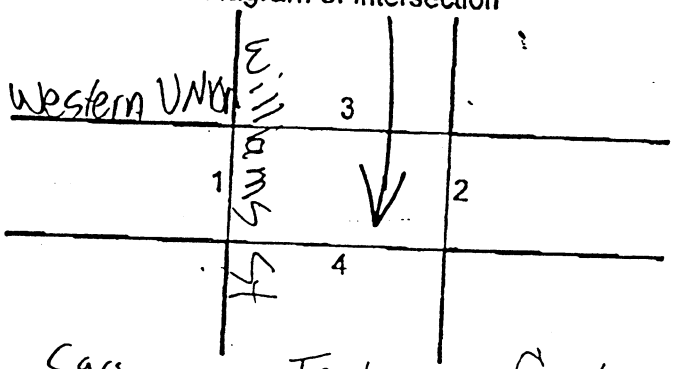
Name: Jamie

Date:

Start Time: 2:00 pm End Time: 3:15

Streets: Williams St.

Diagram of Intersection



NO Buses

Time Period	1 Cars	2 Trucks	3 Cars	4 Cars cont.
2:00-2:15	46	11	66	36
2:15-2:30	30	7	49	21
2:30-2:40	18	6	46	35
2:40-2:50	26	12	31	17
2:50-3:00	35	13	36	14
3:00-3:05	30	8	16	0
3:05-3:10	17	6	29	11
3:10-3:15	10	4	21	0

156 Cars 43 trucks

107 Cars 20T

115 C 18T

105 C 26T

73 C 35T

41 C 30T

69 C 17T

58 C 10T

Total Cars

496

Created by Penn Loh, ACE (617 442-3343 x24) 7/22/97

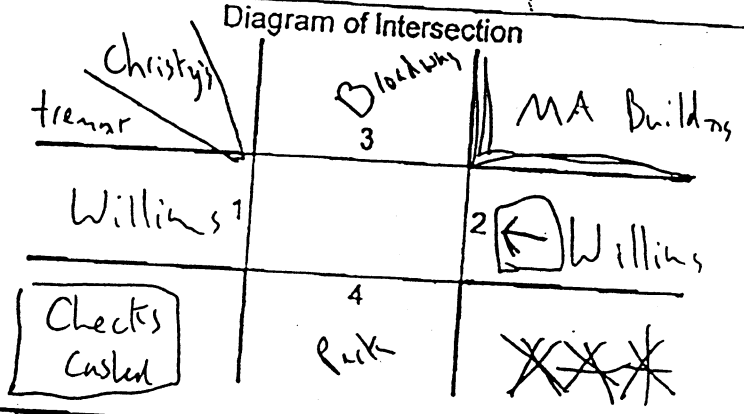
163 TRUCKS Total

429 Vehicles

Traffic or Pedestrian Counting Chart

Name: Chau Hoang
Date: 7/24/97
Start Time 2:00 **End Time:** 4:00 p.m.
Streets: Williams St.

Diagram of Intersection



Time Period	1 Car	2 truck	bus 3	4
2:00	24	35	1	1
2:15	16	17	11	2
2:30	22	16	1	1
2:45	60	28		
3:00	104	40		
3:15	115	27		

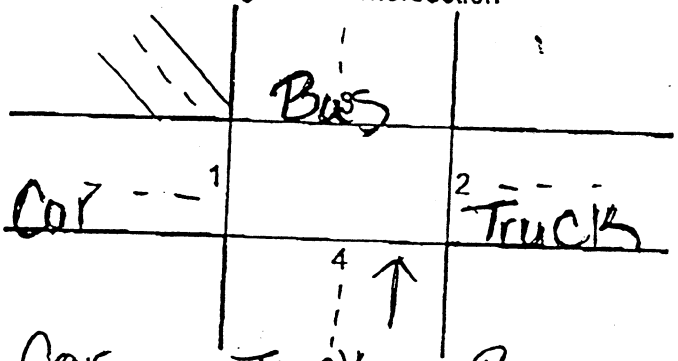
Created by Penn Loh, ACE (617 442-3343 x24) 7/22/97

547C 165T 46

Traffic or Pedestrian Counting Chart

Name: Dolly Ann Pettie — jr.
Date: 7/24/97
Start Time _____ End Time: 4:00 pm
Streets: Park St four Broadway St

Diagram of Intersection



Car Truck Bus

Time Period	1	2	3	4
2:00/2:15	33	2		
2:15/2:30	40	5		
2:30/2:45	27	7		
2:45/3:00	41	1		
3:00/3:15	52	8		
3:15/3:30	52	3		
	264	31		

Created by Penn Loh, ACE (617 442-3343 x24) 7/22/97

Traffic or Pedestrian Counting Chart

Name: _____

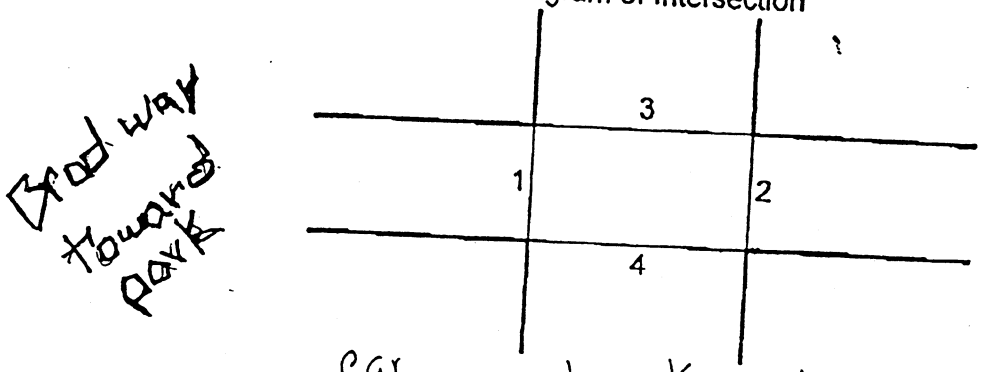
Date: _____

Start Time _____ End Time: _____

Streets: _____

_____

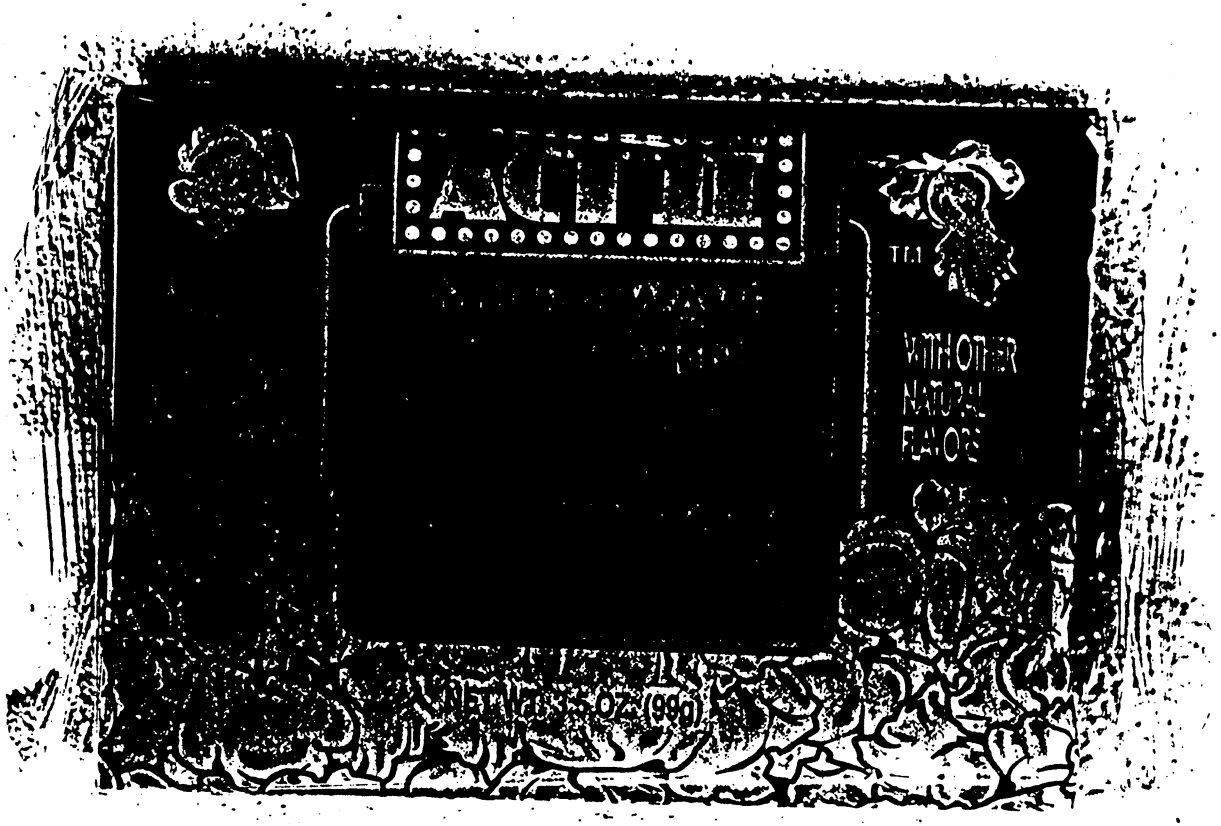
Diagram of Intersection

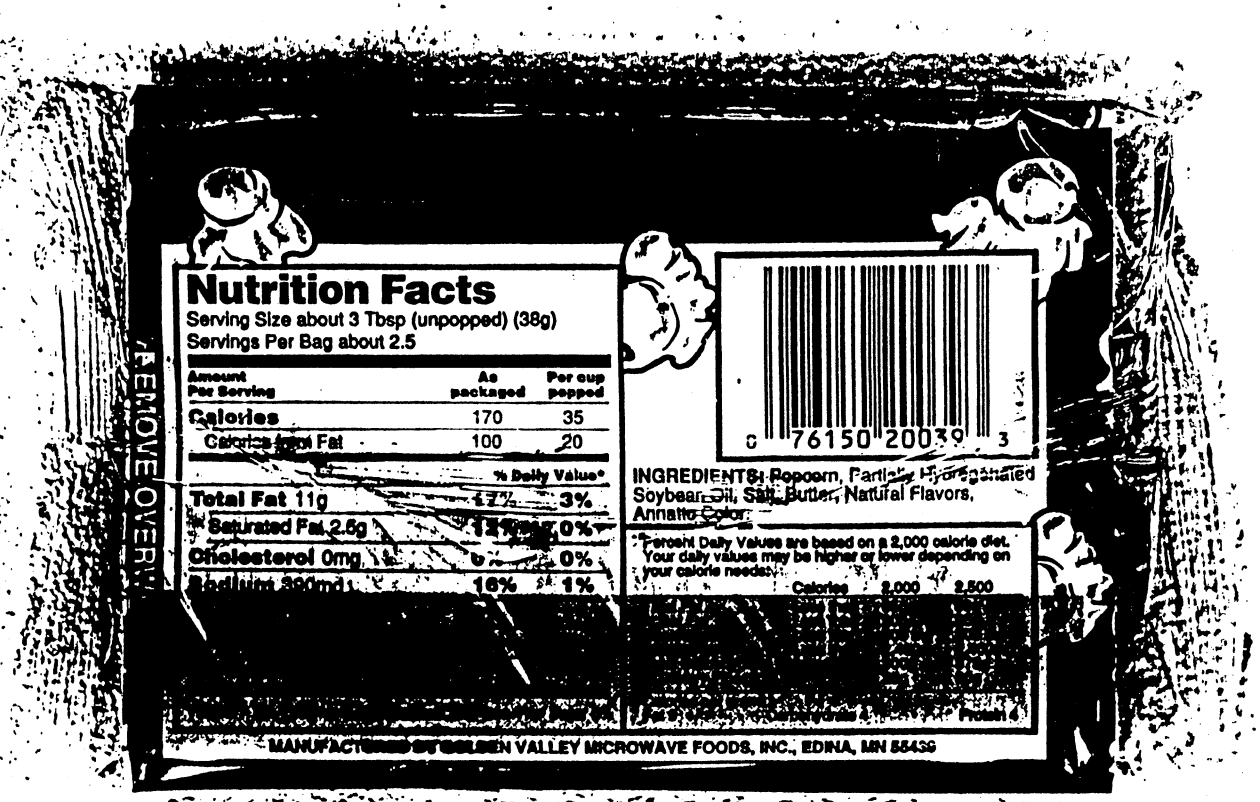


Broadway toward Park

Time Period	1 (car)	2 (trunk)	3 (bus)	4
2:00-2:15	⑫	⑦	①	
2:15-2:30	⑩	①	③	
2:30-2:45	⑮	⑮	②	
3:00-3:15	⑯	⑬	⑤	
	134 cars	34 trunk	14 bus	total-182

Created by Penn Loh, ACE (617 442-3343 x24) 7/22/97


ACT II
WITH OTHER


REMOVE OVERW
Nutrition Facts
Serving Size about 3 Tbsp (unpopped) (38g)
Servings Per Bag about 2.5
Amount Per Serving
As packaged
Per cup popped
Calories
170
35
Calories from Fat
100
20
% Daily Value*
Total Fat 11g
17%
3%
Saturated Fat 2.5g
13%
0%
Cholesterol 0mg
0%
Sodium 390mg
16%
1%
0 76150 20039 3
INGREDIENTS: Popcorn, Partially Hydrogenated Soybean Oil, Salt, Butter, Natural Flavors, Annatto Color.
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:
Calories
2,000
2,500
MANUFACTURED BY GOLDEN VALLEY MICROWAVE FOODS, INC., EDINA, MN 55439

Letter 211
Mary Jane Quinn
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
211.1	Ground Transportation	Access to Logan	Massport needs to let us know how 129 ("average, about") truck trips was chosen....Their truck numbers are a very important issue to us. In the EIS, 58 to 500+/day truck trips are projected. Which is it? Is it in addition to?	The number of round trip truck trips associated with construction of the Preferred Alternative as presented in the Airside Project Draft EIS/EIR ranged from a high of 324 per day to a low of 49 per day, with 129 representing the average number of daily truck trips associated with construction of the Airside Preferred Alternative. The cumulative number of truck trips for all concurrent on-airport construction projects ranged from a high of 580 to a low of eight per day. The Airside truck trips were included within the cumulative number. Construction traffic associated with the airside improvements has now been significantly reduced from the numbers presented in the Airside Project Draft EIS/EIR as a result of the reduction of soil material to be removed off-site. See Sections 6.9 and 7.5 of the Supplemental DESI/FEIR for additional discussion of construction impacts.

LETTER 212

40 Beacon Street
Chelsea, MA 02150
April 20,1999

Secretary of Environmental Affairs
attention MEPA Office
Mr. Arthur Pugsley-EOEA No.10458
100 Cambridge Street
Boston, MA 02202

Dear Mr. Pugsley:

I've enjoyed living in the Chelsea Waterfront neighborhood for the last 9 years and I can only speak to the stunning inadequacies and blatant omissions of data versus the reality found in Chelsea. On any page of the EIS where there is a reference to noise, air, odor pollution; air cargo truck traffic; Environmental Justice or 'mitigation' I know its data collection is flawed or tragically non-existent concerning Chelsea. Of course, then, any 'conclusions' or projections drawn from such poor 'info' gathering and reporting would have to be considered flawed or inadequate because what you had been given to work with was such. The EPA's best and most carefully drawn conclusions would have to be considered pointless, since you have not been given what MEPA had requested of Massport- an accurate, thoughtful, thorough accounting of present impacts of Logan and its operations and a complete picture of environmental impacts of any proposal. 212.1 212.2

A few examples:
Vol. 1, ES-5: "...14/32 will provide an opportunity to reduce the most severely moise impacted population..."

Chelsea is severely impacted by jet noise (see photos). Massport will not admit this on paper (ex:"0 noise impacted population" GEIR)--so if they won't acknowledge it--they don't have to reduce it! Massport can't tell you what the noise level is in Chelsea because they have chosen not to find out: 212.3

1. Chelsea was taken out of the Noise Contour Map and yet our noise has not abated esp. considering that flight operations have doubled in that time. Massport officials told residents and Chelsea City Councillors that we probably do have enough jet moise to be in but they wouldn't file this info with FAA till their normal filing time 5 yrs later.(this conveniently brings it to after this EIS filing process) 212.4

2. The Noise Monitor on Admiral's Hill was broken for 2 YEARS, without mention, without repair, without apology, without correction to the data..."0" noise recorded, documented and tabulated as such. Reported only when residents asked specifically and repeatedly for this data.

3. In 1998, Chelsea City Councillor Preston Galarneau fought to get a noise monitor on his Beacon St home-1 monitor delivered=broken...2cd monitor delivered= broken...BUT even with 'non-functioning monitor' days tabulated in for those few weeks-the numbers reportedly averaged ≥ 70dB with peaks of 100dB or greater! So if Massport's data is so completely untrustworthy,how can they decide how much more noise to give us(to be "equitable") if they don't know what we have now? THEIR COLLECTION OF DATA IS INADEQUATE, THEIR MONITORING APPEARS MANIPULATED and they have the nerve to send it to the EPA with conclusions drawn from it and proposals based on it. 212.5

4. Now we are discovering that Massport benefits from the use of this flawed, manipulated data. Chelsea has one of the highest immigrant, minority and low income population in the state-7 languages 'officially' used in the public schools, many more spoken--BUT Chelsea was taken off the Conour Map, Massport 212.6

refused to collect or consider reliable data to let us back onto Map, and so Chelsea's minority and low income population doesn't have to be included statistically by Massport in their Environmental Justice analysis which was required for this EIS. Again, how convenient.

Vol.1, ES-20: "Noise modeling analysis was conducted for all alternatives... noise contours and noise exposed populations were determined using the Integrated Model version 5.0" (Sounds good...but see above.\.I don't care who's 'modeling' ...the machines are broken.) How can the public, the EPA, the courts have faith in Massport's modeling if they can't or won't gather basic info properly. 212.7

Vol.1, ES-28: "Therefore there are no cumulative air quality or odor impacts associated with the Airside Project."

The one air quality monitor is on the highest hill in Chelsea and not under a flight path, nor near a jet at take-off or landing! On March 3,1998 a Massport official stated jets were "about 260 ft off the ground" in my neighborhood. Massport has been told by residents for years that on take-off and landings at this level we see emissions spewing from the jets. Massport told us that what we see is "harmless, it's been tested" or "you don't see anything, nothing comes out". 212.8 We would like to see a study included in an EIS reporting what is raining down on us and at such close quarters. We would like it examined thoroghly, but perhaps not by Massport (can you blame us?).

SINCE THERE IS NO AIR QUALITY MONITOR IN THE WATERFRONT NEIGHBORHOOD,WHERE THE PLANES ARE, MASSPORT CAN TELL US THERE IS NO AIR QUALITY PROBLEM. Their conclusion... Chelsea waterfront neighborhood can handle an additional 23,000 large jets (1 every 10 min,10 hrs/day,7days/wk-additional) at less than 300' ...why?...Because we have no noise or air pollution that THEY can find.

The EIS has a 'dollar value' for the flight delays. I would like to see several mature statistical analysis showing how such a figure was derived. I would also 212.9 like to see an unbiased, detailed reporting of what exactly was the cause of each delay. With the knowledge perhaps a new, varied, less harmful, truly helpful or even cost effective alternatives may be readily apparent.

Why isn't there an economic breakdown for the citizens of the dozens of communities affected by Logan and its operations and traffic. What is the 'dollar value' lost for OUR DELAYS in Airport traffic-every day (no matter what the wind direction!)

Our health cost/missed work or school days

Our sleep loss resulting in decreased lifespan,decreased work and school performance...jets stop about midnite,then cargo planes throghout the nite,then jets at 6:15AM) 212.10

Our cost of buying(and running 24hrs/day) an air conditioner

Our car insurance(Logan Rental cars accidents charged to boston,Revere,Chelsea) (All 3 Tunnel accidents charged to Boston,no matter where car is based)

Damage to Our roads (causing Our flat tires,ruining Our car's suspension system)

Our own 'soundproofing' which we've paid

Our cracked walls and shattered windows etc etc etc

Why does Massport just get to put THEIR 'dollar value' on THEIR'troubles',but not ours?

MASSPORT APPEARS TO PLAY WITH THE NUMBERS,BUT ON THESE EXAMPLES, THEY DIDN'T EVEN BOTHER TO COLLECT THE NUMBERS!

There may be other ways to improve Logan's efficiency, other ways to improve regional transportation without greatly damaging lives and the environment. 212.11 But we do not know from the material Massport has chosen to collect or not collect, chose to give you or not give you.

Please help us. Logan is filled to its natural capacity now-it's stuffed but can't seem to admit it. The residents know what squeezed-in Logan and its far-flung operations do to our lives, our sanity,our towns, our children, our days and nights,our air, land and water.

We've told Logan...but they did not tell you.

Thank you very much for your time, efforts and attention.

Respectfully,

Mary Jane Quinn
40 Beacon Street
Chelsea, MA 02150

MIC # 10708

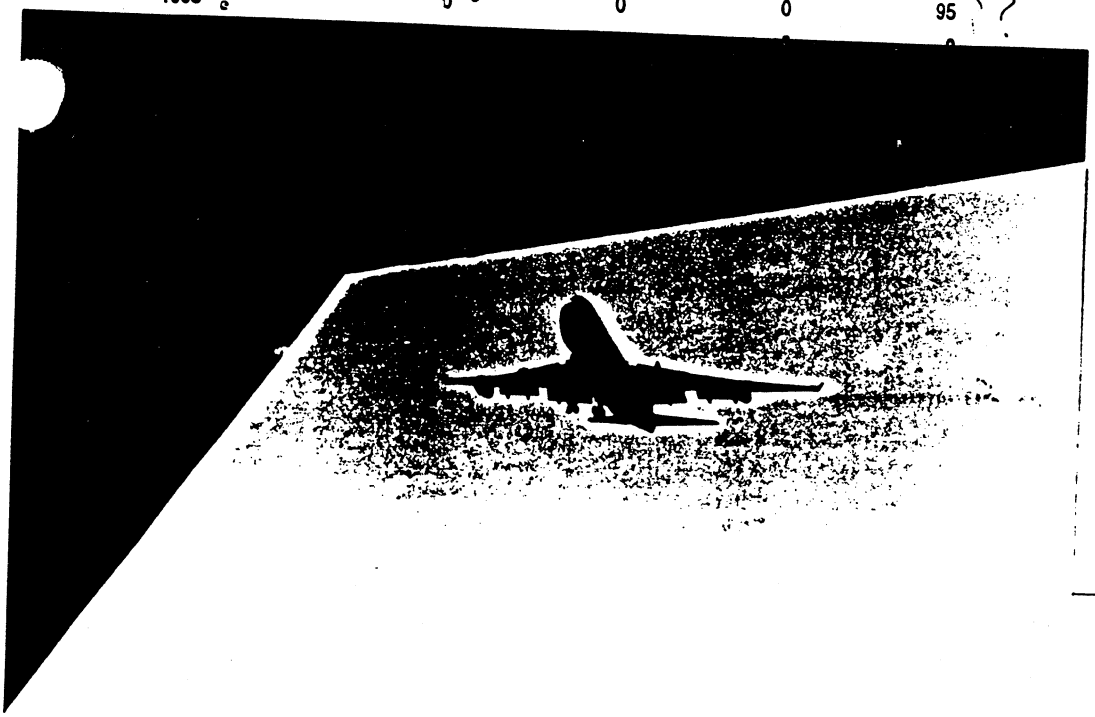
"statistical nonsense" as Massport's J. Crockfield would say.

Table 6-3
Noise-Exposed Population by Community

see photo *

→ Chelsea people + environment have "noise exposure" but not according to Massp ↓ Massp Studie Statist. 51 model flawed inaccu & misleadi

Year	80+ L_{dn}	75-80 L_{dn}	70-75 L_{dn}	65-70 L_{dn}	Total (65+)	60-65 L_{dn}
Boston**						
1987	0	533	6,436	40,020	146,989	NA
1990	0	0	1,778	28,970	30,748	NA
1993	0	0	264	2,820	3,084	NA
1994	0	106	265	7,698	8,069	30,895
1995	0	106	851	8,815	9,772	33,765
1996	0	106	374	8,775	9,255	40,992
1999	0	48	58	3,413	3,519	16,020
2010***	0	48	58	1,398	1,504	12,107
2010†	0	48	58	1,926	2,032	12,804
Chelsea						
1987	0	0	2,635	4,457	7,092	NA
1990	0	0	0	4,813	4,813	NA
1993	0	0	0	0	0	NA
1994	0	0	0	0	0	8,510
1995	0	0	0	95	95	9,750
					0	8,744
					0	4,490
					0	2,788
					0	3,065
					287	NA
					0	NA
					0	NA
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0



← * taken from my front window, 199

And according to the proposed Chelsea mitigation my house will still not be w/in mitigation area! I see 1000's of planes like this/yr—the proposed an addition

Submitted by Mary Quinn
4-8-99
40 Beacon St
Chelsea MA (Waterfront District)

This has * will have environment impacts..... not addressed in the report accurately or at all.

Table 6-3
Noise-Exposed Population by Community

Year	80+ L_{dn}	75-80 L_{dn}	70-75 L_{dn}	*65-70 L_{dn}	Total (65+)	60-65 L_{dn}
Boston**						
1987	0	533	6,436	40,020	46,989	NA
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1993	0	0 ?	264	2,820	3,084	NA
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Chelsea						
1987	0	0	2,635	4,457	7,092	NA
1990	0	0	0	4,813	4,813	NA
1993	0	0	0	0	0	NA
1994	0	0	0	0 ? ?	0	8,510
1995	0	0	0	95 ? ?	95	9,750
1996	0	0	0	0	0	8,744
1999	0	0	0	0	0	4,490
2010***	0	0	0	0	0	2,788
2010+	0	0	0	0	0	3,065
Everett						
1987	0	0	0	287	287	NA
						NA
						NA
						0
						0
						0
						0
						0
						0

Historical Aircraft Disturbance Complaints Logan International Airport 1976-1996

	1976	1977	1978	1979*	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991**	1992**	1993	1994	1995	1996
Arlington	1	4	2	21	32	6	3	9	2	0	2	4	1	8	2	10	8	3	0	2	3
Belmont	0	9	6	20	7	5	9	1	4	0	0	2	0	0	0	0	6	5	0	0	1
Boston (Total)	380	786	921	3629	1856	936	828	413	434	325	357	523	493	509	422	1480	1579	1016	1016	931	866
Brighton	0	0	50	16	3	0	0	0	1	0	0	0	1	0	1	4	1	1	1	0	3
Charlestown	8	2	2	7	7	2	0	6	1	2	2	5	1	1	0	2	4	2	4	9	7
Dorchester	21	9	42	423	60	12	7	6	4	1	5	39	11	13	14	37	43	17	13	36	10
East Boston	145	481	338	1061	577	324	403	263	284	175	141	159	153	282	193	234	466	475	539	381	361
Hyde Park	0	0	1	29	13	6	2	21	5	1	4	1	0	0	0	11	3	0	3	0	1
Jamaica Plain	72	135	139	560	293	152	151	45	51	56	93	195	224	96	84	289	243	123	98	106	107
Roslindale	4	0	14	120	210	92	69	21	30	29	21	22	11	17	4	19	87	34	9	16	22
Roxbury	25	10	28	118	48	39	21	13	17	7	20	11	13	10	13	11	6	20	10	15	7
South Boston	72	77	213	855	368	207	88	9	14	20	22	55	42	41	47	250	299	96	111	117	201
South End	0	23	27	296	140	41	35	10	4	6	1	4	6	2	28	545	349	207	192	104	100
West Roxbury	6	0	41	97	88	56	39	10	9	22	33	14	7	24	4	35	6	9	1	6	10
Other	27	49	26	47	69	5	13	9	14	6	15	18	24	23	34	43	72	32	35	141	37
Braintree					15	0	0	0	0	0	3	0	2	4	5	32	47	22	24	18	8
Brookline	7	13	33	426	158	21	13	4	6	5	5	13	8	12	12	84	225	20	5	13	32
Cambridge	25	54	27	170	37	6	9	9	1	3	22	18	24	14	14	34	49	31	13	33	19
Chelsea						14	27	11	6	2	8	3	5	17	16	11	27	18	17	24	485
Cohasset				0	146	7	10	20	16	10	6	2	2	2	0	0	6	0	1	1	4
Dedham				0	17	8	1	1	0	0	2	0	0	1	1	5	2	2	2	3	4
Everett	11	0	9	26	10	7	27	10	10	5	2	0	1	3	5	4	16	2	0	4	24
Hingham	1	0	4	112	97	21	23	6	4	1	1	2	4	4	3	14	42	16	15	4	5
Hull	1	0	63	361	1330	144	68	33	16	13	13	22	22	20	21	41	72	78	45	44	27
Lynn	1	6	36	37	61	45	25	10	4	2	11	15	6	3	4	2	3	3	2	2	2
Malden	8	4	3	19	5	0	32	9	4	1	1	2	1	0	4	1	8	3	4	1	7
Marblehead	0	0	0	0	3	1	0	0	0	3	15	4	2	1	2	0	2	0	2	2	4
Medford	26	56	24	58	118	105	65	29	13	11	10	28	37	23	15	15	36	3	5	24	19
Melrose	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	3	1	2	2	1	1
Milton	1	0	308	1392	583	387	163	165	114	70	105	117	98	77	149	586	308	425	249	204	369
Nahant	5	8	80	22	17	12	0	10	1	0	13	8	10	5	2	23	206	292	74	102	152
Needham	4	3	3	120	238	10	27	30	29	27	25	37	22	2	0	9	9	1	3	19	3
Newton	3	8	2	78	24	4	14	3	3	1	0	4	3	3	5	28	29	5	2	7	1
Quincy	71	34	4527	4525	860	218	109	97	104	63	79	53	38	34	16	92	72	51	16	17	39
Revere	27	46	157	319	129	93	27	78	39	20	99	41	57	47	132	109	165	798	918	199	476
Saugus	0	0	0	3	0	0	0	0	0	0	2	0	0	0	1	7	4	6	0	2	0
Situate	0	0	0	0	135	10	5	10	3	1	2	0	1	2	2	2	0	1	3	0	1
Somerville	15	30	8	86	23	7	7	12	3	1	5	17	3	6	5	8	50	18	13	15	16
Stampscott	0	0	0	0	0	4	1	125	106	71	167	82	29	12	26	27	3	36	2	0	8
Plymouth	0	0	1	11	22	7	13	19	134	160	30	91	137	85	104	75	170	113	138	109	213
Winchester	11	49	23	24	16	0	12	2	1	1	10	5	1	6	1	1	2	0	0	12	10
Winthrop	75	96	589	2278	1303	648	288	211	240	107	277	795	389	663	1003	817	542	899	664	717	938
Woburn	0	9	8	20	0	0	2	0	0	0	1	1	0	0	1	11	12	2	3	0	4
Other	52	32	213	243	160	27	24	21	25	3	20	20	38	51	50	70	87	63	44	34	172
TOTAL	725	1247	7047	14000	7402	2753	1832	1348	1322	906	1294	1909	1434	1615	2023	3599	3790	3933	3282	2545	3913

*Alternative flight tracks were being tested on Runway 22.

**Alternative flight tracks were being tested on Runway 27 (Nov. & Dec. 1991, Jan. & Feb. 1992).

E. Boston

Chelsea

938 Winthrop

Massport officials have been told by Chelsea City Councilors at Public mtgs for yrs (& phone conversations) that Operators at "Noise Abatement Hotline" are "rude" "do not copy complaints accurately at all" "s of busy signals" "no spanish speaking spoken" "etc" conducive to encouraging phone complaints and not complaints

Table 6-3
Noise-Exposed Population by Community

Massport style → averaged over 7 day/wk
Not per exposure
- still many planes w/ >65 dn over Chelsea
- creative statistics

Year	80+ L_{dn}	75-80 L_{dn}	70-75 L_{dn}	*65-70 L_{dn}	Total (65+)	60-65 L_{dn}
Boston**						
1987	0	533	6,436	40,020	46,989	NA
1990	0	0	1,778	28,970	30,748	NA
1993	0	0	264	2,820	3,084	NA
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1999	0	0	0	0	0	4,490
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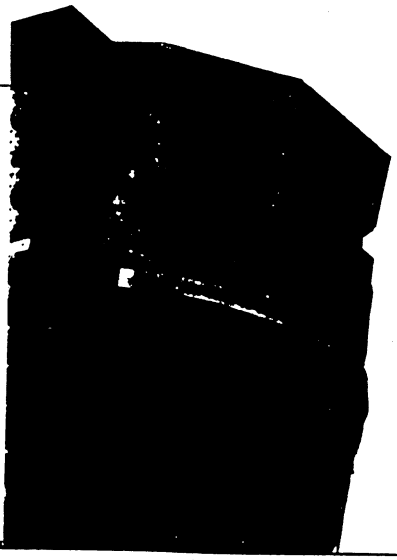
2010+	0	0	0	0	0	3,065
Everett						
1987	0	0	0	287	287	NA
1990	0	0	0	0	0	NA
1993	0	0	0	0	0	NA
1994	0					
1995	0					
1996	0					
1999	0					
2010**	0					
2010+	0					

Must have independent study

Independ group giving you data so that you may make an informed decision

212.12



Mary Quinn
Chelsea Waterfront
4-8-99 Subm. Ltr re: Runway 14-32

Tchm 1998 Beacon St Chelsea MA

Waterfront Neighborhood

Table 6-3
Noise-Exposed Population by Community

Year	80+ L_{dn}	75-80 L_{dn}	70-75 L_{dn}	*65-70 L_{dn}	Total (65+)	60-65 L_{dn}
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1993	0	0	0	0	0	NA
1994	0	0	0	0 ?	0	8,510
1995	0	0	0	95 ?	95	9,750
1996	0	0	0	0 ?	0	8,744
1999	0	0	0	0	0	4,490
2010***	0	0	0	0	0	2,788
2010+	0	0	0	0	0	3,065
Everett						
1987	0	0	0	287	287	NA
1990	0	0	0	0	0	NA
1993	0	0	0	0	0	NA
1994	0	0	0	0	0	0
1995	0	0	0	0	0	0
1996	0	0	0	0	0	0
1999	0	0	0	0	0	0
2010***	0	0	0	0	0	0
2010+	0	0	0	0	0	0

average 1 a/c every 24 hrs / Not per se "plenty of" planes over Chelsea — just = statistical nonsense

Jerry Crawford would say

Need independent group to gather & report statistics to you. Thank you

Taken 1998

← From 2nd floor window of 3 story house (w/ 50 mm lens which shows size as our eye sees it... right size)

268' flight path now and they want to be on instruments in bad weather now

Letter 212
Mary Jane Quinn
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
212.1	Environmental Review Process	Impacts	...On any page of the EIS where this is a reference to noise, air, odor pollution; air cargo truck traffic; Environmental Justice or 'mitigation,' I know its data collection is flawed or tragically non-existent concerning Chelsea. Of course, then, any 'conclusions' or projections drawn from such poor 'info' gathering and reporting would have to be considered flawed or inadequate because what you had been given to work with was such.	Noise was identified as the only off-airport impact associated with the Preferred Alternative (refer to Section 6.2 of the Supplemental DEIS/FEIR for a discussion on noise impacts). Environmental and health studies relating to the City of Chelsea were reviewed to assess the potential for other cumulative or multiple adverse exposures, since the increase in population within the 65 dB DNL contour associated with the Preferred Alternative is primarily within this community. A review of issues within Chelsea indicated a concern regarding toxic discharges associated with industrial facilities, truck emissions, and contamination of Chelsea Creek. There was nothing to suggest that these issues increased the noise impacts associated with the Preferred Alternative. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. Refer to Section 6.8 of the Supplemental DEIS/FEIR for additional information. The dispersion model portion of the LDMS is an EPA-approved model. The methodology is consistent with FAA and EPA guidelines.
212.2	Environmental Review Process	MEPA	...you have not been given what MEPA had requested of Massport—an accurate, thoughtful, thorough accounting of present impacts of Logan and its operations and a complete picture of environmental impacts of any proposal.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
212.3	Noise	Impacts	Chelsea is severely impacted by jet noise (see photos). Massport will not admit this on paper (ex: "0 noise impacted population" GEIR)—so if they won't acknowledge it—they don't have to reduce it! Massport can't tell you what the noise level is in Chelsea because they have chosen not to find out:	Tables 6.2-4 and 6.2-5 show the noise exposed population for Chelsea for the 29M Low and 37.5M High Fleet scenarios, respectively. Although both show no noise exposed population in DNL 70 dB and above, both show noise exposed population in the DNL 65 dB and DNL 60 dB and above categories.
212.4	Noise	Impacts	Chelsea was taken out of the Noise Contour Map and yet our noise has not abated, esp. considering that flight operations have doubled in that time. Massport officials told residents and Chelsea City Councillors that we probably do have enough jet noise to be in but they wouldn't file this info with FAA till their normal filing time 5 years later. (This conveniently brings it to after this EIS filing process.)	Chelsea appears on the basemaps showing the noise contours for each of the fleets and alternatives studied. The community is exposed to noise either from 60 to 65 dB or from 65 to 70 dB, depending on the fleet and alternative being evaluated. Chelsea is also listed as a separate community in the tables of population counts by increment of exposure (Tables 6.2-4 through 6.2-7 and 6.2-20 and 6.2-21).
212.5	Noise	Impacts	...how can they decide how much more noise to give us (to be "equitable") if they don't know what we have now? THEIR COLLECTION OF DATA IS INADEQUATE, THEIR MONITORING APPEARS MANIPULATED and they have the nerve to send it to the EPA with conclusions drawn from it and proposals based on it.	Comment noted. The EPA will draw its own conclusions regarding the efficacy of the data and findings presented here.

Code	Topic 1	Topic 2	Comment	Response
212.6	Environmental Justice	Impacts	Now we are discovering that Massport benefits from the use of this flawed, manipulated data. Chelsea has one of the highest immigrant, minority and low income population in the state—7 languages 'officially' used in the public schools, many more spoken—BUT Chelsea was taken off the Contour Map...	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
212.7	Noise	Impacts	Vol. 1, ES-20: "Noise modeling analysis was conducted for all alternatives... noise contours and noise-exposed populations were determined using the Integrated Model version 5.0." (Sounds good...but see above...I don't care who's 'modeling'...the machines are broken.) How can the public, the EPA, the courts have faith in Massport's modeling if they can't or won't gather basic info properly.	Comment noted. The EPA will draw its own conclusions regarding the efficacy of the data and findings presented here.
212.8	Air Quality	Impacts	...Massport has been told by residents for years that on takeoff and landings at this level [260 ft.] we see emissions spewing from the jets. Massport told us that what we see is "harmless, it's been tested" or "you don't see anything, nothing comes out." We would like to see a study included in an EIS reporting what is raining down on us and at such close quarters. We would like it examined thoroughly, but perhaps not by Massport (can you blame us?).	In 1997, Massport conducted a Soot Deposition Study at Logan Airport and the surrounding communities. The results of this study did not identify any discernable differences in samples collected on, or in the vicinity of, the airport compared to samples collected away from the airport. DEP also maintains a permanent air monitoring station (the "Bremen Street" station) in close proximity to Logan Airport. Data collected at this station has continually shown that the air quality meets the NAAQS.

Code	Topic 1	Topic 2	Comment	Response
212.9	Delay	Model	The EIS has a 'dollar value' for the flight delays. I would like to see several mature statistical analyses showing how such a figure was derived. I would also like to see an unbiased, detailed reporting of what exactly was the cause of each delay. ...	The cost of delay analysis presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is based on a methodology recommended by the FAA. The cost of delay to a passenger ($27 per hour) is a weighted average cost for business and leisure passengers. Refer to FAA APO Bulletin APO-97-1. Chapters 1 and 4 of the Supplemental DEIS/FEIR provide analysis of delays at Logan. Delays primarily occur when wind or weather conditions require the use of configurations with fewer than three active runways or when poor weather requires increased separation distances between aircraft. Proposed Runway 14/32 would be designed to reduce delays at Logan Airport from adverse winds Refer to Section 1.4 and Appendix C of the Supplemental DEIS/FEIR contains a description of the delay factors at Logan Airport, and a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports.
212.10	Environmental Justice	Impacts	Why isn't there an economic breakdown for the citizens of the dozens of communities affected by Logan and its operations and traffic? What is the 'dollar value' lost for OUR DELAYS on airport traffic—every day (no matter what the wind direction!) • health cost/missed work or school days, • sleep loss resulting in decreased lifespan, decreased work and school performance, • cost of buying (and running 24 hrs/day) an air conditioner • damage to our roads • our own 'soundproofing' which we've paid • our cracked walls and shattered windows, etc. Why does Massport just get to put THEIR 'dollar value' on THEIR 'troubles,' but not ours?	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.
212.11	Alternatives	Other Non-construction Alternatives	There may be other ways to improve Logan's efficiency, other ways to improve regional transportation without greatly damaging lives and the environment. But we do not know from the material Massport has chosen to collect or not collect, chose to give you or not give you.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
212.12	Noise	Model	Table 6-3, Noise-Exposed Population by Community [in Logan GEIR]...averaged [noise] over 24 hrs and 7 day/week. Not per exposure. [There are still]...many planes with >65 Ldn over Chelsea...[These are] creative statistics. Must have independent study [by an] independent group giving ...[Massport] data so that ...[Massport] may make an informed decision.	Table 6-3 in the Logan Airport 1994/1995 GEIR is similar to that in Tables 6.2.4 and 6.2.5 in the Supplemental DEIS/FEIR. The Supplemental DEIS/FEIR also gives values of the maximum sound levels at 23 sites in Table 6.2.8 of the Supplemental DEIS/FEIR and the time-above threshold at those sites in Table 6.2.13 of the Supplemental DEIS/FEIR. Additional data can be found in the Appendix E of the Supplemental DEIS/FEIR. The Supplemental DEIS/FEIR uses the DNL as the primary descriptor of aircraft noise exposure in the community. This metric was developed by the United States EPA for this purpose and was found by the EPA to correlate better with the effects of noise on humans than any other descriptor. The methodology used is in the Supplemental DEIS/FEIR is in accordance with all applicable federal guidelines and is the same methodology that would be required for a noise study performed by any other independent firm.

LETTER 213

[redacted]

RECEIVED
APR 6 1999
MEPA

From my front step, Chelsea Waterfront — but Massport states "Zero noise impacts on Chelsea." Their faulty conclusion - from faulty DATA - from

7-4-99

broken noise monitor Admiral's Hill for 2 yrs — it read 0 w/ planes like this — they wrote "0" — they sent "0" to FAA — they knew monitor broken — they used that 'data' — they sent it to FAA & EPA and yet we have to read in Sun Globe 4/4/99 Jeremy Crockford, massport spokesman, said 'This is the triumph of statistical nonsense over common sense!' (the refering to CAG 'delay' report) Hello ?!!!

Massport, at least - at the minimum gives EPA faulty info & asks them to make a ruling on it alone - knowing they (EPA) don't have the budget to do their own investigation - and, could we say, at worst, they have knowingly chosen faulty info to send ?!!

Please consider other options — study before our towns are destroyed & emptied. Thank you for listening. MARY QUINN Chelsea MA

213.1

4/30

Letter 213
Mary Quinn
Private Citizens: Chelsea

Code	Topic 1	Topic 2	Comment	Response
213.1	Noise	Impacts	[Massport's conclusion that there are] "zero noise impacts on Chelsea" [is based on] faulty data from [a] broken noise monitor [or] Admiral's Hill.	The noise monitoring site on Admiral's Hill played no part in analyzing noise from future alternatives with Future Fleet scenarios.

LETTER 214

EoEA #10458 Draft eir/eis.
Logan Airside improvement planning project
mepa unit - EoEa
Arthur Pugsley - 100 Cambridge ST 20 floor
Boston, Mass 02202

The eis/eir has been fairly well done. I support the use of the new runway described in the report. It will eliminate delays and ease some air ways problems. 214.1

However, the political aspect of this project has to be evaluated. Since the city of Boston is opposed, it will be difficult to complete the project and probably it won't happen.

If you develop Hanscom or Worcester airport as the second airport, how does one deal with transfers from major airlines to small planes that travel to Nantucket, Bangor, etc? It seems a massive new realignment of airline is necessary. I don't think Logan is ready for this 214.2

Another concern - More flights if possible should ascend or descend over the ocean before turning at higher altitudes west/south/and north. 214.3

Not mentioned in the report is the problem of fuel dropping in detail. Fuel does drop over cohasset when descending to Logan. My house is under the path, thus we join the other communities of the 214.4

negative effects and aspects of an urban airport. The best solution in time is moving the airport to a new area such as Hanscom and/or South Weymouth. Highway access could easily be achieved. There should have been a more in depth analysis of Hanscom and South Weymouth airports

214.5

Martha K. Gjesteby
81 Old Pasture Rd
Cohasset, MA 02025

Cohasset [illegible] 02025

Martha Gjesteby

Letter 214
Martha Gjestby
Private Citizens: Cohasset

Code	Topic 1	Topic 2	Comment	Response
214.1	General Support		The EIS/EIR has been fairly well done. I support the use of new runway described in the report. It will eliminate delays and ease some airways' problems.	Comment noted.
214.2	Regional Transportation	Regional Airports	If you develop Hanscom or Worcester Airport as the second airport, how does one deal with transfers from major airlines to small planes that travel to Nantucket, Bangor, etc.? ...	Commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field or Worcester Regional Airport, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights.
214.3	Alternatives	Operational Restrictions	...More flights, if possible, should ascend or descend over the ocean before turning at higher altitudes west, south and north.	The operations of Proposed Runway 14/32 would be over the water. The departures on Runway 14 would turn over the inner harbor and proceed out the harbor mouth, as do the departures on Runway 15R, the nighttime preferential runway. Similarly, the last several miles of the approach path to Runway 32 would be over water and largely uninhabited islands. When Runway 14/32 is in operation, it would reduce the noise exposure over populated communities.
214.4	Air Quality	Impacts	Not mentioned in the report is the problem of fuel dropping in detail. Fuel does drop over Cohasset when descending to Logan. My house is under the path, thus we join the other communities of the negative effects and aspects of an urban airport.	Fuel dumping (dropping) typically occurs only in aircraft emergencies. Air traffic control makes every effort to direct the pilot away from residential and other populated areas during this procedure. Notwithstanding the above, the Federal Aviation Administration (FAA) requirements allow fuel dumping at or above an altitude of 2,000 feet. This distance above ground allows much of the fuel to evaporate and disperse. Thus, emergency fuel dumping should have little or no impact on human health and welfare.
214.5	Regional Transportation	Regional Airports	The best solution in time is moving the airport to a new area such as Hanscom and/or South Weymouth. ...	Section 2.8 of the Supplemental DEIS/FEIR discusses passenger and activity growth at the regional airports and their effect on Logan Airport's projected passenger and activity levels. With regard to ridership projections on Amtrak's high-speed rail, the Airside Project Draft EIS/EIR described in detail the best current information. No updated projections are available. Refer to Appendix B for Amtrak's letter stating that no revised ridership estimates are available. Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport (as of January 15, 2000). Massport plays no role, however, in the decisions of private airlines regarding air service routes or service levels. As proprietor of Logan Airport, Massport's primary responsibility is to supply, operate, and maintain Logan Airport's infrastructure that includes the runways, taxiways, terminal buildings, parking facilities and access roads. As a recipient of federal airport grants, Massport must adhere to grant covenants that require it to operate Logan Airport in such a way so as to ensure access and availability for public use on fair and reasonable terms and without unjust discrimination.

123 Stoughton Street
Dorchester, MA 02125

LETTER 215

April 16, 1999

Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Sirs,

I'm sure you are all well aware of all the issues regarding the proposed expansion of Logan Airport with runway 14/32. As the proposal is coming up for review at your office in just a few short days, I wish to register my strong opposition to the plan. The cons are well known; increased air and noise pollution are just two of them. There is also a reason to consider the environmental justice of the proposal. No one can reasonably see the addition of the runway as anything but expansion. But if we are all going to enjoy the benefits of increased air travel, we must all take on the burdens that come with it. Massport must go back and look at all options, including, but not limited to, increased reliance on rail travel and the development of a regional transportation plan before considering new runways. Massport has not done their job. My family and I urge you to let them know in no uncertain terms that this is the case. Thanks for your time.

215.1

215.2

Regards,

Michael P. County

Letter 215
Michael P. County
Private Citizens: Dorchester

Code	Topic 1	Topic 2	Comment	Response
215.1	General Opposition		...As the proposal is coming up for review at your office in just a few short days, I wish to register my strong opposition to the plan. The cons are well known; increased air and noise pollution are just two of them. There is also a reason to consider the environmental justice of the proposal. ...	The Environmental Justice analysis in Section 6.8 was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.
215.2	Regional Transportation	Regional Airports	... Massport must go back and look at all options, including, but not limited to, increased reliance on rail travel and the development of a regional transportation plan before considering new runways.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of the Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Barbara McDonough" <McDonough@rascal.med.harvard.edu>
ject: runway 14/32
e: Wednesday, April 21, 1999 16:53:29 EDT
ach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 216

Dear Mr. Pugsley,

I am writing to voice my concern over plans to expand Logan Airport's runways. Massport's Environmental Impact study is inadequate because it uses 1993 data instead of 1998 data, AND because it doesn't look at the health and environmental problems or the economic losses (real estate devaluation) that will be caused by Runway 14/32. 216.1 216.2

I hope that you will consider these concerns and the negative impact they will have on our neighborhood. Thank you.

Sincerely,

Barbara McDonough
Hilltop Street
Chester, Ma 02124

Letter 216
Barbara McDonough
Private Citizens: Dorchester

Code	Topic 1	Topic 2	Comment	Response
216.1	Analysis Assumptions/ Methodologies	Base Year	I am writing to voice my concern over plans to expand Logan Airport's runways. Massport's Environmental Impact Study is inadequate because it uses 1993 data instead of 1998 data.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. The appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year.
216.2	Public Health	Effects	Massport's Environmental Impact Study is inadequate because it doesn't look at the health and environmental problems or the economic losses (real estate devaluation) that will be caused by Runway 14/32.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives. According to 40 CFR Part 1502 Environmental Impact Statements Regarding Cost-Benefit analysis " for purposes of complying with the act, the weighing of the merit and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis..." The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives.

LETTER 217

April 21, 1999

John C. Silva
Manager, Environmental Programs
Airports Division, FAA-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Secretary of Environmental Affairs
Attention MEPA Office
Arthur Pugsley - EOEA # 10458
100 Cambridge Street
20th Floor
Boston, MA 02202

Mr. John Silva and Arthur Pugsley:

In response to the Draft Environmental Impact Statement Report [EOEA #10458] presented by Massachusetts Port Authority for Logan Airside Improvements Planning Project, I find the draft EIS/EIR report insufficient in content to make an informed decision regarding the environmental impact of these improvements on the surrounding communities. I present the following questions as a condo owner and resident of Dorchester, MA.

1. Pages ES-22 and ES-23 indicate a 2 mile inland impact of Day/Night Sound Levels – 65 dB contours for Alt.1A and Alt.4. However, more traffic has consistently traveled over Roxbury and parts of Dorchester (a radius in excess of 2 miles from Logan airport) during the period of sampling. How can the model produce accurate results when the radius of land covered is grossly understated for data sampling and how can anyone (including Massport) conclude that one alternative provides less noise over another alternative when the data sampled is deficient and excludes critical noise level exceedances? 217.1
2. How was the noise level sampling collected in Roxbury?
   a) Specifically what time of day and/or night and in what frequency and over how many days or months were the data collected to assess sound levels?
   b) Did the sampling days and times coincide with the increased operations flying over Roxbury and Dorchester?
      I. If not, how can the model used by Massport be accurate in its assessment of the sound level impact to communities south of Roxbury and Dorchester?
      II. If so, what were the noise levels recorded and how many occurrences of noise exceedances were detected by the monitor? 217.2
   c) Was the noise monitor in proper working order every day from the original placement to the final removal day of the noise monitor?
      I. If not, how many days and number of hours did the noise monitor fail to operate in proper working order?
      II. Was the failure of the noise monitor detected and replaced? At what period did this occur and what workarounds or testing was implemented?
3. As a result of increased traffic over Roxbury and Dorchester from delays at Logan, why did the FAA not review these two low income minority communities to determine whether they qualify for impacted community status? 217.3 Why did the FAA not request an increase in noise monitoring and payment by Massport for sound proofing of public and private property affected by excessive noise levels when the flight path was changed to fly over Roxbury and Dorchester which prompted excessive noise level complaints by community residents? 217.4

4. In assessing noise levels and determining the classification of an impacted community, what is FAA's role in controlling or preventing planes from flying below legal and/or acceptable levels over communities such as Roxbury or Dorchester that do not directly abut the airport? 217.5

5. Page 6-105, Table 6.6-3 compares existing Logan soil quality data with Logan modernization unregulated soil criteria.
   a) Where is the soil quality data from test samples for the runway to be built into the water? 217.6
   b) What is MEPA's role in halting or delaying construction of a runway if it is determined that the cost of removing or remediating contaminated soil greatly exceeds Massport's budget and greatly outweighs any financial or environmental benefits of building the new runway? 217.7
   c) Does MEPA think it is prudent to proceed with construction of a runway into water that flows into a larger body of water without collecting soil samples from the proposed construction site to determine progressive environmental impact to marine life and the quality of soil and cost of disposal or remediation? 217.8

Respectfully submitted,

Karen L. Rucker

Karen L. Rucker

Letter 217
Karen L. Rucker
Private Citizens: Dorchester

Code	Topic 1	Topic 2	Comment	Response
217.1	Noise	Model	Pages ES-22 and ES-23 indicate a 2-mile inland impact of Day/Night Sound Levels--65 dB contours for Alt. 1A and Alt. 4. However, more traffic has consistently traveled over Roxbury and parts of Dorchester (a radius in excess of 2 miles from Logan Airport) during the period of sampling. How can the model produce accurate results when the radius of land covered is grossly understated for data sampling and how can anyone (including Massport) conclude that one alternative provides less noise over another alternative when the data sampled is deficient and excludes critical noise level exceedances?	The contours in Figures ES-5 and ES-6 on pages ES-22 and ES-23 of the Airside Project Draft EIS/EIR are for Day/Night Sound Levels (DNL) of 65 dB. The analysis extended much further from Logan Airport than required for the 65 dB DNL contours and for the 60 dB DNL contours which may be found in the Appendix E of the Supplemental DEIS/FEIR. The analysis in Roxbury and Dorchester included representative flight tracks over each community, with annual average aircraft operations on each flight track, so that aircraft noise was accounted for in each community.
217.2	Noise	Impacts	How was the noise level sampling collected in Roxbury? a) Specifically, what time of day and/or night and in what frequency and over how many days or months were the data collected to assess sound levels? b) Did the sampling days and times coincide with the increased operations flying over Roxbury and Dorchester? I. If not, how can the model used by Massport be accurate in its assessment of the sound level impact to communities south of Roxbury and Dorchester? II. If so, what were the noise levels recorded and how many occurrences of noise exceedances were detected by the monitor? c) Was the noise monitor in proper working order every day from the original placement to the final removal day of the noise monitor? I. If not, how many days and number of hours did the noise monitor fail to operate in proper working order? II. Was the failure of the noise monitor detected and replaced? At what period did this occur and what work-arounds or testing was implemented?	Noise data were acquired in Roxbury for the tests of the Runway 27 departure procedure in the winter of 1991 to 1992. These data indicated a reasonable correlation between measurement and modeling based on the radar tracks. In 1997, a permanent noise monitor was installed in the Boston Latin Academy in Roxbury under the new flight path. The data for part of 1997 were reported in the 1997 Annual Update in Table 5-5, and the data for 1998 were reported in the 1998 Annual Update in Table 5-6. The 1998 data show both the total noise and the total noise from aircraft, as well as the INM-calculated values of DNL. The agreement is excellent.

Code	Topic 1	Topic 2	Comment	Response
217.3	Environmental Justice	Impacts	As a result of increased traffic over Roxbury and Dorchester from delays at Logan, why did the FAA not review these two low income minority communities to determine whether they qualify for impacted community status?	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
217.4	Noise	Soundproofing	Why did the FAA not request an increase in noise monitoring and payment by Massport for soundproofing of public and private property affected by excessive noise levels when the flight path was changed to fly over Roxbury and Dorchester which prompted excessive noise level complaints by community residents?	The delays at Logan Airport did not increase air traffic over Roxbury and Dorchester and may have reduced such overflights. Because of the concern for the noise under the new departure heading (235 degrees magnetic), Massport has added two new noise monitors, Monitor No. 27 in Roxbury and Monitor No. 29 in Mattapan. However, the noise levels in these two communities are less than the minimum criteria for FAA approval of a sound insulation program.
217.5	Noise	Impacts	In assessing noise levels and determining the classification of an impacted community, what is FAA's role in controlling or preventing planes from flying below legal and/or acceptable levels over communities such as Roxbury or Dorchester that do not directly abut the airport?	The FAA establishes standard arrival and departure procedures, which provide for the safe and expeditious flow of air traffic. It is FAA noise policy to select flight tracks and altitudes to minimize noise exposure. The departure procedure for Runway 27, for example, was established through a lengthy public Environmental Impact Review involving the FAA, Massport and all interested communities.
217.6	Soil/Sediment	Testing	Where is the soil quality data from test samples for the runway to be built into the water?	The runway will not be built into Boston Harbor. All construction is confined to upland areas of the existing airfield. Airfield soil sample data are presented in Section 6.7 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
217.7	Environmental Review Process	MEPA	What is MEPA's role in halting or delaying construction of a runway if it is determined that the cost of removing or remediating contaminated soil greatly exceeds Massport's budget and greatly outweighs any financial or environmental benefits of building the new runway?	The requirements for removing or remediating soil for the Airside Improvements have decreased from the estimates in the Airside Project Draft EIS/EIR because both the volume of soil to be removed and the level of contamination in the soil is much lower than anticipated at the time of the Airside Project Draft EIS/EIR analysis. The volume of excavate has been reduced as a result of the on-going removal of stockpiled Central Artery/Tunnel soil material from Governors Island, and the findings of a subsurface investigation program show that much of the existing soil material on the airport is suitable for construction and therefore does not have to be removed. Refer to Section 6.7 of the Supplemental DEIS/FEIR.
217.8	Soils	Testing	Does MEPA think it is prudent to proceed with construction of a runway into water that flows into a larger body of water without collecting soil samples from the proposed construction site to determine progressive environmental impact to marine life and the quality of soil and cost of disposal or remediation?	See response to comment 217.6.

19 April 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley, EOEA No. 10458
100 Cambridge Street, Room 2000
Boston, MA 02202

LETTER 218

Dear Secretary Durand,

My husband and I have lived in East Boston since 1976. In 1982 when we decided to buy a home here, we called Massport and asked them to outline their long range plans. They had nothing to say about future expansion plans. We also asked them for their best advice on soundproofing as we planned extensive renovation to our home and sought to incorporate soundproofing (at our own expense) into our plans. Massport sent a representative over to find out what we were doing as they had no expertise to offer! As you can see, the decision to live in East Boston was a deliberate one and we did our homework. Why did we decide to make our home in East Boston? It minimized our daily commuting difficulties, it was affordable, its community spirit was heartening. These reasons still stand today.

East Boston is a neighborhood determined to survive and thrive despite the failure of government in the past to protect its residents from harm. It is a black mark on the Commonwealth to this day that a great park - Wood Island Park - was destroyed to build Logan Airport. Talk about environmental injustice! This was not a democratic decision, made in the light of day. The current Massport proposal is of the same ilk. It did not emerge in the light of day. It would not survive a democratic vote, because it is a bad plan, and not just for East Boston. It will choke the city with traffic, it will increase the noise that residents experience, it will negate the progress made in creating more parks and outdoor recreation areas for Boston's families and residents. These harmful results, which cannot be mitigated, were not give serious consideration in Massport's proposal.. 218.1

I attended Boston City Councilor Paul Scapicchio's hearing on March 2 and both MEPA hearings on April 6 and April 7. The arguments against Massport's plan were well stated at these public meetings and I will not restate them here. The executive summary of the CAC's report details the problems and the deficiencies of Massport's proposal. It is clear that Massport's proposal exacerbates the environmental problems we city dwellers already have.

I would like to comment on the arguments I heard from those business interests that spoke in favor of the proposal. In every case the proponents were talking about benefits to people who are in Boston only for a short time - a business traveler, a tourist, perhaps a person who works in Boston, but does not live here. As old as I am, I was still astounded at the willingness of the proponents to sacrifice the well-being of the residents of Greater Boston for "jobs" as Paul Guzzi did or "tourists and conventioneers" as Gloria Larson did. Putting that aside, I tried to look at the business sense of it. Where would the businesses that operate in Boston have their work force live? It is counterproductive to force employees to live farther and farther away from their place of work. The daily commuting problems are already horrendous. Without the investment in regional ground transportation, getting to work will be even worse, if that can be imagined, than it is now. Massport's proposal does not take these factors into consideration either. 218.2

By denying Massport's proposal, you will be protecting the residents of Greater Boston from environmental harm, you will be encouraging a more thoughtful, long-range solution to our transportation needs, and you will prevent further wasteful expenditure of public moneys on this ill-conceived proposal. As citizens, taxpayers, voters and home owners in East Boston, my husband and I hope you will make a decision that will truly be in the interest of the Commonwealth and deny Massport's DEIS/EIR #10458. Surely, what is good for the one and a half million residents of the Boston metropolitan area will be for the good of the Commonwealth as well.

Sincerely,

Carolyn Banulis
Brent Banulis

Carolyn Banulis
33 Morris Street
East Boston. MA 02128

Letter 218
Carolyn and Brent Banulis
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
218.1	General Opposition		...The current Massport proposal...will choke the city with traffic, it will increase the noise that residents experience, it will negate the progress made in creating more parks and outdoor recreation areas for Boston's families and residents. These harmful results, which cannot be mitigated, were not given serious consideration in Massport's proposal.	Comment noted.
218.2	General Opposition		...Without the investment in regional ground transportation, getting to work will be even worse, if that can be imagined, than it is now. Massport's decision does not take these factors into consideration either.	Section 2.3 of the Supplemental DEIS/FEIR discusses the specific role played by the regional alternatives and steps Massport has taken to foster increased use of these alternatives. Massport has long recognized and been a proponent of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million passengers that could be accommodated by regional alternatives that include use of T.F. Green/Providence, Manchester, and Worcester Regional airports, as well as the introduction of high-speed rail to New York in December 2000. In the Supplemental DEIS/FEIR, Massport undertook analysis of the passenger traffic development patterns at Logan Airport and the regional airports. Based on this analysis, Massport estimates that Logan Airport may only achieve approximately 34 million passengers by 2010 instead of the previously forecasted 37.5 million passengers. The updated forecast reflects the attractiveness of the regional airports and the availability of high-speed rail to New York, Boston's largest air travel market.

April 8, 1999

LETTER 219

Robert Durand
Massachusetts Environmental Policy Agency
100 Cambridge Street, Suite 2000
Boston, MA 02202

Dear Mr. Durand,

Re: EOA 10458

The purpose of this letter is to outline for you my reasons for being in strong opposition to the Massachusetts Port Authority's proposed new runway, otherwise known as Runway 14/32, the proposed centerfield taxiway, and the proposed reduced minimums for deciding whether to abort a landing near my home.

The existing court-ordered injunction against the runway serves to protect the environmental interests of East Boston residents and should not be overturned. The reasoning behind the injunction remains sound: our community should not be asked to absorb additional negative environmental burdens, without all other alternatives having been studied and serious implementation of all alternatives attempted.

Please do not be swayed by the argument that this runway is needed to help alleviate delays at Logan International Airport for the tourist industry or for business travelers coming to Boston. By Massport's own figures, fully 57% of all passengers arriving at Logan or departing Logan are residents of communities located west of Routes I-95 and I-495. Clearly the logic of siting another airport nearer to those residences cannot be denied. Such a new airport would serve to enhance the justice of not allowing more negative burdens here in Boston and would bring those passengers closer to their homes. 219.1

I would also ask that you consider the impact the airport currently has on the health of residents of East Boston. Our children's overall well being is compromised daily by the negative effects of the pollution created by the airplanes and the attendant traffic going to and from Logan. That includes cars, taxis, limousines, and cargo trucks. The infrastructure of our community cannot withstand additional burdens, which would be evident if Runway 14/32 is built. 219.2

Massport's presentations have alluded to the 5000-foot runway as being primarily for commuter planes and being necessary because of the wind patterns here in Boston. Well, a runway a mere 280 feet short of a mile, accommodating 100-passenger jets, creates an unfair environmental burden on East Boston. With careful planning, another airport could be designed with a runway configuration that would take into account all possible wind patterns and the problem would not be duplicated. 219.3

I live in the Bayswater section of Orient Heights. The proposed centerfield-taxiway will only serve to burden further our area with airplane-related pollution as more and more planes are allowed to fill that taxiway. Similarly, I am against zero-visibility landings using Runway 22L—also very near to my home—because if a pilot decides to abort a landing, he/she will accelerate the plane's engines over the water near to Bayswater Street, causing further concussions to the homes in the adjacent area. Massport has shown that body of water to be Boston Harbor, when, in fact, it is the bay near our homes. 219.4

For the health of all persons in East Boston, who are trying to live a somewhat reasonable quality life, and who should not be considered expendable to satisfy the needs of the travelling public, I ask that your agency deny Massport's request to sanction Runway 14/32. This is issue has clear environmental justice implications and your decision must be based on that consideration. 219.5

Thank you for taking the time to consider my concerns, and those of other residents, as you begin to make your decision about this proposal.

Sincerely,

Mary C. Berninger

Mary C. Berninger
156 Saint Andrew Road
East Boston. Massachusetts 02128
617-569-3643

Letter 219
Mary C. Berninger
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
219.1	Regional Transportation	Regional Airports	Please do not be swayed by the argument that this runway is needed to help alleviate delays at Logan International Airport for the tourist industry or for business travelers coming to Boston. By Massport's own figures, fully 57% of all passengers arriving at Logan or departing Logan are residents of communities located west of Routes I-95 and I-495. Clearly the logic of siting another airport nearer to those residences cannot be denied. Such a new airport would serve to enhance the justice of not allowing more negative burdens here in Boston and would bring those passengers closer to their homes.	Massport considers Logan Airport to be part of a regional system of airports that includes the Providence, Manchester and Worcester Regional airports. Service developments and increased traffic at these airports are an important component of the region's long-term strategy to accommodate passengers and activity growth. By its agreement to assume operational responsibility and the eventual ownership of the Worcester facility, Massport is working to increase air services at Worcester Regional Airport and its role in accommodating air travel demand generated in communities west of I-95 and I-495. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
219.2	Public Health	Effects	I would also ask that you consider the impact the airport currently has on the health of residents of East Boston. Our children's overall well being is compromised daily by the negative effects of the pollution created by the airplanes and the attendant traffic going to and from Logan. That includes cars, taxis, limousines, and cargo trucks. The infrastructure of our community cannot withstand additional burdens, which would be evident if Runway 14/32 is built.	The proposed Airside Project will not stimulate additional growth in passenger activity levels at Logan Airport. Off-site motor vehicle emissions estimates are shown in Table 6.4-9 of the Supplemental DEIS/FEIR. Increases in the number of vehicles accessing Logan Airport are not analogous to increases in emissions. As indicated in the table, these emissions generally decrease in the future, as a result of improved motor vehicle emission standards, the increased use of alternative fuels, and other factors. The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative. Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas. Massport is actively involved in many air quality initiatives and explored other options to reduce emissions from activities at Logan Airport in the *Logan Airport 1999 ESPR* (previously GEIR).
219.3	Regional Transportation	Regional Airports	...a runway a mere 280 feet short of a mile, accommodating 100-passenger jets, creates an unfair environmental burden on East Boston. With careful planning, another airport could be designed with a runway configuration that would take into account all possible wind patterns and the problem would not be duplicated.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

Code	Topic 1	Topic 2	Comment	Response
219.4	Alternatives	Reduced Approach Minima	I am against zero-visibility landings using Runway 22L--also very near to my home--because if a pilot decides to abort a landing, he/she will accelerate the planes' engines over the water near to Bayswater Street, causing further concussions to the homes in the adjacent area.	Zero visibility landings (i.e. Category III Approach minimums) are not proposed for Runway 22L. The minimums on Runway 22L will be reduced to Category I standards consistent with the equipment already installed. Aircraft will still follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach procedure will be initiated will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise such as the Day-Night Sound Level (DNL), but are rather single aircraft events. The noise from a missed approach is at maximum value just after engine thrust has been increased for the climb-out. For example, reducing the Runway 22L decision height to 200 feet moves this maximum noise point to approximately 3,000 feet from touchdown and further from populated areas in East Boston than is currently the case. Although normally categorically excluded from the NEPA review, the Airside Project study included modeling of changes in runway availability due to reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result.
219.5	General Opposition		For the health of all persons in East Boston, who are trying to live a somewhat reasonable quality life, and who should not be considered expendable to satisfy the needs of the traveling public, I ask that your agency deny Massport's request to sanction Runway 14/32. This issue has clear environmental justice implications and your decision must be based on that consideration.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

LETTER 220

Comments not referring to the EOEA file number may not be considered.

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

There are toxic fumes in the air and I am breathing into my lungs. I do definitely hope you take some severe disciplinary action against the people who want to expand the runway. "The Blute Crew" we dub these people - only because they think runway expansion is a good idea. Please take action immediately so my reputation and health are not laying waste. 220.1

Name Christopher Blackler
Address 2 Webster Ave.
E. Boston, MA 02128
Phone 569-3296

Letter 220
Christopher Blackler
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
220.1	Air Quality	NAAQS	There are toxic fumes in the air and I am breathing [them] into my lungs.	Dispersion modeling indicates no violation of the NAAQS, which were designed to protect human health and welfare.

LETTER 221

Bcc:
From: Catherine Brayden@fld_op_Boston@OFC
Subject: Logan Airport
Date: Wednesday, April 21, 1999 14:39:37 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

It is difficult to express my tremendous concern about Massport Authority's plan to expand airport transportation through the building of runway 14/32 a second taxiway, and lower ceiling height for landing aircraft at Logan.

As a lifelong resident of East Boston, it does not seem possible that a community with limited resources can successfully win an argument against this expansion. The Massport Authority can send representatives to the Greater Boston Chamber of Commerce and other businesses to argue their mutual need. Massport has the capital to invest in subliminal TV ads on the CNBC and local broadcast networks. Therefore, it becomes incumbent upon your agency to represent the citizen of Boston in its review of Massport's plans for Logan Airport.

Commonwealth of Massachusetts participates in the air transportation provided at Logan - not just East Boston and its surrounding communities. It is a compliment to believe that all travels through Logan are coming to Boston; but common sense says that is not true. The 128 and 495 beltways present evidence of the expansion of business outside the Boston area. These businesses and communities are best served by a second airport. 221.1

As Massport presented to this community, the airport is good for economic development. A second airport has the potential to employ up to 15,000 people, to hook up to high speed rail, and improved infrastructure of the host community. Travelers would be 30 to 45 minutes closer to home or their business destinations.

A second airport would not deny the Boston businesses and tourist the availability of air transportation. A second airport would offer choices to travelers, offer better air and ground transportation while in Boston, and reduce travel time for those traveling outside the Boston area.

Logan Airport has reached its capacity; a sixth runway is not the solution.

An afternoon at Constitution beach in East Boston will provide us with clear visual and audible reasons why a second taxiway is harmful to our environment. The jet noise, rumbling and exhaust fumes have a negative impact on the residents of Orient Heights and beach goers alike. To add a second taxiway, center field or 221.2

not, will not increase the benefits to this community.

It is almost impossible to believe that your organization would approve of lowering the ceiling on landing heights. It is already possible to see the passengers on the planes as the fly over East Boston and Winthrop to land at Logan.

221.3

Massport has not met its obligation to develop an air and ground transportation system that meet the needs of the Commonwealth of Massachusetts. It has placed all the responsibility on a small island called East Boston and the impact has affected the quality of life of all Bostonians and neighboring communities near and far.

With all due respect, I request that you deny the request for addition environmental damages; deny Massport Authority's request to lift the injunction; and deny the development of runway 14/32, a center field taxiway and lower landing heights.

Thank you for your time and consideration of this important issue.

Catherine Brayden
351 Sumner Street
East Boston 02128
617-567-0419

Letter 221
Catherine Brayden
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
221.1	Regional Transportation	Regional Airports	...The 128 and 495 beltways present evidence of the expansion of business outside the Boston area. These businesses and communities are best served by a second airport...A second airport has the potential to employ up to 15,000 people, to hook up to high speed rail, and improved infrastructure of the host community. Travelers would be 30 to 45 minutes closer to home or their business destinations. A second airport would not deny the Boston businesses and tourists the availability of air transportation. A second airport would offer choices to travelers, offer better air and ground transportation while in Boston, and reduce travel time for those traveling outside the Boston area.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.
221.2	Alternatives	Taxiway Improvements	...The jet noise, rumbling and exhaust does have a negative impact on the residents of Orient Heights and beachgoers alike. To add a second taxiway, center field or not, will not increase the benefits to this community.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR. The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. However, decreases in odorous emission concentrations will be imperceptible.
221.3	Regional Transportation	Regional Airports	Massport has not met its obligation to develop an air and ground transportation system that meet the needs of the Commonwealth of Massachusetts.	Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of the Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 222

CHARLES I. CANN, III
20 LEVERETT AV., #6B
E. BOSTON MA., 02128
APRIL 11, 1999

DRAFT EIR
ROBERT DURAND, SECRETARY
OF ENVIRONMENTAL AFFAIRS
ATTN MEPA OFFICE
MR. ARTHUR PUGSLEY -
EOEA # 10458

DEAR MR. PUGSLEY,
I'M WRITING YOU TO ASK YOU TO REJECT MASSPORT'S PLAN TO BUILD RUNWAY 14/32 - CENTER TAXIWAY. FOR MANY YEARS THE PEOPLE OF EAST BOSTON AND SURROUNDING COMMUNITIES HAVE BEEN PLAGUED WITH NOISE, CONJESTION, AND AIR POLLUTION AS A DIRECT RESULT OF LOGAN AIRPORT.

I LIVE IN THE ORIENT HEIGHTS/ BEACHMONT SECTION OF EAST BOSTON. A FEW WEEKS AGO, I ATTENDED AN INFORMATIONAL MEETING SPONSORED BY MASSPORT. I ASKED BETTY DESROSIERS WHAT WOULD HAPPEN

IF 14/32 WAS BUILT, I ASKED MCR IF ALL THE SMALLER PLANES WOULD USE THE NEW RUNWAY AND SHE SAID YES, WHICH LED ME TO BELIEVE THAT ONLY SO-CALLED CLASS 3 AIR PLANES WOULD FLY OVER MY HOUSE. THE CLASS 3 PLANES, L1011'S AND 747'S ARE THE ONES THAT MAKE THE MOST NOISE! YOU CAN'T SIT ON YOUR PORCH, USE YOUR YARD OR TALK TO YOUR NEIGHBORS OUTSIDE WITHOUT SHOUTING MASSPORT HAS EVEN ADMITTED THAT. THEIR MONITORING OF NOISE IS FLAWED. IN SUMMER THE SMELL OF JET FUEL IS ALMOST UNBEARABLE EVEN IN WINTER WITH SOUNDPROOF WINDOWS, THE HOUSE STILL SHAKES AND YOU STILL HEAR THE PLANES AND SMELL THE JET FUEL. 222.1

THEY TELL US THAT THE CENTER TAXIWAY WILL MEAN PLANES WILL BE ABLE TO MOVE TO AND FROM THE TERMINALS FASTER SO THERE WILL BE LESS AIR POLLUTION, BUT IT SEEMS THAT MORE PLANES MEANS MORE JET ENGINES RUNNING WHICH SEEMS 222.2

TO ME TO TRANSLATE TO MORE JET FUEL AND MORE NOISE. AND IF THEY LOWER THE MINIMUM HEIGHT, THE PLANES WILL BE FLYING EVEN LOWER OVER MY HOME AND MY NEIGHBORHOOD. A FRIGHTENING THOUGHT INDEED! HOW ENVIRONMENTALLY FRIENDLY MASSPORT IS TO BE WILLING TO SPEND $200,000 TO MOVE AN ENDANGERED BIRD! WE LIVE NEAR THE AIRPORT SO WERE NOT ENTITLED TO HAVE ENDANGERED BIRDS!

ONE DAY LAST WEEK AROUND 7:30 IN THE EVENING I HAD TO WAIT FOR FOUR 18 WHEELERS ON OUR CITY STREETS TO GO TO THE AIRPORT. LAST FRIDAY I HAD TO WIND AROUND TWO SHUTTLE BUSES A STRAIGHT TRUCK AND AN 18 WHEELER AT THE SAME INTERSECTION. WERE INUNDATED WITH AIRPORT TRAFFIC ALL THE TIME ALONG WITH TAXIS, LIMOSINES OIL TRUCKS, SHUTTLE VANS AND GENERAL AIRPORT TRAFFIC.

IN THE MOVIE "FIELD OF DREAMS" THE EXPRESSION WAS.

"IF YOU BUILD IT, THEY WILL COME."
WELL, THEY'RE ALREADY HERE!

I'VE READ LETTERS AN EDITORIALS ABOUT THE PEOPLE SURROUNDING HANSCOM FIELD COMPLAIN ABOUT THREATS ABOUT QUALITY OF LIFE AND HISTORICAL SIGNIFICANCE. WHAT ABOUT OUR QUALITY OF LIFE AND OUR HISTORY?

T. F GREENE AIRPORT AND MANCHESTER AR EXPANDING THEIR OPERATIONS BECAUSE THEY KNOW LOGAN IS TOO SMALL TO HANDLE ANY MORE TRAFFIC. WORCESTER AIRPORT HAS BEEN LOSING BUISNESS BECAUSE OF LACK OF FACILITIES. ONLY RECENTLY HAS MASSPORT BEGUN TO ADDRESS WORCESTER'S POSITION ON A REGIONAL BASIS.

ALL WE EVER HEAR FROM THE BUSINESS PEOPLE AND AIRLINE SPOKESPEOPLE IS HOW GOOD THIS PLAN WILL BE FOR OUR ECONOMY 222.4

WHAT ABOUT THOSE OF US THAT BEAR THE BRUNT OF MASSPORT OPERATIONS? IS ECONOMICS MORE IMPORTANT THAN PEOPLE?

DOES A "MORE EQUITABLE DISTRIBUTION OF NOISE MEAN ONLY THE WORKING CLASS COMMUNITIES AROUND LOGAN?

DO ENDANGERED BIRDS HAVE MORE OF A CHANCE FOR SURVIVAL THAN ENDANGERED PEOPLE?

I BELIEVE THAT IF THEY COULD, MASSPORT WOULD MOVE US ALL AWAY FROM LOGAN AND TAKE OUR HOMES JUST AS THEY DID TO THE PEOPLE ON NEPTUNE ROAD. NO AMOUNT OF MITIGATION OR STOP GAP MEASURES CHANGES THE FACT THAT WE NEED A SECOND AIRPORT. LOGAN HAS REACHED ITS CAPACITY, AND LONG SINCE PASSED IT 222.5

DO PEOPLE NOT GO TO PARIS OR LONDON BECAUSE THEIR AIRPORTS ARE OUTSIDE THE CITY AND MUST BE ACCESSED BY BUSES OR TRAINS? DO PEOPLE NOT GO TO SAN FRANCISCO BECAUSE OF WEATHER DELAYS. I DON'T THINK SO.

PLEASE DON'T BE SWAYED BY BIG BUISNESS OR MASSPORT RHETORIC

PLEASE LISTEN TO THE PEOPLE WHOSE LIVES ARE AFFECTED THE

MUST. HOPEFULLY IT'S NOT
TOO LATE TO STOP THE MADNESS.

AT LEAST THEY DIDN'T PROMISE
THEY'D CHANGE THE WEATHER.
WE KNOW THEY COULDN'T KEEP
THAT ONE!

SINCERELY

Charles L. Camillo

Letter 222
Charles I. Cann, III
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
222.1	Noise	Monitoring	Massport has even admitted that their monitoring of noise is flawed.	In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix E of the *Logan Airport 1996 Annual Update).*
222.2	Alternatives	Taxiway Improvements	They tell us that the center taxiway will mean planes will be able to move to and from the terminals faster, so there will be less air pollution. But it seems that more planes means more jet engines running, which seems to me to translate to more jet fuel and more noise.	The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative. The Centerfield Taxiway is designed to increase operational efficiency and reduce taxiway delays, but construction of the taxiway will not lead to an increase in operations. None of the proposed airfield improvements will induce demand by new passengers or operations that would otherwise not come to Logan Airport.
222.3	Alternatives	Reduced Approach Minima	And if they lower the minimum height, the planes will be flying even lower over my home and my neighborhood.	Reduced landing minimums provide for a safer approach by providing precision guidance at lower altitudes, and thus a safer approach The reduced landing minimums do not change the approach path nor reduce the clearance between aircraft and the surface. Rather, they shift the location at which a missed approach decision is initiated closer to the airport. For Runways 27 and 22L, the reduced minimums will make the approach procedures flown by pilots more consistent with FAA standards in effect at most other airports. Reduced landing minimums will increase airfield safety by allowing operations more directly into the prevailing wind and will help improve PRAS goal achievement.
222.4	Alternatives	Impacts	All we ever hear from the business people and airline spokespeople is how good this plan will be for our economy. What about those of us that bear the brunt of Massport operations? Is economics more important than people [are]?	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
222.5	Regional Transportation	Regional Airports	No amount of mitigation or stop-gap measures changes the fact that we need a second airport. Logan has reached its capacity, and long since passed it.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields. Airport capacity varies according to weather conditions and traffic volume as well as the airfield layout, facilities and equipment such as ILS, and operational procedures such as approach minimums and aircraft separations.

LETTER 223

Mr Durand, Arthur Pugsley:

I am writing to let you know I am opposed to the construction of runway 14/32 I honestly do not think it will help the environment of our air + noise 223.1
I was at the meeting at the Holiday Inn 4-8-99 and it seemed most everyone felt the same way. I hope you will 223.2
Consider a second airport. There were people from several areas at the meeting in opposition to runway 14/32. Thank you for taking the time reading my request.

Mrs Catarina D'Amore
62 Haynes St
E. Boston Ma
02128

Letter 223
Mrs. Carmela D'Amore
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
223.1	General Opposition		I honestly do not think [the construction of Runway 14/32] will help the environment of our air and noise.	Comment noted.
223.2	Regional Transportation	Regional Airports	I hope you will consider a second airport.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions.

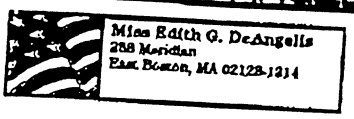
LETTER 224

Attention MEPA Office

=== CALL BACK MESSAGE ===

TO: Bob A. Durand, Secretary
Commonwealth of Massachusetts
Environmental Affairs
FAX: (617) 727 - 1598 cc Mr. Arthur Pugsley
TEL (617) 727 - 9800 x 301 EOEA No. 9045

FROM: EDITH G DE ANGELIS / Life-long resident of the Eagle Hill Neighborhood, East Boston



PLEASE CALL AT [TEL] 617-567-1442 4/23 1st transmission
2nd transmission 4/25
[FAX] 617-567-1442

To: Secretary Durand
From: Edith G DeAngelis
~~Date~~: April 22, 1999
Re: "Logan Airside Improvements"

23 pages

I would like to go on record as OPPOSED to the ludicrous, as well as unconscionable Masspoit Plans for additional Expansion of Logan International Airport. The surrounding communities have taken an unfair burden, and decades of negative environmental impacts, demise of quality of life and, degragation of neighborhoods, and the community as a whole as a result of the uncontrolled growth Logan International Airport. Enough is enough!! Our lives are at risk!! 224.1

It is my understanding that the "Planning Project" reports are flawed.

However, I will leave the assessment of the reports to those with the technical expertise to make such evaluation.

Therefore my response will address those issues frequently ignored in the planning process, and, in the "response" to technical reports. Although important, and in some cases critical to the health and safety of human beings, as well as wildlife, to the stability of neighborhoods as well as the survival of viable residential communities, they tend to become low priority items when it comes to competition with business industry, and, the "almighty dollar"

PART I - Planners, decision makers and funding agencies must be cognizant and practitioners of:

224.1 (cont.)

- Environmental Responsibility
- Environmental Justice
- Methods of improving quality of life of those who live, work and play in East Boston / other Communities
- Prevention, not exacerbation of the degragation / deterioration of neighborhoods contiguous to the airport and/or under the flight patterns.

Who will / must be responsible for

Re EOEA 10458
Cruise Line Angelin

- danger to life and limb for residents?
- degradation of the health of
- deterioration of environment?
- deterioration of quality of life?
- exacerbation of air, water, soil noise and visual pollution?
- the insidious, as well as blatant intrusion and extreme negative impacts upon the lives of the residents of the contiguous neighbo

Part II — Harbor Clean up & Toxic Wast

Loss of incredibly invaluable historic sites and open/green space and parkland, and, 3 harbor islands. (not to mention innumerable homes, business streets)

Governor's Island - Fort Wash (the first) Fort Winthrop, a richly historic site which should have preserved as part of the rich heritage of America (such as the 2nd Fort Warren at Castle Island South Boston) was instead, bulldozed and filled in along with Apple Island, Bird Island World war I Memorial Park - Wood Island Park designed by Frederick Law Olmsted,

224.2

RECEIVED 10-4-55

Edith G. Delangelis

America Park and America Field for airport expansion. To add insult to injury, toxic waste, too contaminated for designated outer harbor foul disposal area was dumped into Governor's Island, despite our efforts to stop such an outrageous proposal!

224.2 (cont.) Despite our grave concerns about the potential consequences, now and for generations to come Massport and the Ma. Highway Department proceeded to dump more hazardous waste in East Boston! Incidentally the largest percentage of 21E sites of Ma. D.E.P. are on Massport property.

224.3 Taxpayers and especially local BWSC rate payers are spending billions of dollars to clean up Boston Harbor.

Questions — What happens to our clean harbor if a contractor accidentally or deliberately breached the capsule containing the toxic waste??

Re: CCCT 10455
East Boston

It was my understanding that the Capsule would never, should never be breached (for obvious reasons) What will the construction of the proposed runway do to this so called/concealed/protected hazardous waste? What will happen to the air the water, the soil not only in East Boston but all along the waterways? The disposal sites must not be tampered with in any way for any purpose!

224.4

224.5

Part III - "Law of averages"

As the percentage of flights increase over our homes and communities, we need to have some questions answered! We also must prevent catastrophic conflagrations, the potential of which increases with each new plane and flight pattern added to a sky already super saturated with all types and sizes of aircraft.

224.6

Re: EBEA 10458
Edith G. DeAngelis

Questions which require a response
& yearly account of at least the
last five years:

- How many flights leaving Logan have been aborted due to
  - faulty equipment?
  - smoke in the Cockpit or Cabin
- How many "near misses" of planes flying over New England?
- How many flights, not from Logan have had to make emergency landings?

224.6 (cont.)

- How many incidents of unruly passengers in flights over New England?
- How many disabled planes unscheduled on Logans roster have had to land at Logan
- How many planes have gone off the runways?
- How planes approaching or leaving Logan have Crashed? (on and around the airport - Bayswater Street Boston Harbor and/or on the runways or perimeter of the airport?
- Can you not believe that, God forbid, one or more communities

Re: EBEA 6045
Edith Eddy Angelo

could be totally wiped out if a plane were to crash into any of the jet fuel tanks at the airport, the underground jet fuel and gas lines, with all the oil tanks up and down the Chelsea River in East Boston, Chelsea and Revere? We have no escape since they close off the tunnels during emergency situations.

224.7 As the number of flights increases, over land or over water, the potential for plane crashes increases significantly. Since many of the flights also circle or continue to fly over Boston Inner Harbor and the Mystic River where natural gas tanks are located and where the huge L.N.G. tankers travel (just clearing the Tobin Bridge) the potential for a regional conflagration increases significantly!!! I understand that if the runway is built, anticipated number of flights will increase

by 21,000, with a ~~similar~~ greater percentage over the Eagle Hill Neighborhood which is an Historic District with a number of individual buildings on Landmark of the City of Boston listing and on the National Register of Historic Places.

- What is being done to prevent a potential conflagration?

Part IV - Wildlife -

Despite being an urban community, East Boston enjoys many varieties of birds and other wildlife, some rare species. Wood Island Bay Marsh, Belle Isle Marsh Reservation, the runways and perimeter of the airport are rich with opportunities for outdoor recreation, recreational and environmental awareness
224.8 programs. How can we protect the wildlife? How can we provide opportunities for Outdoor Education? What would a new runway do to

our natural environment and rich resources? Of course another fear, as experienced in the past, is the ingestion of birds into the jet motors disabling planes. What happens when we increase flights in and out of Logan, by many thousands

Part V - Infrastructure and Safety

Intrusion around in, and through neighborhoods of East Boston and surrounding communities.

The roadway system to and from the airport is already woefully inadequate, with standstill, gridlock traffic frequently seen not only on the highways but also on many of our neighborhood streets (at least

224.9 twice a day) when either one of the bridges to East Boston/Chelsea (over the Chelsea River) are open. Not only is traffic at a standstill for over 1/2 mile, but local traffic is severely exacerbated by airport related vans, trucks,

Re: 10 [illegible]
Edith [illegible]

limos, taxis, buses, etc further clogging our streets disposing their letter, in addition to all the noxious gasses.

- Route 1A must be depressed from and including the portals of the tunnels (to re-connect East Boston to Bell Circle, Revere — or, at the very least to Boardman Street East Boston. Without a more efficient, functional depress roadway, airport traffic including on the airport roadways will be in a gridlock almost continuously, most especially on high peak hours. This is a critical need now, a new runway can only cause more and greater problems!

224.10

224.11

- A special truck route should be constructed to keep [illegible] off our neighborho[illegible]

Streets / re: 10458 Eastie & Delaglen

- Emergency drills should be implemented and extend beyon the airport boundaries, to

224.12 include the most negatively and, most vulnerable to / Catastrophies: East Boston, Chelsea Revere and Winthrop (at least) as part of the Emergency "civil defense" drills.

224.13 • Stronger measures to enforce "no trucks over 2½ tons" which blatantly drive on restricted streets, many times at excessive speeds.

224.14 • Stronger measures by Massport to prevent airport traffic from spilling over or using short cuts through our neighborhood streets.

- Massport must agressively

224.15 encourage public transportation and discourage the use of private cars to and from the Airport.

Re: EDEA 1045
Edna DeAngelis

- Masspt must discourage airport related business firms and their C.E.O.'s, such as hotels, freight storage warehouses, trucking companies (cargo and small trucks and vans) taxis, rental cars, limo, busses from further encroachment and intrusion into our neighborhoods, as well as, in close proximity to our back and front yards and neighborhoods as a whole!

224.16

224.17 • Masspt must return and develop into a park 4½ acres + replace Ameena Park and Ameena field. taken during uncontrolled airport expansion!

224.18 • Masspt and the F.A.A. must do more to make the airlines more responsive to making their airplanes safer and more quiet!

- Masspt must not build a new runway but m...

EOEA 10457
East Boston

safer, more logical methods of addressing their claimed need for a new runway. A second airport is 25 years behind schedule! Any relief of any type (as they, Massport staff, claim), would be like putting a cup of water on a raging forest fire or putting a band aid on cancer. If any relief results, the relief would be extremely inadequate and very limited in scope and in time, and, the runway would be obsolete before built. Then what??

VI Critical Problems - Too many to list.

East Boston has two times less open/green space per capita, as the city as a whole. We desperately need a massive reforestration of trees and other vegetation, for the desperately needed oxygen for our lungs and well-being, and to

224.19

counteract the poisonous fumes and particles from airplanes and airport related vehicular traffic.

• If Massport gave, and developed, 1,000 plus acres of parkland for the East Boston community, it could never replace Frederick Law Olmsted's "Wood Island Park" Neptune Road, "America Park" and "America Field"!

224.20 • A new runway, with a doubling of flights can only exacerbate an already critical need/problem of our community and surrounding communities.

- Traffic (to and from airport)
- Parking
- Pollution
  - air, water, soil, noise and visual pollution
- Accidents (vehicular) within the boundaries East Boston which:
  - increase accident statistics for our community

Tony Durand
EOEA 10455
Edith DeAngelis

- adds more demand on municipal resources
  - fire department
  - police department
- adds more demand on community resources
- increases the insurance premiums of the residents of East Boston due to airport traveler accidents within our boundaries (another unfair/unjust burden to the residents of E.B.)
- Many other critical needs and problems, not already addressed, would fill many more pages!
- In summary, our health and safety and our overall quality of life must always be the first and foremost consideration
- It is a matter of survival
- Survival of our most valuable asset — our people

224.21

- Survival of our natural Resources
- Survival of our residential Community
- A new runway, or any further expansion of Logan International Airport, and/or the increase in cargo or passenger flights can not will not enhance any of the above critical needs. It can only exacerbate an already critical problem/set of problems we currently face.

VII Flight Patterns

- Current flight patterns are dangerous and noisy. Low flying planes almost take down chimneys and roofs of surrounding homes. Every few seconds our lives are disruptive to conversations, any

224.22

form of communication
listening to radio,
T.V. and life in
general!
One plane (and the
incredible noise)
does not out of sight
when another plane
is in view. The sound
often deafening fur
here has caused
lot of people surround-
ing the airport. Even
on main street Medford
the loud noise and
vibrations from planes
at 3 AM 4:30 AM 6:30
AM (as examples) wake
sleeping individuals.
When that (those)
runway(s) is (are) used
the planes never stop!
(Except when a deepfreeze)
The vibrations, the sound
and the odor are relentless!
The irony is, that the greatest
impact over Eagle Hill, E B,
and, Medford, Ma. is when

Re: EOEA 10458
Edith L. DeAngelis

The flights are taking off or landing on the runway over our beloved and irreplaceable former Wood Island Park (That really rubs the salt in the wound)

- We have already been told by Massport officials that those runways will be used even more, and if the new runway is built Eagle Hill, the most densely populated neighborhood would receive the greatest negative noise impact with some 21,000 increased flights (as a starter). Those flights will also continue to impact Medford and other communities on or under that flight pattern as well and will be totally unbearable if increased!! Enough is enough!! Living and life can be intolerable now because of the overflights traffic, noise and pollution impacts and other related airport activities!

Re: EOEA 10458
Edith Eddy Angelini

VIII

224.23

Airport operations and the proximity to homes and neighborhoods

• Logan International Airport and many of the related business operations i.e. rental car companies, trucking firms, bus van car and limo port impacts are literally and figuratively next to the home front and backyards of the residents of East Boston. It is time for relief and the return/replacement of open green space and developed parkland not a further exacerbation of 1300 plus rent a cars and other negative impacts in our backyards!

• The vibrations, most especially from planes warming up, taking off and landing, make windows shake, buildings vibrate and human beings tremble, birds take off and domestic animals get stressed out! • Those folks who advocate for more expansion of the airport activities and facilities should live abutting the airport! or next to taxi/bus pool or rent a car agencies!

Re: EOEA 10458
Edith Goldingelis

• The jets taking off blast an intense air stream with heat, dust and noxious gases - fumes (you can taste as well as smell) right into the homes and neighborhoods leaving a black trail in the atmosphere. Traditionally, the jets approaching the airport would jettison excess fuel over Belle Isle Marsh, Boston Harbor, the Eagle Hill neighborhood, our homes and our gardens leaving a black trail behind them and contaminating the vegetables and fruits growing in private and community gardens.

• The discharged fuel, fumes, noxious gases, dust and dirt thrown into the air by planes, by vehicles (hundreds of thousands) related to airport activities and vehicles using our neighborhood streets to and from the airport leave layers of black dirt on our homes and cars and a greasy film on our windows which can not be removed, regardless of what cleaning agency is used!

• Can you imagine what our lungs

12:10 45 Earth to DeAngelis

look like?
- Don't try to dry clean clothes outside on a clothesline

IX Epidemiology Study
- What is happening to our lungs? To the entire respiratory system? The circulatory system and other vital organs?
- Why does East Boston have a high incidence of illness and death caused by high blood pressure, heart attacks, cancer, chronic lung disease, asthma, cancer, etc.?
- What will over 21,000 more flights and hundreds of thousands additional vehicle trips through East Boston do to our health, safety and well being???
- a new runway and further expansion of Logan is NOT ACCEPTABLE, our health and our lives are at stake!
- What about our peace of mind? Mental stress? Emotional health?

X Historical Perspective

224.24

Re: 10 Feb 86
Edith Wolkowicz

- "NMB" – "Not in my backyard" syndrome / philosophy – I just dump it all in East Boston, but not... my backyard!
- Approximately twenty or more years ago, it was determined that a second airport was needed, and should have been built at that time.
  - Dover Ma was recommended for the site of the 2nd airport for obvious reasons, within 24 hours Dover was taken off the table.
  - What was not good for the wealthy, and affluent, and influential residents of Dover is not good for the residents of East Boston!
- What was bad for East Boston approximately twenty years ago when the runway was proposed, and an injunction was filed and has been in place ever since, is not only bad for East Boston and surrounding communities now, but can only be magnified and exacerbated if a new runway is installed

224.25

re: COEX 10458
Edna Delaney

X. Public Relations - Media Blitz

Ho hum!

What a waste of money to prepare, broadcast at prime time, and have telephone banks in Texas encouraging people to "vote" to approve the runway. They can only ask questions, the operators can not take your statement or vote to deny a new runway, just "yes" and "no" responses and an approval for the runway. I want to go on record once again as I did over the phone, to deny this proposal

XI. Finally, I would like to commend politicians and all other individuals who recognize the problems and negative impacts that airport expansion and operations have caused this, and other communities, and were brave enough to stand up, and say NO more runways! I am personally grateful for their integrity and courage

Edna K DeAngelis

Letter 224
Miss Edith G. DeAngelis
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
224.1	Environmental Justice	Cumulative Impacts	[Critical issues have been omitted from the planning process including health and safety of the local population and threats to community structure. The decision makers need to consider the environmental justice of expanding Logan and find ways of improving quality of life and protecting the local neighborhoods.]	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively. Massport is committed to a number of mitigation measures in addition to project-specific mitigation. Refer to Chapter 8 of the Supplemental DEIS/FEIR for a discussion of mitigation measures.
224.2	Open Space/ Parklands	Impacts	[Logan construction has already caused the loss of incredibly invaluable historic sites and harbor islands. The proposed construction and expansion will further jeopardize the harbor that is being cleaned up at cost of "billions of dollars."]	The Preferred Alternative will neither incorporate land from nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site. In addition, Massport prepares the *Logan Airport Annual Update* and the *EDRs* as part of the review process for the Logan Airport GEIR/ESPR, which presents a series of status updates on conditions and environmental mitigation initiatives at Logan Airport. Massport has carefully planned the airside improvements to reduce delays and improve efficiency without the need for harbor intrusion. Stormwater management will employ Best Management Practices to minimize potential adverse impacts to harbor water quality. No adverse impacts to the Harbor, the Harbor Islands or the surrounding areas are anticipated from this project.

Code	Topic 1	Topic 2	Comment	Response
224.3	Water Quality	Monitoring	What happens to our clean harbor if a contractor accidentally or deliberately breaches the capsule containing the toxic waste?	No work is proposed in or adjacent to the lined landfill area or other airfield areas where hazardous materials are stored.
224.4	Water Quality	Monitoring	...What will the construction of the proposed runway do to this so-called concealed/protective hazardous waste?	Massport recently completed a soil boring and chemical analytical program along the centerlines of Runway 14/32 and the Centerfield Taxiway. The preliminary soil chemical data indicate that the large majority of soil to be excavated is not regulated soil in that it did not exceed the S-2 Reportable Concentration. Therefore, this excavate may be recycled at in-state or out-of-state lined landfills or used at industrial sites for fill. In accordance with Massport's Soil Management Plan, the excavate will not be used for fill or any other use at environmentally sensitive sites such as near wetlands, playgrounds, water supplies, etc.
224.5	Construction	Mitigation	What will happen to the air, the water, the soil not only in East Boston but all along the waterways? ...	Monitoring of airborne soot levels in the vicinity of Logan Airport have shown that the airport is a very small (less than one percent) contributor to ambient levels. In addition, Nitrogen Oxides emissions associated with the Airside Project are lower, when compared to the No Action Alternative. Construction and operational controls will be implemented to ensure that any potential impacts to natural resources are minimized. In general, these will include a construction soil erosion and sediment control plan, a stormwater management plan and the use of Best Management Practices (BMPs) for daily airfield operations.
224.6	Airport Operations	Safety	As the percentage of flights increase over homes, and communities, we need to have some questions answered! We also must prevent catastrophic conflagrations, the potential of which increases with each new plane and flight pattern added to a sky already supersaturated with all types and sizes of aircraft...[Within the last five years] ■ how many flights leaving Logan have been aborted due to: ■ faulty equipment? ■ smoke in the cockpit or cabin? ■ How many near misses of planes flying over New England? ■ How many flights, not from Logan, have had to make emergency landings? ■ How many incidents of unruly passengers in flight over New England? ■ How many disabled planes unscheduled on Logan's roster have had to land at Logan? ■ How many planes have gone off the runways? ■ How many planes approaching or leaving Logan have crashed?	The goals of the Airside Project are to reduce delay, increase airport efficiency, and reduce negative environmental impacts. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. Although safety is the first consideration of any proposed alternative at Logan Airport, this data were not relevant to the Airside Study. However, such questions can be answered by contacting the public affairs offices of the FAA or Massport.
224.7	Airport Operations	Safety	[What measures are being proposed to avoid catastrophes such as air collisions over East Boston or damage to fuel storage facilities near the airport? The increase flights proposed increases the potential for accidents, spills, and further degradation to the local environment.]	The first goal of the FAA and Massport is always to provide safe air transportation. Logan Airport has a tightly controlled system of flight tracks and procedures to prevent aircraft accidents. Runway 14/32 and the other proposed Airside improvements are designed to enhance safety and efficiency of traffic operations in the air and on the ground. The runway will segregate smaller aircraft and reduce congestion during northwest wind conditions, reducing the possibility of mistakes and potential for accidents. The Airside Project will not increase flights at Logan Airport. They do not increase the capacity of the airport, but allow the handle the future traffic with enhanced safety and efficiency.

Code	Topic 1	Topic 2	Comment	Response
224.8	Ecosystems	Wetlands	...How can we protect the wildlife? How can we provide opportunities for outdoor education? What would a new runway do to our natural environment and rich resources?	The Airfield Improvements that comprise the Preferred Alternative will be constructed within the confines of the existing airfield. Most of the wildlife that occurs on the airfield will continue to do so. For the only state-listed endangered species that occurs on the airfield, Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The Airfield Improvements will not affect existing opportunities for outdoor education. Section 6.5 of the Supplemental DEIS/FEIR documents that with the exception of the Sandpiper, the Preferred Alternative will not impact natural resources.
224.9	Ground Transportation	Access to Logan	[There is already insufficient infrastructure to support the existing volume of traffic going to and from the airports. The proposed expansion will increase these problems.]	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
224.10	Ground Transportation	Access to Logan	[Route 1A must be depressed to reconnect East Boston with Bell Circle, and something must be done to avoid the constant gridlock that will result from more vehicles approaching Logan.]	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways.
224.11	Ground Transportation	Access to Logan	A special truck route should be constructed to keep [traffic] off our neighborhood streets!	The Airside Project does not result in additional demand for ground access services.
224.12	Airport Operations	Safety	[Emergency drills should be conducted and include neighboring towns such as Chelsea, East Boston and Revere.]	The first goal of the FAA and Massport is always to provide safe air transportation. Runway 14/32 and the other proposed Airside improvements are designed to enhance safety and efficiency of traffic operations in the air and on the ground. Massport does conduct periodic emergency drills that involve appropriate personnel of neighboring towns.
224.13	Ground Transportation	Access to Logan	[Stronger enforcement is needed to keep large trucks off those city streets with weight restrictions.]	Comment noted.
224.14	Ground Transportation	Access to Logan	[Stronger measures are needed to keep airport traffic off city streets during busy periods.]	The Airside Project does not result in additional demand for ground access services.
224.15	Ground Transportation	Access to Logan	[Massport must encourage public transportation.]	The *Logan Airport 1999 ESPR* (previously GEIR) reports on Massport's progress on meeting its air passenger goal of 35.2 percent by the time air passenger volumes reach 37.5 million annual passengers. Consideration will be given to ways to enhance transit ridership and use of the Logan Express bus service. In addition, Massport is considering consolidation of car rental facilities, which will facilitate the consolidation of the courtesy vehicles serving the rental car companies.
224.16	Ground Transportation	Access to Logan	[Massport needs to discourage use of local streets as temporary storage for limousines and trucks associated with airport-related businesses.]	Comment noted.
224.17	Open Space/ Parkland	Mitigation	[Massport must return or replace the loss of Amerina Park and Amerina Field lost during uncontrolled airport expansion.]	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
224.18	Noise	Impacts	[Massport and the FAA need to enforce noise standards better and force the airlines to make their planes quieter.]	The noise impact per operation is expected to diminish in the future for several reasons. The two largest airlines at Logan Airport, Delta Air Lines and US Airways are replacing their hushkitted shuttle fleets with full Stage 3 aircraft. US Airways took delivery of Airbus 320 aircraft in the fall of 1999 and Delta Air Lines has ordered Stage 3 Boeing 737-800s for its Boston to New York shuttle operations. By the end of 2000, approximately 24,000 annual operations were replaced by full Stage 3 technology aircraft.
224.19	Open Space/ Parkland	Mitigation	[Massport should provide open space and parkland in East Boston to replace lost parkland from previous Logan expansions.]	The Preferred Alternative will neither incorporate land from nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site.
224.20	Alternatives	Runway 14/32	[A new runway can only exacerbate existing problems in the community caused by Logan-related traffic and operations.]	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Annual Updates (Environmental Data Reports).
224.21	Public Health	Effects	[The health and safety of the community needs to be the "first and foremost" consideration in discussing plans to expand Logan.]	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study*. Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.
224.22	Alternatives	Other Non-Construction Alternatives	[Existing flight patterns need to be changed to reduce impacts on communities. The noise, odor, vibration and pollution impacts on the community are unbearable and will only get worse.]	The existing flight tracks at Logan Airport have been developed over a long period of time with community consultation and provide the best combination meeting both airport requirements and community needs. The redesign of existing flight tracks was not included as a part of the Airside Project. The only new tracks proposed in the Airside Project Draft EIS/EIR are for Runway 14/32 and are over water.
224.23	Open Space/ Parkland	Mitigation	It is time for relief and the return/replacement of open green space and developed parkland not a further exacerbation of 1,300-plus rent-a-cars and other negative impacts in our backyards.	Comment noted.
224.24	Public Health	Effects	[What are the health effects of all the pollution dumped on East Boston as a result of airport operations?] [Why does East Boston have such high incidence of high blood pressure, cancer, chronic lung disease and asthma?] [What are the increased health impacts associated with the proposed 21,000 flights?]	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study*. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR.
224.25	Environmental Justice	Demographic Data	[As far back as 20 years ago a second airport was recommended in Dover, Massachusetts. This site was rejected immediately because Dover is a wealthy community, yet East Boston continues to suffer greater pollution and airport expansion.]	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions.

LETTER 225

April 22, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Dear Secretary Durand,

As introduction, be advised that I am a East Boston resident and home owner. My experiences of living with the impact of a local airfield, which has grown to major international air transportation facility, so close to the city, have spanned a generation. With resources and knowledge typically available to one person, this letter will document the past, present, and future empirical environmental impacts exerted by airport operations, as well as the immeasurable impacts of those operations.

While reading the Draft Logan Airside Improvement Plan Environmental Impact Report, EOEA #10458 ("EIS/EIR"), it becomes obvious that a resident, citizen, a local business group or a small activist organization each to their own devices or as a cohesive group, can not begin to participate in a fair process, with the intentions of changing the sponsor's desired result and attain that goal. The resources necessary to adequately address, comment on, disprove or rebut the report details and conclusions, even within the extended time allotted, are far beyond an individual's reach. When the opponent has the process "wired", as appears to be the case in this instance, even a technically based cogent document comment is discounted by reference to a study which may be based on flawed data. The sponsor makes abundant use of consultant reports, the results of which may be forgone conclusions.

Problem

Logan, as configured, is beyond demand capacity both airside and landside. The proponent seeks to address the long range, eastern Massachusetts, all mode transportation demand and capacity problem through the proposals contained within this EIS/EIR.

The problem scope is wider than that which is addressed within the EIS/EIR, however, the proponent seeks to frame the problem as limited in scope, under the banner "Reducing Delays at Logan".

The alternatives are limited in scope to just the Logan airport airside aspects of a region wide transportation issue. Logan airport is overextended, and if the delay figures are to be believed, it can not meet the demand of the next century under any modification proposals.

Root Causes

Within the EIS/EIR limited scope context, the problem root causes are:

#1 As a coastal airport wind and weather are the most significant factors contributing to delays at Logan.

#2 Peak Period demand due to fleet mix and a high level of regional carrier flights operated with smaller aircraft.

#3 Demand imposed by airline flight schedules.

In summary, the proponent's Preferred Alternative 1A package does not eliminate the problem root cause but merely addresses the effects of root cause #1 and #3, both of which are outside the proponents sphere of control. In not seeking a root cause solution, at a different, larger and appropriate geographical setting, thereby ELIMINATING root cause #1 and #3, the proposals will result in a short term reduction of effects. In addition, the Preferred Alternative 1A ignores the only short term remedy, reducing demand administratively through Peak Period Pricing, which would not impose further environmental and safety impacts on and beyond the airside island. 225.1

The Preferred Alternative 1A, if the source data is accurate, predicts reduced delays as the result. Just as the high/low load data may overstate delays in may understate them as well. The Preferred Alternative 1A, short term remedy goal to reduce delays, will not solve the problem root cause and eliminate delays. The Preferred Alternative 1A assumptions also predict minimum or no induced passenger loads resulting from increased operations.

For these reasons Alternative 1 and the Preferred Alternative 1A should be found to be inadequate and only Alternative 3 should be considered a remedy, to effect the stop gap demand reductions the sponsor is seeking.

Data

The data and modeling throughout the EIS/EIR is questionable. The data baseline years used for data classes such as noise contours, delayism, passenger volume and growth, operation volume and growth among others, establishing the base for comparison and projections differ. The sponsor uses 1993 as a base line for aircraft load factors. 1993 was the year during which the loads were very high due mainly higher demand and airline over-scheduling, it is not representative of the modeling succeeding years. Decisions should be delayed until results of the upcoming 1998 GEIR are reviewed to confirm the modeling technique is accurate. Use the most recent data for forward projection and establish 1998 as the base line. 225.2

The sponsor uses an extrapolated trend line through the 1993 baseline year to forecast 1999 & 2010 fleet operation projections. The trend was flat during 1994 - 1997 rather than increasing at the average rate. The load forecasts were developed in 1994 and 1995 and ignore the actual data during the subsequent years.

One example of inaccurate data is the modeling projections use *scheduled operations (515,822)* rather than actual operations during 1993 (493,093) or 3.4% fewer actual operations.

Delayism Modeling

The sponsor relies heavily on the DELAYISM model and algorithms to substantiate the problem. As reported in the 1994/1995 GEIR, the modeling, constants and algorithms used to compose the NEM contours were flawed, but it is that very data which was used at that time to make noise contour projections into 1999, and eliminate homes for mitigation eligibility. (The subsequent annual updates supposedly adjusts the error to compensate for the 3 to 7 db Ldn underestimate of ground roll effects). 225.3

The DELAYISM model must be proven over a considerably longer time period and the model compared to empirical data, before the sponsor is allowed to rely on it to define the problem and be accepted as proof. As likely as the model may overstate delays in may understate delays and the sponsor has overestimated the proposed Alternative effect to solve the delay problem through the next century.

Seat Departure Metric

The proponent makes abundant use of OAG data to frame the delay problem. The problem is measured in terms of operations and operation delays. It further models those operation delays in the context of passenger delays, using a seat departure metric as a passenger delay measurement. The passenger delay is then equated to a cost of delay. 225.3

The seat departure metric is only an accurate measurement, when supported by data indicating the number of seat departures with passengers in them. Without that data, an accurate measurement of passenger delays and cost can not be made. To assume each seat departure delay is a passenger delay, using carrier reported load factors for every operation, severely overstates the cost of delay. The GEIR annual updates revises the reported seat departures, but those adjustments are not used in the EIS/EIR conclusions. (cont.)

Therefore, the EIS/EIR delay cost foundation, its conclusions, remedies and impacts are not supported by current data and is inadequate.

Runway Length

There is insufficient land area west to east along the 14/32 heading to construct a 5000' runway. The 5000' active runway length plus the FAA standard 1000' runway safety area ("RSA") on each end exceeds the undeveloped land area length. To build, it would impose more impacts than addressed in the EIS/EIR. 225.4

The additional impacts are:

- Option A - Acquiring more land area in addition to the #60-61 cargo buildings, such as the parking area for the Hyatt hotel, to gain length to the west.
- Option B - Filling in the harbor on the east end or building a ramp structure into the harbor to gain length to the east.
- Option C - Compromising FAA safety standards by reducing the RSA to less than 1000' on one or both ends.

In choosing Option C, the EIS/EIR is inadequate in addressing this issue. The examples sited for aircraft incidents and how they relate to runway centerline and reduced RSA are ludicrous. The citing can not be accepted as a tacit FAA approval or likely approval of Option C.

The proponent brought forward the 5000' active runway length in favor of 4500', to accommodate a larger jet fleet using the 32 end for landings. There is insufficient land area to build any more than a 4000' to 4500' runway.

I ask that you find the EIS/EIR inadequate regarding this critical issue with the following remedies:

- At minimum, the proponent must have a final acceptance document, with impact analysis, from the FAA regarding a below minimum RSA waiver, under Option C.
- Absent the FAA approval, the proponent revise the EIS/EIR to demonstrate how the 5000' runway would be accommodated . That modified EIS/EIR, with impacts analysis due to harbor intrusion to the east or land acquisition to the west, be evaluated on its merits.
- The proponent modify the EIS/EIR proposal Alternatives 1 and Preferred Alternative 1A and substitute the build with a 4000' to 4500' runway. That modified EIS/EIR, then must be evaluated as to whether it meets the stated goal of reduced delays.

Regional Agreements

The sponsor has stated; No agreements are in place which would bind either the airport operators or the carriers to induce or encourage operations to and from Worcester, Providence, Manchester or Hanscom. Any shift in passenger demand would occur over a long time period, and would be largely dependent upon air carrier decisions relative to service levels, destinations and fares. In the Preferred Alternative 1A and Alternative 1, the sponsor is highly dependent upon operations moving from Logan to these other airports. The sponsor argues, reduced delays at Logan will encourage travel from the regional airports is specious. Only the No-Action Alternative and Alternative 3 (no-build), as a result of the forecast increased delays, will induce an operation shift to the regional airports. 225.5

The regional passenger load reduction conclusions in Preferred Alternative 1A and Alternative 1, should not be considered a factor in meeting the short term or long term problem root cause solution. With no agreements in place and a build scenario, passenger volume will be induced at Logan. Carriers are not motivated to create regional markets. The predictor of this is 1993, when operation capacity overload was experienced due to over-scheduling. Carriers will maximize operations in the active market up to the operation volume capacity and beyond.

The sponsor indicates demand imposed by airline flight schedules as a potential problem tertiary root cause, and infers it is a situation beyond its control. " If operating conditions change and the environment at Logan becomes more like 1993, then over scheduling may once again become a significant cause of delay at Logan....".

EIS/EIR Scope

Consistently, through the ENF and the EIS/EIR, the sponsor has ignored the mandate for a broad scope EIS/EIR. The sponsor prefers to interpret the Federal and State scoping documents to limit the EIS/EIR scope to only air side improvements. Further improvements to Logan will induce more land side traffic volume and overload the capacity of and already fragile land transportation system.

Even supporters of the Preferred Alternative point to the land side delays as a detractor to using Logan.

The sponsor's Preferred Alternative 1A expansion to reduce delays and provide for more operations, encourages and induces more passenger visits and thereby more land side impacts.

The demand for air travel to, from and through Logan is a function of economic trade forces beyond the sponsor's control.

The sponsor has very limited control over aircraft operations. No restrictions may arbitrarily be put in place to limit who uses the airport and when. Those limitations are beyond the control of the sponsor. The desired effect of reduced delays, if it is accomplished, will be manifested in more induced operations and thereby more land side impact.

There has been an increased number of public parking spaces on site and the relocation of employee parking to Chelsea. This effort is not a mitigation of air quality issues, it merely relocates the emissions to a location outside the scope of the EIR. No EIS/EIR has been done to measure the effects at the off-airport locations.

The EIS/EIR should be judged inadequate until the scope is expanded to consider all concurrent land side projects, and the impacts on the surrounding community. 225.6

Second Airport

This point is not a direct argument to a specific impact within the EIS/EIR, but it addresses the overall limited scope theme the sponsor has chosen. The argument demonstrates the EIS/EIR inadequacy, in not addressing the problem root cause and limiting the EIS/EIR scope.

The long range solution to the delay problem root cause (coastal airfield with insufficient land space) is a second major airport. The proponent, in response to numerous comments to the ENF, contends:

"A second major airport is not a solution to the current delay and congestion at Logan...."

While that response may be accurate, the key word to consider is "current". The proponent implies the Preferred Alternative solution is a short term, stop gap measure, and irresponsibly ignores the regional transportation problem, both airside and land side, that in fact would be solved by a second major airport. 225.7

The statewide evaluation of appropriate airport sites conducted in the early 1990's evaluated approximately 188 potential sites, from which all but one site were found to be inadequate for a second major airport. The one site evaluated as having all the attributes, was Fort Devens in Ayer MA. The proponent has stalled and delayed the long overdue decision to support a second major airport and in the process have lost at least 7 years of development and construction time. The proponent has been irresponsible by allowing the Logan problem to grow to crisis stage, and use its inaction and the crisis as a backdrop to argue for a poorly planned, hastily conceived, short sighted, inadequate, short term solution to an immense problem.

Just as the proponent contends doing an analysis is not a guarantee that action will be taken on a proposal, an analysis of Fort Devens as a site for a second major airport should be done. It is understood that legislative action is required to acquire that or any site but it should not be a barrier to the analysis. The proponent may already have conducted such an analysis, but chose to take the path of least resistance, rather than solve the problem, in pursuing the second airport.

It is incumbent upon the sponsor, under its charter, not encourage operations outside of eastern Massachusetts, along with the growth and revenue, but actively pursue the second Massachusetts airport long term solution. The paradigm, 15 years of planning is too long to wait therefore do not begin the process, is easily overcome by focusing all the Authority's resources to such a plan. There are many knowledigble activists in Boston to aid that effort. 225.8

Hanscom Field is classified by the FAA as a reliever airport, but provides merely general aviation relief. In 1997 Hanscom handled 188,000 operations, 85% of which (160,000) were single engine piston aircraft.

Massport has not demonstrated vision and planning in its utilization of Hanscom to relieve Logan's delay problems. It is beyond its control, ability or desire to develop passenger service at Hanscom. Currently, there are no carriers providing scheduled passenger service to or from Hanscom, regardless of this fact, the sponsor uses Hanscom as a regional capacity reliever in both Preferred Alternative 1A and Alternative 1.

Hanscom AFB even at 1000 acres is sizable. As a property owned by Massport, the eminent domain process is available to expand that land area and truly share airport impacts at a different socio-economic level. However it chooses the more expedient course through Logan expansion, rather than confront the NIMBY opposition at Hanscom or Ft. Devens.

Ceiling Reductions

The proponent again demonstrates irresponsibility bringing forward reduced minima within this EIS/EIR. The DH and DA reductions are in direct conflict with agreements in place with the FAA and the reduction proposal seeks to disregard the process to change them. 225.9

Runways 22L and 27 both use a Category I instrument landing system ("ILS"), with specific ceiling minimums, DH and DA for approach and landing. Due to the unique characteristics of Logan and its proximity to residential areas, the FAA chose, demonstrating good judgment, to retain the existing approach minimums.

Centerfield Taxiway

The taxiway stated intention is to alleviate congestion by moving aircraft to and from the gates more efficiently. It would clearly accomplish that goal by allowing multiple simultaneous runway 4/22 crossings. However due to the close proximity of residents to the northeast runway ends, the prevailing winds when these runways are in use will carry the increased V.O.C., Co, NOx emissions into residential areas, when aircraft are queued on the taxiway. This taxiway, if allowed to queue the maximum aircraft as space permits, would result in more aircraft using the taxiway under power, rather than being at a gate, not under power, waiting to queue.. Clearly, the end result will be cumulatively more noise, NOx and Co emmisions, from those queued aircraft operating under low pressure low power conditions.

What is the limit of planes allowed to queue on this taxiway? The center taxiway without limitations, impacts the environmental air quality in the surrounding residential areas. 225.10

Public Health Assessment

The costs related to early deaths and adverse physical conditions to people living in close proximity to the high noise contours has not been effectively measured. Logan's 225.11

noise effects have been present without mitigation from the time the facility transitioned from propeller and prop-jet aircraft through to stage I & II aircraft.

There is a long range, approximately 10 year, clinical study which began in the 1970's conducted by Dr. Taylor of the East Boston Health Center. The study focused on hyper-tension within the community and causative factors.

The scope of the EIR should be expanded to correlate the results of that study within the context of the earliest noise contours. Additionally, the INM should be used to chronologically reverse model NEM contours using data from specific stage I and stage II aircraft, operational data, the most current ground roll adjustments and other INM inputs which were valid during the period of the hyper-tension study. The data from the hypertension study should be correlated geographically and then overlaid with the modeled contours from that period. It is assumed, and an actual study will reveal, that the incidence of hyper-tension, hearing loss, interrupted sleep patterns, stress, and the inherent ill effects, will geographically coincide with the highest level modeled NEM contours. The evaluation should, at minimum document the incidence of hyper-tension within the 75, 70, 65 and 60 Ldn contours. 225.12

The results will provide data to evaluate the cost of premature death, ill-health, medical treatment, psychological and social dysfunction.

Noise

The noise level from both over flights and especially ground noise from takeoffs is insidious, continuos and far exceeds noise levels applicable under RSIP. The noise levels are so severe they are manifested in both measurable audible levels far exceeding both the RSIP time weighted average threshold and especially the short term excursion limit, and as physical resonant frequency modes matching the structural modes of my home as well as other homes built under the same codes. The noise level and resulting resonant vibration during takeoffs from runway 22 are so high that they fall into the unsafe category for very short time periods under federal OSHA standards for safe working environments, and by inference are unsafe for residential environments. 225.13

In classifying jet operations, Massport classifies Stage 2 aircraft fitted with hush kits as Stage 3 aircraft. Stage 3 aircraft exhibit similar noise and pressure in the <100 hz and "C" weighted ranges as Stage 2 aircraft. Any measurements and modeling, for low frequency noise, should assume operations as being Stage 2 aircraft. The 1994/1995 GEIR noise analysis uses only Stage 3 noise data for these fitted aircraft. 225.14

Mitigation is nearly impossible for these low frequencies, and results in resonance effects inducing vibration in the majority of residences, located in the 65 to 75 Ldn contours, built with light weight wall structures.

The noise levels from aircraft is but one intrusion affecting the quality of life in the surrounding communities. There are additional major inconveniences resulting from ground traffic on local streets and highways due to airport related loads, during peak travel periods. Not readily recognized but more intrusive, is commercial vehicular traffic inherently more noise producing than passenger traffic, serving airport support businesses, which occurs during distinctly off peak hours during both the early morning and late evening.

Support

The Preferred Alternative 1A supporters are on record as having a special interest related to their business or their personal wealth. Indeed, they do have a voice in the process which should be heard, but their disregard for environmental impacts and the evaluation bias based strictly on money, must be weighed against the human impacts. As Secretary, I ask that you give greater weight to factors unrelated to business costs. Answer, how much is a life worth? Then answer, how much is a life worth if it were yours or your family? There should not be a distinction. The direct, indirect and cumulative environmental impacts imparted through Logan operations, cost lives which must not be sacrificed for business growth.

The injunction

The sponsor has expended money performing an ENF and an EIS/EIR for approval of a plan which is precluded by a court injunction in place since 1974, prohibiting further airport expansion through added runways. The EIS/EIR adequacy is a pre-requisite to arguing for its removal.

The injunction was fought for an won during period in which, political will was the primary vehicle for change. The abutters and the community did not have the current Federal and State Code of Regulations nor the teeth of the present Federal and State Environmental Protection Agencies to provide opposition support. The fact that the injunction has stood the test of time and has been respected by political administrations for nearly a generation, is a testament in itself to the conviction and the wisdom of both political party state leaders. They realized that expansion at Logan was not, is not and will not, solve the root cause of the eastern Massachusetts transportation problems.

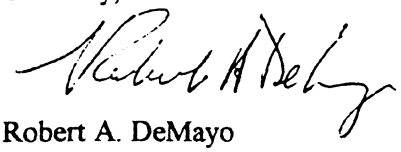
The sponsor and its administration demonstrates lack of responsibility and poor judgment, putting forth a stop gap solution to a major problem. It also demonstrates a lack of respect for the community. Yet the sponsor has dragged its feet in its application of

mitigation through sound proofing and other means while it is hurtling headlong into a short sighted, ill-conceived expansion plan.

Some of these are emotional type issues, but you must consider what is the correct decision in terms of human factors as well. To the decision makers, it is just a job or a political appointment from which they will succeed to other noble causes. Left in the wake of poor decisions are thousands of people, whose quality of life are irreparably damaged. Step into the shoes of a member of the largely immigrant population, who have inherent socio-economic problems. Walk the walk of the dis-enfranchised, to whom life style choices are limited and are in direct proportion to their near minimum wage, and deciding where to live is a distant option never considered.

These are among the many reasons the EIS/EIR should be found to be in adequate as it is presently composed. A finding of inadequacy will force the debate to consider a eastern Massachusetts transportation long range solution.

Sincerely,



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Letter 225
Robert A. DeMayo
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
225.1	Regional Transportation	Regional Airports	Within the EIS/EIR limited scope context, the problem root causes are: #1 As a coastal airport, wind and weather are the most significant factors contributing to delays at Logan. #2 Peak period demand due to fleet mix and a high level of regional carrier flights operated with smaller aircraft. #3 Demand imposed by airline flight schedules. ...the proponent's Preferred Alternative 1A package does not eliminate the problem root cause but merely addresses the effects of root cause #1 and #3, both of which are outside the proponent's sphere of control. In not seeking a root cause solution, at a different, larger and appropriate geographical setting, thereby ELIMINATING root cause #1 and #3, the proposals will result in a short-term reduction of effects. ...The Preferred Alternative 1A, short-term remedy goal to reduce delays, will not solve the problem root cause and eliminate delays. ...	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size. Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields. Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
225.2	Analysis Assumptions/ Methodologies	Base Year	... The data baseline years used for data classes ... establishing the base for comparison and projections differ. ...	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative.
225.3	Delay	Model	... As reported in the 1994/1995 GEIR, the modeling constants and algorithms used to compose the NEM contours were flawed, but it is that very data which was used at that time to make noise contour projections into 1999, and eliminate homes for mitigation eligibility. ... The DELAYSIM model must be proven over a considerably longer time period and the model compared to empirical data, before the sponsor is allowed to rely on it to define the problem and be accepted as proof. ... The seat departure metric is only an accurate measurement, when supported by data indicating the number of seat departures with passengers in them. Without that data, an accurate measurement of passenger delays and cost cannot be made. ...	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32,. reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport. All models are recognized by the FAA and have been used in prior studies funded by the FAA. The forecasts developed for the future scenarios included estimates of passengers, seats, load factors, and operations, so estimates of the delays to passengers and their associated costs consider the number of seat departures with passengers (the load factor).

Code	Topic 1	Topic 2	Comment	Response
225.4	Alternatives	Runway 14/32	There is insufficient land area west to east along the 14/32 heading to construct a 5,000-foot runway. The 5,000-foot active runway length plus the FAA standard 1,000-foot runway safety area ("RSA") on each end exceeds the undeveloped land area length. To build, it would impose more impacts than addressed in the EIS/EIR.	Runway 14/32 would not impact land areas off of the existing airfield. A Determination of Acceptance of the Level of Safety will be sought from the FAA for the two small, triangular corners of the Runway 32 end RSA and the portion of the RSA south of the runway, which lie over water.
225.5	Regional Transportation	Regional Airports	... The sponsor argues, reduced delays at Logan will encourage travel from the regional airports is specious. Only the No-Action Alternative and Alternative 3 (no-build), as a result of the forecast increased delays, will induce an operation shift to the regional airports. ...With no agreement in place and a build scenario, passenger volume will be induced at Logan. Carriers are not motivated to create regional markets.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
225.6	Environmental Review Process	FAA/NEPA, MEPA	The EIS/EIR should be judged inadequate until the scope is expanded to consider all concurrent land side projects, and the impacts on the surrounding community [including the potential for increased traffic and air quality impacts in areas currently outside the sponsor's self-determined study area].	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The Airside Project has independent utility from existing and proposed landside projects at Logan Airport. The proposed Airside Projects at Logan Airport are designed to improve airport efficiency and better accommodate current and future levels of demand. Long-term growth in air travel demand is a recognized worldwide phenomenon that results from economic and demographic growth. Massport has no control over the underlying determinants of aviation growth. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway will not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year. The runway does not induce or stimulate new traffic that would otherwise not occur at Logan Airport. Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent and its subsequent Environmental Data Reports (Annual Updates). No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Code	Topic 1	Topic 2	Comment	Response
225.7	Regional Transportation	Regional Airports	....The proponent implies the Preferred Alternative solution is a short-term, stop gap measure, and irresponsibly ignores the regional transportation problem, both airside and land side, that in fact would be solved by a second major airport.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years.
225.8	Regional Transportation	Regional Airports	It is incumbent upon the sponsor, under its charter, not encourage operations outside of eastern Massachusetts, along with the growth and revenue, but actively pursue the second Massachusetts airport long term solution.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.
225.9	Alternatives	Reduced Approach Minima	The proponent again demonstrates irresponsibility bringing forward reduced minima within this EIS/EIR. The DH and DA reductions are in direct conflict with agreements in place with the FAA and the reduction proposal seeks to disregard the process to change them.	The agreement between the City of Boston, the FAA and Massport stipulates that any modification of the existing minimums requires completion of an EIS/EIR, even though the setting of minimums is otherwise categorically excluded from the EIS/EIR process. The reduced minimums will, in fact, enhance safety by providing precision guidance to a point closer to touchdown and reducing reliance on Runway 4R under poor weather conditions, when winds may favor use of an alternate runway.
225.10	Alternatives	Taxiway Improvements	[The proposed taxiway would increase pollutants being blown into residential areas.] What is the limit of planes allowed to queue on this taxiway? The center taxiway, without limitations, impacts the environmental air quality in the surrounding residential areas.	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Code	Topic 1	Topic 2	Comment	Response
225.11	Public Health	Effects	The costs related to early deaths and adverse physical conditions to people living in close proximity to the high noise contours has not been effectively measured. ...	Noise was identified as the only off-airport impact associated with the Preferred Alternative (refer to Section 6.2 of the Supplemental DEIS/FEIR for a discussion on noise impacts). Environmental and health studies relating to the City of Chelsea were reviewed to assess the potential for other cumulative or multiple adverse exposures, since the increase in population within the 65 dB DNL contour associated with the Preferred Alternative is primarily within this community. A review of issues within Chelsea indicated a concern regarding toxic discharges associated with industrial facilities, truck emissions, and contamination of Chelsea Creek. There was nothing to suggest that these issues increased the noise impacts associated with the Preferred Alternative. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. Refer to Section 6.8 of the Supplemental DEIS/FEIR for additional information.
225.12	Environmental Review Process	MEPA	The scope of the EIR should be expanded to correlate the results of [the "Taylor study of the East Boston Health Center"] study within the context of the earliest noise contours. ...	The Scope of Work for the Supplemental DEIS/ FEIR was defined by the FAA and MEPA following an initial scoping process. A subsequent set of tasks was developed after a follow-up review of the Draft document by the Supplemental DEIS Panel empowered by the FAA to add supplemental information to the Supplemental DEIS. Neither scope included mention of the "Taylor Study".
225.13	Noise	Impacts	...The noise level and resulting resonant vibration during takeoffs from runway 22 are so high that they fall into the unsafe category for very short time periods under federal OSHA standards for safe working environments, and by inference are unsafe for residential environments.	OSHA standards are not applicable to community noise. Nevertheless, the baseline standard for workers is a maximum exposure of 90 dBA *continuously* for 8 hours per day, with higher levels up to 120 dBA permitted over shorter durations. As indicated in the tables of data listing Times-Above-Threshold sound levels (e.g. Table E-4 of the Supplemental DEIS/FEIR showing results for the High Regional Jet scenarios), the highest duration exposure to levels of 85 dBA (5 dB more conservative than OSHA) occur at Site 4 in Winthrop where the total duration of the exposure over a full 24-hour period is only 14.4 minutes. Exposure above 90 dBA OSHA standard is obviously less than that and is well below the allowable 8 continuous hours. The noise levels occurring in even the closest community do not come close to exceeding OSHA standards.
225.14	Noise	Impacts	Mitigation is nearly impossible for these low frequencies [<100 Hz), and results in resonance effects inducing vibration in the majority of residences, located in the 65 to 75 Ldn contours, built with lightweight wall structures.	Neither Massport nor the FAA is aware of any evidence to support the contention that structural damage has ever occurred due to overflights. Noise-induced vibration levels from aircraft, though they may cause rattling, are normally less than footfalls produced by people walking through their own homes.

LETTER 226

Mary Dreitlein
408 Summer Street
East Boston, MA 02128

March 3, 1999

Secretary Robert Durand
c/o MEPA
100 Cambridge Street
Boston, MA 02202

Dear Secretary Durand:

I am writing to express my concerns over Massport's proposed runway 14/32. Logan cannot handle the air traffic growth of the 21st Century. The present noise inside the city has rendered many areas unfit to live in. Logan is calling this new runway a "delay reduction program", call it what you may, it is an expansion of Logan Airport, an expansion of the noise pollution and air pollution, not just from the planes, but from the increased auto traffic, bound to be moving inefficiently to and from Logan.

Logan is here in East Boston, it will not go away, it can serve the city well, but to do so it must reduce it's size. It is beyond capacity now! Another airport is needed. The dollars already spent by Peter Blute to promote this plan could have and should have been spent developing a rapid rail system between Hanscom and Boston. Much of what makes Boston a wonderful city to visit as well as to live in is being damaged by Logan.

As one that lives close to the airport, not on a flight path, I can tell you that there is still constant noise. If "Massport windows" were installed in every home in Boston that may provide some relief on cold winter days. What of the beautiful spring, summer, and fall days. Are we to sit in a tightly closed home with no fresh air? Is that what life in Boston is to become? 226.1

Peter Blute says the increased planes will come with or without the new runway. What would he do if he were the CFO of a hotel? Put beds in the halls, when that was full, tap on the doors of sleeping gusts to tell them they must add a cot or two in their room. Capacity is capacity! If the airport is full, if the "NO VACANCY" sign is on the plans will go elsewhere. Hanscom and T.F. Green are reasonable alternatives. Boston cannot take any increase in air traffic, we must work to reduce the size of Logan so it can serve Boston as it should!

This is a difficult problem at best. The points I have made are but a few, to sight all of the reasons why Logan should reduce it's volume would take more time than is reasonable. Please consider what has been said here. I am only one of the million people that live in and love Boston. Protect the environment of Boston.

Sincerely,

Mary Dreitlein

Ms. Mary Dreitlein

Letter 226
Mary Dreitlein
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
226.1	Regional Transportation	Regional Airports	[Logan is already beyond its operational capacity. Massport should explore Hanscom as an alternative to further expansion at Logan.]	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.

LETTER 227

Mary Dreitlein
408 Sumner Street
East Boston, MA 02128

Mr. Robert Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

April 11, 1999

Dear Mr. Durand:

Protecting the environment is perhaps the most important job anyone can have. Your organization will soon face a major decision which will effect not just our generation, but many generation in the future. Massport's desire to expand Logan Airport is wrong. It will bring increased pollution to our city. It is time to force Massport to find alternative solutions.

I have attended almost all of the public meetings regarding runway 14/32, and although it has been packaged with the title of "Delay Reduction" even Massport officials admit that it is an expansion of Logan. Those that support this expansion do so in the name of money. They do not speak of the environment, of the increased noise and air pollution. How sad it is to hear Massport even speak of having to move birds to Cape Cod because of the increased noise pollution they will cause, and say it will help the economy.

It is all a balance. Being in the city has it's advantages and it's disadvantages. East Boston has accepted Logan. We have had to keep a constant watch on them in order to maintain an acceptable quality of life. Each year the problem has increased. Having an airport right in the heart of the city is an advantage to everyone. If Logan were down sized to where it was ten years ago everyone would reap benefits. The plans would land on time, and the passengers would be able to get from Logan to their final destination, which I may add is usually the most difficult part of anyone's trip. 227.1

Enough has already been pointed out regarding Logan's Environmental Impact Study to be able to say for sure that it is a flawed document. It is a fact that outdated figures were used. It is a fact that the FAA modeling was not adhered to. It is a fact that there has been a lack of alternative studies. It is also a fact that Massport will not reveal it's ten or fifteen year plan. 227.2

When Massport officials speak of the rapid rail system to T. F. Green Airport in Rhode Island, they do not mention the proposed fair for this rail service is twenty-four dollars one way. Nor do the discuss the proposed schedule.

There is no reason why Logan can not have a curfew. Other inner city airports do. There is no reason why Hanscom can not take the small jets, and prop plains, freight should not be going in and out of Logan. Logan can best serve Boston and the surrounding communities by moving people not freight. 227.3

Several years ago I spent two years in South Dakota working with the Lakota Sioux's. I would like to share some wisdom I learned from the true natives of our country. "When we make a decision we are responsible for seven generations." The effects of your decision will be either the pains or pleasures of the generations to come. Protect our city, protect our air, protect the generations yet to come as well as those of us that are here now. Clean air is more important than money. Please make your decision carefully. It is your job to protect the environment.

Sincerely,

Mary Dreitlein

Letter 227
Mary Dreitlein
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
227.1	Purpose and Need	Airfield Capacity	[Logan is operating beyond its capacity and should be downsized.]	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
227.2	Environmental Review Process	FAA/NEPA, MEPA	[The EIS/EIR used outdated figures to describe existing conditions and project future use.]	In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year.

Code	Topic 1	Topic 2	Comment	Response
227.3	Alternatives	Operational Restrictions	[Logan should have a curfew as other airports do. Freight and small planes should use Hanscom.]	A curfew is considered an airport access restriction. According to the "Noise Act", airport access restrictions are subject to FAA review and require completion of a FAR Part 161 Study. Since the Noise Act was enacted, the FAA has not approved any Part 161 access restrictions proposed by airport operators. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. In fact, 50 percent of passengers on Logan Airport commuter flights connect to other Logan Airport flights. The Secretary of Environmental Affairs' Certificate on the ENF directed Massport to "discuss [these] off-airport alternatives and analyze the potential each has to divert passengers and/or cargo from … Logan Airport." Cargo operations were not specifically analyzed because they account for only two percent of aircraft activity at Logan Airport and since most all cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport.

LETTER 228

Att: Robert Durand

I'm opposed to runway 14-32. I have been a resident of East B. for 64 years & I ha seen also my husband airport expansion & he's 7.

"Enough is Enough"

228.1 Please try to help find an alternate solution to this prob Any source of help would b greatly appreciated to all a residents of the surrounding areas.

Sincerely

Charles & Anna Du

(Duluth)

Letter 228
Charles and Ann Dulcetta
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
228.1	Alternatives	Other Non-Construction Alternatives	[Please try to find an alternative solution to an expansion of Logan.]	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

LETTER 229

Bcc: Arthur Pugsley@MEPA@EOEA
From: <RFLEMING@WESLEY.IT.EMERSON.EDU>
Subject: Runway 14/32 environment impact report
Date: Tuesday, April 20, 1999 13:55:44 EDT
Reply to:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

Dear Mr. Pugsley,

I am writing as part of the public comment on the issue of the environmental impact report filed by Massport. I believe that this report is inadequate and should be rejected. The report does not sufficiently address the impact of the new runway on the resident of the surrounding communities. Specifically, it does not address the health effects that increased flights will have on the residents of Eagle Hill neighborhood in East Boston. It also does not address the effect of these increased flights on the real estate value of property in this neighborhood. Finally, I believe that the rationale for building a new runway is misleading at worst, of flawed at best. Massport is using skewed figures....the chose 1993 a base year becuase it had the largest number of delays, and they down play the fact that delays have decreased since. Also, they have devised their own formula for calculating the number of delays, instead of using the formula established and used by the FAA. Finally, the new runway is only a stop gap measure iimpact on reducing delays will disappear in less than 10 years.

229.1

229.2

229.3

Again, I urge you to reject this report as inadequate and send Massport back to the drawing board to produce a plan for delay reduction based on a true regional airport system, landings slots and peak hour pricing.

Sincerely,

Robert Fleming
23 Princeton St
E. Boston MA 02128
rfleming@emerson.edu

Letter 229
Robert Fleming
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
229.1	Public Health	Effects	... The [EIS/EIR] does not sufficiently address the impact of the new runway on the resident of the surrounding communities. Specifically, it does not address the health effects that increased flights will have on the residents [and] the effect of these increased flights on the real estate value of property in this neighborhood. ...	Comment noted.
229.2	Delay	Model	[Massport invented their own method for calculating impacts rather than using the FAA-approved method.]	All models are recognized by the FAA and have been used in prior studies funded by the FAA.
229.3	Alternatives	Runway 14/32	[The new runway is a stop gap measure at best and will only reduce delays for 10 years.]	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

22 April 1999

LETTER 230

Mr. Authur Pugsley - EOEA No. 10458
Massachusetts Environmental Policy Act
Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

John C. Silva, Manager
Environmental Programs
Airports Division, ANE - 600
New England Region
12 New England Executive Park
Burlington, MA 01803

Re: Massachusetts Port Authority (MPA)
Logan Airside Improvements Planning Project ("Project")
Boston-Logan International Airport
Boston/Winthrop

Gentlemen:

I strongly request that the Massachusetts Secretary of Environmental Affairs, Secretary Durand, (the Secretary) and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed, that the document be found "INADEQUATE" and that a new Draft document be required. Each of the major three parts; the proposed runway 14/32, the centerfield taxiway between the 4/22 runways and, lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed. In addition, the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to 2020. 230.1

The proposed project is clearly major and complicated, having involving both air side and ground side implications. It is but a segment of a long term airport expansion plan.

I also want to go on record concerning the conflict of interest that exists for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. I request that the EPA take the lead role for this decision because of the conflict. 230.2

A comprehensive northeast regional transportation plan, including all forms of transportation, should be developed and put in place before any airport expansion is allowed. This should be accomplished with the cooperation of all interested parties, including, but not limited to, residents, businesses, and organizations. It should also analyze all impacts, including airside and landside at airports, track 230.3

adjacent properties for rail, any new planned or proposed marine ferry development or road development. It should explore all environmental impacts on wetlands, waterways, flora, fauna, and human, including health studies as well as air and noise impacts. All impacts in the Northeast must be addressed and a plan developed to determined the least invasive environmental impacts for developments needed to meet not just Massachusetts requirements but the entire North East the region's requirements for future long term growth. This Airside Improvement Study is only one element of the Project and should not be permitted until the landside and regional impacts are included. Segmental planning cannot and should not be tolerated.

The MPA makes the claim in their transmission letter of February 19, 1999 that, "...the lapse of time between the publication of the ENF and the publication of notice availability of this Draft EIR **has no adverse environmental consequences..."** This is blatantly untrue. Weather conditions alone have dramatically changed over the last five years because of the El Nino and La Nina effects. FAA delay data (DELAYSIM) shows that Logan's delay situation has improved since 1993 and is essentially in equilibrium. The entire analysis in the document needs to be updated. 230.4

I urge the Secretary and FAA to require the MPA to change the base year for planning for the project to calendar year 1998, to revise all presentations in the DEIS/DEIR, including the appendices thereto to reflect the changes and to extend the planning period to 2020 from 2010 with concomitant revisions in projected levels of activity and impact and to require that the DEIS/DEIR be republished.

Massport has not met the requirements of the National Environmental Policy Act (40 CFR Part 1502 Environmental Impact Statements) that requires:

1. the DEIS/DEIR to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated."[1]
   I would expect the DEIS/DEIR alternatives to include, but not be limited to, the following:
   - a: Development of a new airport,
   - b: Consideration of Implementing a High-Density Rule (Slots)
   - c: Consider Implementation of FAR Part 161 regulations to provide aircraft noise and access restrictions for Stage 2 and Stage 3 operations at Logan to provide noise relief to affected communities, and.
   - d: A thorough regional transportation plan, including rail, and all environmental impacts.

   230.5

2. regarding methodology and scientific accuracy, that, "...They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and the sources relied upon for the conclusions in the statement."[2]
   The DEIS/DEIR does not indicate the detailed methodology used to develop the levels of passenger forecasts presented

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[1] Council on Environmental Quality, 40 CFR Part 1502.14(a)

[2] Council on Environmental Quality, 40 CFR Part 1502.24

3. the environmental consequences regarding the following, "The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. It shall include discussions of: ...(g) Urban quality, historic and cultural resources, and the design of the built environment..."[3]

The DEIS/DEIR discusses the preferred alternatives effect on historic districts but does not comment on the urban quality, or the design of the built environment. Although Peak Hour Pricing in Alternate 1 clearly shows to be the most beneficial for delays and thus, noise reduction, the MPA continues not to consider this alternative except as a future option.

4. "An agency shall commence preparation of an environmental impact statement as close as possible to the time the agency is developing or is presented with a proposal (PP 1508.23) so that preparation can be completed in time for the final statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made." PP 1508.23 describes a proposal as the following: " 'Proposal' exists at the stage in the development of an action when an agency subject to the Act has a goal, is actively preparing to make a decision on one or more alternative means of accomplishing that goal, and the effect can be meaningfully evaluated."[4]

230.5 (cont.)

The ENF Certificate was issued November 22, 1995. The MPA and the FAA have not complied with the required timing of the DEIS/DEIR document. Furthermore, the analysis uses baseline data of 1993 for a document submitted in 1999. Weather, as well as aircraft and major regional infrastructure and developments have occurred to the point where a 1998 base year should be required.

A lack of "reasonable alternatives" exists because of the lack of assessment of either Hanscom (no mention of this Massachusetts Port Authority owned and operated airport in the document) or a second major airport or other, the possible diversion of cargo to another airport, and the documentation of history of PRAS and the problems of implementation. Further, I do not believe that the metropolitan Boston communities cannot continue to absorb the landside growth that would accompany the proposed airside growth at the airport.

I believe there should be a detailed analysis of the causes of the delays in the document which show aircraft mechanical problems, crew caused delay, and weather causes both at Logan and those caused by weather at other airports. The documented analysis is outdated and inadequate.

230.6

Lowering of the minimum on runway 22L is an additional concern, particularly, for the near in neighborhood of the Saratoga Street area of East Boston. Not only does this allow for an increased

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[3] Council on Environmental Quality, 40 CFR Part 1502.16

[4] Council on Environmental Quality, 40 CFR Part 1502.5

number of flights to land at Logan Airport, it also will spread the noise from the missed approach aircraft more horizontally thus impacting the neighborhood at the end of runway 22L with increased noise. Nor does it take into account the fact that the noise created by "spooling up" adversely affects neighborhoods far behind the aircraft. Further computer modeling does not present the real life occurrence in the surrounding communities and a more accurate analysis needs to be done. Communities constantly challenge the 65 db contour lines with regards to soundproofing and which does not include air conditioning, but does require that a residence meet current code specifications. This can cause financial stress on the already noise impacted residents. 230.7

The proposed Centerfield taxiway between runways 4L/22R and 4R/22L leads to further increased operations at Logan Airport and increased noise for the close in residents of Winthrop, Revere, and East Boston. This Taxiway will allow for additional queuing of aircraft very close to the surrounding neighborhoods and Constitution Beach, increased operations which will increase noise and further degrade of the quality of life for these residents. 230.8

Boston as an historic city will suffer the brunt of negative impacts from the proposed Project and will lose a quality of life that will never be recaptured! The additional number of flights, as well as increased traffic, that the Project would allow and encourage will do irreparable harm to the historic city of Boston and the greater metropolitan area. Development of high speed rail connections to other airports and the connection of Boston's two rail stations with the North/South Rail Link could help reduce these impacts. Convention locations and tourist destinations are not determined by the accessibility of an airport, rather they are determined by the quality of the experience of the location. No other major city around the world has had loss of tourists or conventions because of the convenience or inconvenience of the locality's airport. For the MPA to claim that the additional runway and centerfield taxiway are needed for the proposed new convention center is nothing more than an exaggeration. Time and again the MPA has claimed the need for the Project for the good of the city of Boston. With the proposed growth for Logan Airport needless adverse impacts will continue to grow over one of the most historic cities in the country Mayor Menio does not agree with the MPA hypothesis and neither do I. 230.9

Massport and the FAA state "when dealing with an existing airport (such as Logan Airport) within an urban setting (such as metropolitan Boston), any change in operating conditions aimed at more equitably distributing noise impacts (here, in accordance with the PRAS goals) may result in some increase in noise at specific historic areas while at the same time decreasing noise at other historic areas."[5] I believe that changes to Logan's operating conditions are not any more important than the cultural, historical and urban quality of life in the metropolitan Boston area.

The state listed endangered upland sandpiper habitat which would be disrupted by Centerfield Taxiway is not adequately addressed and there is no agreement with the Massachusetts Natural Heritage and Endangered Species Program although this has been a known area of concern since 1993. 230.10

A primary concern of mine is for the newly created Boston Harbor Islands National Recreation Area is the proposed construction of runway 14/32 and the resultant 75,000 proposed flights over the newly created Boston Harbor Recreational Area. This impact, one of environmental injustice, would

[5] DEIS/DEIR Section 8.6.1.2 "Assessment of Impact"

occur to mostly inner city residents who frequent the islands to get away from the noise and hubbub of city life. This is, and should continue to be, a time for them to experience nature, to hear and smell the harbor and study the skies. These sensory experiences would be severely impacted by the exorbitant number of flights over the harbor. I spend a great deal of time in on the harbor and on the islands. Aiplane noise is already an interruption, 75,000 planes a year will be intolerable.

Children from school groups, Boy and Girl Scout troops, Inner City Outings groups, and many other groups camp and explore the islands and enjoy learning experiences from the skies to the flora and fauna of the islands to the marine life and water quality. All of this will be degredated by the subject project. 230.11

The roar of the overhead planes will make a camping experience a horror rather than the wonderful enjoyment of sleeping under the stars. The fuel emissions and dumping from the airplane engines will contaminate the islands and the wildlife, not to mention the humans who will be much more exposed by being out of doors rather than at home or work.

In conclusion, I see this proposed Project as the first step in further major development at Logan airport There is also no guarantee of the unidirectional use of the proposed 14/32 runway, and I request that due to the the lack of future plans and analysis for the airport over the next 20 years that the current document be declared inadequate. In addition, the public has not been given fair consideration of the proposed Project. It is merely an interim solution to a much bigger and more complex problem which must be addressed before allowing the project to go forward. Further the projected growth of jet operations is horrifying. Other alternatives must be assessed. The possibility of the "New Large Aircraft" (NLAs)[6] has not been mentioned or addressed and is frightening for those of us who live in such close proximity to the airport.

Because none of the above mentioned impacts has been adequately addressed or, in some cases, even mentioned in the DEIS/DEIR, I am requesting that the Massachusestts Secretary of Environmental Affairs and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed, that the document be found "INADEQUATE" and that a new Draft document be required

Thank you for this opportunity to comment.

Very truly yours,

Ethan D. Hoag

cc: John Devillars, Director, Regional EPA
Robert Bartonowicy. Regional Director, FAA

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[6] FAA Report DOT/FAA/AR-97/26, "Impact of New Large Aircraft on Airport Design, "March 1998.

[1] Council on Environmental Quality, 40 CFR Part 1502.14(a)
[1] Council on Environmental Quality, 40 CFR Part 1502.24
[1] Council on Environmental Quality, 40 CFR Part 1502.16
[1] Council on Environmental Quality, 40 CFR Part 1502.5
[1] DEIS/DEIS Section 8.6.1.2 "Assessment of Impact"
[1] FAA Report DOT/FAA/AR-97/26, "Impact of New Large Aircraft on Airport Design, "March 1998.

Letter 230
Ethan D. Hoag
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
230.1	Environmental Review Process	MEPA	... Each of the major three parts; the proposed runway 14/32, the centerfield taxiway between the 4/22 runways, and lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed. In addition, the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to 2020.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.
230.2	Environmental Review Process	FAANEPA, MEPA	[There is a] conflict of interest that exists for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. ...	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
230.3	Regional Transportation	Regional Airports	A comprehensive northeast regional transportation plan, including all forms of transportation, should be developed and put in place before any airport expansion is allowed...[This plan would determine] the least invasive environmental impacts and developments needed to meet not just Massachusetts requirements but the entire North East the region's requirements for future long-term growth.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
230.4	Delay	Model	[The DELAYSIM study is outdated, uses incomplete data and needs to be redone, including using 1998 as the base year and project volume to the year 2020.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. The DELAYSIM model represents the most precise model developed to date for measuring delay at Logan Airport. FLAPS and DELAYSIM have been discussed in Section 4.4 of the Supplemental DEIS/FEIR. These models were originally developed for Logan Airport under Massport and FAA funding, and have been used in airport planning studies in the United States and internationally.

Code	Topic 1	Topic 2	Comment	Response
230.5	Environmental Review Process	FAA/NEPA	Massport has not met the requirements of the National Environmental Policy Act [by failing to]: ... "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." "...identify any methodologies used and shall make explicit reference by footnote to the scientific and the sources relied upon for the conclusions in the statement." ... "...include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, ..." [Prepare an environmental impact report in a timely manner.]	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons.
230.6	Delay	Methodology	...[T]here should be a detailed analysis of the causes of the delays in the document which show aircraft mechanical problems, crew caused delay, and weather causes both at Logan and those caused by weather at other airports. The documented analysis is outdated and inadequate.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
230.7	Environmental Justice	Impacts	[Lowering the minimum on Runway 22L will adversely effect the adjacent neighborhood. The report fails to consider noise created by aircraft "spooling up".]	The noise model *does* account for the noise at the start of takeoff roll as pilots advance their throttles and begin to accelerate down the runway for takeoff. It also includes a correction for higher than normal thrust observed during the final approach to land as well as a short application of thrust reversers after landing. All three factors effectively account for "spooling up".
230.8	Noise	Impacts	[The proposed taxiway will increase noise in Winthrop, Revere and East Boston.]	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today no would occur in the future if no action is taken. PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere.

Code	Topic 1	Topic 2	Comment	Response
230.9	Regional Transportation	Passenger Rail	[Boston will suffer the majority of impacts associated with this project. The increased number of flights will do irreparable harm to the city and the whole metropolitan area. High speed rail connections from Boston to regional airports is a better solution.]	Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
230.10	Ecosystems	Rare species	[Impacts to the endangered upland sandpiper habitat have not been adequately addressed.]	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport associated with construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat totaling approximately 150 acres at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far in excess of the 40± acres to be lost at Logan Airport. A Memorandum of Agreement has been signed between Massport and the Massachusetts Army Air National Guard for implementation of the program and long-term maintenance of the area as Upland Sandpiper habitat. Additional details of the Upland Sandpiper mitigation plan are presented in Section 8.5 of the Supplemental DEIS/FEIR.
230.11	Environmental Justice	Impacts	[The increased flights over the Boston Harbor National Recreation Area would mostly affect inner city residents.]	The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative. Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.

LETTER 231

22 April 1999

Mr. Authur Pugsley - EOEA No. 10458
Massachusetts Environmental Policy Act
Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

John C. Silva, Manager
Environmental Programs
Airports Division, ANE - 600
New England Region
12 New England Executive Park
Burlington, MA 01803

Re: Massachusetts Port Authority (MPA)
Logan Airside Improvements Planning Project ("Project")
Boston-Logan International Airport
Boston/Winthrop

Gentlemen:

I strongly request that the Massachusetts Secretary of Environmental Affairs, Secretary Durand, (the Secretary) and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed, that the document be found "INADEQUATE" and that a new Draft document be required. Each of the major three parts; the proposed runway 14/32, the centerfield taxiway between the 4/22 runways and, lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed. In addition, the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to 2020. 231.1

I also want to go on record concerning the conflict of interest that exists for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. I request that the EPA take the lead role for this decision because of the conflict. 231.2

A comprehensive northeast regional transportation plan, including all forms of transportation, should be developed and put in place before any airport expansion is allowed. This should be accomplished with the cooperation of all interested parties, including, but not limited to, residents, businesses, and organizations. It should also analyze all impacts, including airside and landside at airports, track right of ways and adjacent properties for rail, any new planned or proposed road development, and all environmental impacts on wetlands, waterways, flora, fauna, and human, including health studies as well as air and noise impacts. All impacts in the Northeast must be addressed and a plan developed to determined the least invasive environmental impacts for developments needed to meet the region's requirements for future long term growth. This Airside Improvement Study is only one element of the Project and should not be permitted until the landside and regional impacts are included. Segmental planning cannot and should not be tolerated. 231.3

The MPA makes the claim in their transmission letter of February 19, 1999 that, "...the lapse of time between the publication of the ENF and the publication of notice availability of this Draft EIR **has no adverse environmental consequences...**" This is blatantly untrue Weather conditions alone have dramatically changed over the last five years because of the El Nino and La Nina effects. FAA delay data (DELAYSIM) shows that Logan's delay situation has improved since 1993 and is essentially in equilibrium. The entire analysis in the document needs to be updated.

areas."[5] I believe that changes to Logan's operating conditions are not any more important than the cultural, historical and urban quality of life in the metropolitan Boston area.

The state listed endangered upland sandpiper habitat which would be disrupted by Centerfield Taxiway is not adequately addressed and there is no agreement with the Massachusetts Natural Heritage and Endangered Species Program although this has been a known area of concern since 1993. 231.4

A primary concern of mine is for the newly created Boston Harbor Islands National Recreation Area is the proposed construction of runway 14/32 and the resultant 75,000 proposed flights over the newly created Boston Harbor Recreational Area. This impact, one of environmental injustice, would occur to mostly inner city residents who frequent the islands to get away from the noise and hubbub of city life. This is, and should continue to be, a time for them to experience nature, to hear and smell the harbor and study the skies. These sensory experiences would be severely impacted by the exorbitant number of flights over the harbor. I spend a great deal of time in on the harbor and on the islands. Aiplane noise is already an interruption, 75,000 planes a year will be intolerable.

Children from school groups, Boy and Girl Scout troops, Inner City Outings groups, and many other groups camp and explore the islands and enjoy learning experiences from the skies to the flora and fauna of the islands to the marine life and water quality. All of this will be degredated by the subject project.

The roar of the overhead planes will make a camping experience a horror rather than the wonderful enjoyment of sleeping under the stars. The fuel emissions and dumping from the airplane engines will contaminate the islands and the wildlife, not to mention the humans who will be much more exposed by being out of doors rather than at home or work.

In conclusion, I see this proposed Project as the first step in further major development at Logan airport There is also no guarantee of the unidirectional use of the proposed 14/32 runway, and I request that due to the the lack of future plans and analysis for the airport over the next 20 years that the current document be declared inadequate. In addition, the public has not been given fair consideration of the proposed Project. It is merely an interim solution to a much bigger and more complex problem which must be addressed before allowing the project to go forward. Further the projected growth of jet operations is horrifying. Other alternatives must be assessed. The possibility of the "New Large Aircraft" (NLAs)[6] has not been mentioned or addressed and is frightening for those of us who live in such close proximity to the airport.

Because none of the above mentioned impacts has been adequately addressed or, in some cases, even mentioned in the DEIS/DEIR, I am requesting that the Massachusestts Secretary of Environmental Affairs and the FAA determine that significant planning deficiencies exist in the DEIS/DEIR of the Logan Airside Improvements Planning Project ("Project") that must be addressed, that the document be found "INADEQUATE" and that a new Draft document be required

Thank you for this opportunity to comment.

Very truly yours,

M. Blossom Hoag

M. Blossom Hoag

cc: John Devillars, Director, Regional EPA
Robert Bartonowicy, Regional Director, FAA

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[5] DEIS/DEIS Section 8.6.1.2 "Assessment of Impact"

[6] FAA Report DOT/FAA/AR-97/26, "Impact of New Large Aircraft on Airport Design, "March 1998.

Letter 231
M. Blossom Hoag
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
231.1	Environmental Review Process	MEPA	... Each of the major three parts; the proposed runway 14/32, the centerfield taxiway between the 4/22 runways, and lowering of the minimum have major environmental impacts for the greater Boston metropolitan area which have not been adequately addressed. In addition, the data and studies used are outdated and a 1998 base year should be required with the planning period extended from 2010 to 2020.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates. In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. Current traffic trends at Logan Airport, as described in the Supplemental DEIS/FEIR, indicate that the 37.5 million annual air passenger level may not be reached until 2015, and the 45 million passenger level may not occur until 2020 or beyond. The planning horizon considered in the airside analysis therefore extends well beyond 10 years. Chapter 2 of the Supplemental DEIS/FEIR addresses the integration of the Airside Project and regional transportation.
231.2	Environmental Review Process	FAA/NEPA	[There is a] conflict of interest that exists for the FAA to be a proponent for the Project and then also one of the decision makers in determining the Project's adequacy. ...	Comment noted.
231.3	Regional Transportation	Regional Airports	A comprehensive northeast regional transportation plan, including all forms of transportation, should be developed and put in place before any airport expansion is allowed. ...[This plan would determine] the least invasive environmental impacts for developments needed to meet the region's requirements for future long term growth.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
231.4	Ecosystems	Rare Species	The state listed endangered upland sandpiper habitat which would be disrupted by Centerfield Taxiway is not adequately addressed and there is no agreement with the Massachusetts Natural Heritage and Endangered Species Program although this has been a known area of concern since 1993.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport associated with construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat totaling approximately 150 acres at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far in excess of the 40± acres to be lost at Logan Airport. A Memorandum of Agreement has been signed between Massport and the Massachusetts Army Air National Guard for implementation of the program and long-term maintenance of the area as Upland Sandpiper habitat. Additional details of the Upland Sandpiper mitigation plan are presented in Section 8.5 of the Supplemental DEIS/FEIR.

LETTER 232

Mr. Robert Durand
c/o Mr. Arthur Pugsley
MEPA Unit
Executive office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202
EOA - 10458

East Boston and surrounding communities deserve environmental justice. Mr. Durand, as head of the Massachusetts Environmental Protection Agency, you must support our efforts to stop the expansion of Logan International Airport. Logan is already too crowded with ground and air transportation. This congested area can not be expected to accept the entire burden for Massachusetts air traffic.

Runway expansion as a solution to Logan's over crowding demonstrates the Massachusetts Port Authority's lack of a progressive agenda. Other major cities have built airports away from the city center and the cities have not suffered. Dulles, Newark, and LaGuardia have not diminished the people entering the New York or Washington area. The continued growth of Logan can not be the answer. A new solution is needed.

Massport's planned growth of Logan is short sighted and based on misrepresentations. Their studies show expansion as a solution. Their studies also show the following:

- As part of the Massport soot study, I was informed that I had brake dust from the cars at the Sumner Tunnel in my backyard. My home is more than 2 miles from the Sumner Tunnel but the rear of my house faces the 4L runway.
- In volume 1 page 2-9, Hanscom is not listed in the map of commercial airports. Massport does not consider this airport commercial, but it should be listed and included in the planning as 57.2% of flight demand is based outside the 128 and 495 area. Before any expansion of Logan is activated, Worcester airport should be brought up to it's full potential. 232.1
- The change in height decision, volume 3 page 4, was based on a graph that shows Saratoga Street as the last street before the water. There are two additional residential streets between Saratoga Street and the water. Bayswater Street and St. Andrew Road were not even considered. 232.2
- In the change in height decision graphs the water between Bayswater Street and the Airport is referred to as Boston Harbor. However, in Massport's Buffer Graph for the Bayswater Street area the above mentioned body of water is referred to as Boston Inner Harbor Tidal basin. Massport changes the name of the area to whatever will suit their objectives best.
- Charts and graphs used by the Massport never show surrounding homes or schools. Accurate information would demonstrate the closeness to thickly settled residential areas. It would also show the fact that if planes abort, the engine thrust would be aiming directly at homes. 232.3
- Massport claims pollution will be less with the centerfield taxiway, when all of the exhausts from planes using this taxiway will be aimed at the Bayswater Street homes. The main objective of the centerfield taxiway is to get the planes away from the gates. 232.4
- Regulations for the November Taxiway have been disregarded. A maximum of five large jet aircrafts are permitted on the taxiway at a time, however there are times when 10 to 15 large jets are lined up. Massports reply to complaints are "*we need to*". Regulations and social responsibility are forgotten for the pursuit of more air movement. 232.5

Massport will do anything to get 14-32 implemented. Currently the amount of money being spent to promote the new runway is absurd. I was shocked to hear Boston Edison is a contributor for the Massport

television advertisements. I did not realize public utilities could use money from rate payers to lobby for airport expansion. Local concerned citizens can not compete with the corporate media blitzes. The Massport is also asking employees to support the proposed expansion. Through intimidation many local Massport employees will support the runway.

As shown above the Massport has misrepresented information and disregarded policies. We can not believe 14-32 will be unidirectional or this is all the expansion needed. Money and growth are all Massport is interested in. We need the help of the Massachusetts Environmental Protection Agency to stop Massport. People living in the Boston area should have the same environmental rights as the rest of the state. We have the right to breathe fresh air, enjoy a summer day, be able to smell the flowers, not the fumes and hear birds sing, not airplanes taking off. This can not be accomplished without your help. Please stop Massport's plans for expansion.

Thank you for your help in this very important matter.

Sincerely,

Roberta T. Horn

Roberta T. Horn
65 St. Andrew Road
East Boston, Massachusetts 02128

Letter 232
Roberta T. Horn
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
232.1	Regional Transportation	Regional Airports	In volume I page 2-9, Hanscom is not listed in the map of commercial airports. Massport does not consider this airport commercial, but it should be listed and included in the planning as 57.2% of flight demand is based outside the 128 and 495 area.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
232.2	Alternatives	Reduced Approach Minima	The change in height decision, volume 3 page 4, was based on a graph that shows Saratoga Street as the last street before the water. There are two additional residential streets between Saratoga Street and the water. Bayswater Street and St. Andrew Road were not even considered.	Graphics have been updated, supplemented and corrected.
232.3	Noise	Studies	Charts and graphs used by the Massport never show surrounding homes or schools. Accurate information would demonstrate the closeness to thickly settled residential areas.	The noise exposure contours and basemaps presented in Chapters 5 and 6 all show residential areas. Additional blow-ups of specific areas depict cultural resources, historic districts, and parklands. Schools are shown in Appendix E of the Supplemental DEIS/FEIR on a basemap with school day noise exposure contours.

Code	Topic 1	Topic 2	Comment	Response
232.4	Alternatives	Taxiway Improvements	Massport claims pollution will be less with the centerfield taxiway, when all of the exhausts from planes using this taxiway will be aimed at the Bayswater Street homes.	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
232.5	Alternatives	Operational Restrictions	Regulations for the November Taxiway have been disregarded.	The Centerfield Taxiway will provide more flexibility for air traffic controllers to handle ground movements.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

Responses to Comments **Volume 8**

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/	Supplemental Draft Environmental Impact Statement/Final
FEIR	Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

LETTER 233

Susan M. Horn
65 St. Andrew Road
East Boston, MA 02128-1223

Mr. Arthur Pugsley
MEPA Unit
Executive Offices of Environmental Affairs
100 Cambridge Street 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

RE: File # EOA10458

I have lived at the above address all my life. In December, 1996 (at the age of 34) I was diagnosed with environmental asthma. Whilst I can not blame the cause of my asthma specifically on the airport, I can certainly attest that the heavy fumes coming from the airport greatly affects my condition particularly in the warmer months, when I am outside more often. I can not go outside without the need to hold my breath or the need to adjust my breathing because I have an attack. Living in the city I have been able to adapt my breathing in certain circumstances. However if added pollutants are added to the mix, I am concerned for my health when I am outside. I should not be a prisoner in my home due to Massport's inability to not plan ahead. I like living where I live and should not be penalized because Massport can't come up with a fair and reasonable plan that won't burden one specific area.

The MDC is enhancing Constitution Beach making it a nice place to bring the family in the hot summer months with the increase of airplanes people will not be able to enjoy this recreation without getting blasted with fumes from the taxiing airplanes. People bring children to the beach. The children not to mention the adults are currently breathing in these fumes which contain toxins. To have an increase of fumes for children and adults to breathe is not healthy. Massport seems to be very concerned about the wildlife to the tune of $250,000. The increase of planes can not be advantageous to the other birds and sea life that depends on the area to survive. They are willing to take care of the Upland Sandpiper with total disregard to the human inhabitants of the area. 233.1

The utter neglect at looking at this problem as regional and burdening one section of the area is unfair consideration. The entire region reaps the advantages of Logan but yet only a small section of the region is expected handle the burden of noise from flight traffic and land traffic; pollutants from both ground and air vehicles not to mention the speeding cars through the neighborhoods. These neighborhoods for the most part are not affluent and many are quite poor with a minority base. The skies over Logan are getting too crowded 233.2

and with the increased air traffic comes a greater risk of accidents. Remember as with a gallon of milk once it is filled to a gallon no more milk can be added with out spillage and this is what will happen to the affected areas. The more milk added after the gallon container has been filled the greater the mess. The skies around Logan Airport are that filled gallon of milk.

At what point is quality of life and human health and welfare worth less than someone's inconvenience? Life is full of delays: Last minute phone calls in the office: Break down in the tunnel or on the road: Personal happenings. The people who make the Greater Boston Area is what makes Boston a great place to visit by destroying the communities there will be a lost charm to the area.

The report that is currently before you omit several key factors: 1.) Regarding lowering of the minimum the last street on the reference chart is Saratoga Street. There are two streets after that St. Andrew Road and Bayswater Street. 2.) Massport fails to state what will happen when the delays that 14/32 is supposed to curtail increases surpassing the delay times that currently exists. They admit that in the two to three years after completion of this runway the delays will be the same or worse than today. 3.) Massport is also touting this as a unidirectional runway; however, Massport can not make this promise. This is a FAA decision and despite all these promises of being severely penalized if Massport does use it for other directions because of the FAA's ok then the penalties will be a mute point. 233.3 233.4

I went to both of the meetings held on April 7th and 8th. It is apparent that the business people who in all likelihood do not live in the affected areas are for the runway, centerfield taxiway and the lowering of the minimum. The residents of the affected area are astoundingly against the expansion in any form. It is the EPA's responsibility to protect the residents of this affected area from those who want to destroy our quality of life. Please do so.

I thank you for your time and consideration in this matter.

Sincerely,

Susan M. Horn

Letter 233
Susan M. Horn
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
233.1	Air Quality	Impacts	[The proposed expansion and resulting increase in toxic fumes will effect the health of people using Constitution Beach. Massport is willing to spend $250,000 to move sandpipers, what about the human inhabitants?]	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
233.2	Environmental Justice	Impacts	[A small section of the metropolitan area bears the brunt of the impacts from Logan while the whole area enjoys the benefits. Those bearing the burden are the poor and minorities.]	Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
233.3	Alternatives	Reduced Approach Minima	[The decision to lower the minimum for Runway 14/32 ignores potential impacts to residents on St. Andrew Road, Bayswater Street and Saratoga Street.]	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.

Code	Topic 1	Topic 2	Comment	Response
233.4	Alternatives	Runway 14/32	Massport is also touting this as a unidirectional runway; however, Massport cannot make this promise. This is a FAA decision...	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

LETTER 234

159 Trenton Street
East Boston, MA 02128
March 21, 1999

MEPA and FAA:

The siege Massport is waging upon East Boston and surrounding communities is no less historic than British threats to burn Boston. Their determination to build Runway 14/32, regardless of the devastating environmental and social impacts, is like the shot heard around the world. The pollution and noise, resulting from thousands of increased jet aircraft operations, promises to create intolerable living conditions. Massport expects us to close our windows, retreat into some imaginary soundproof cubicle; in effect, to be held prisoners within our own homes. Quality of life is the issue; without it a healthy community cannot exist. 234.1

East Boston is experiencing a rebirth. Restoration and renewal are ongoing activities throughout the community. Future development of our precious waterfront is carefully being studied. The main street initiative is spawning new vitality. Green space, an important ingredient for every flourishing urban environment, is taking root. The Eagle Hill area has recently achieved long over due recognition as an important historic site and is now listed on the National Register of Historic Places. Residents are excited with the developments and are deciding to stay and rebuild their neighborhoods.

Massport and supporting business leaders tout an economic boon throughout the area. NOT TRUE! Airport expansion in other areas of the country where quality of life was ignored does not economically benefit affected communities. Instead, people move out, real estate values plummet, businesses suffer and crime rates increase. In short, many abutting and affected areas slump into depression and decay. The only "economic boon" belongs to Massport whose revenue producing design further encroaches upon our treasured island. 234.2

Massport claims that building 14/32 would reduce Logan congestion and be environmentally benign, or even beneficial. This statement merely reflects one of many dishonest assessments Massport is promoting. Thousands of increased jet aircraft operations is NOT environmentally friendly, nor will congestion be relieved. Taxpayer funding should not be required to arrive at such an obvious conclusion. Massport even admits that shortly after the runway is completed delays will return to the same levels. In other words, Massport and Governor Cellucci are willing to

devastate the health, sanity and well being of all the surrounding communities for a project which will benefit virtually no one.

It's been reported in the Globe that Massport plans on launching a media blitz using "soft-sell" ads and "strategies of the 90's" to build public and political support. It's quite apparent in the national arena that "strategies of the 90's" consists of attempts to deceive, cover-up and lie in order to sway opinion. The fact is Massport and their political cronies will do and say anything to achieve their designs. Be forewarned, we in the surrounding communities are not so easily deceived.

Noise levels are presently unbearable from aircraft operations over Eagle Hill. Adding thousands more atop this National Historic Site is an appalling abuse of morality. It's time to face the fact that Logan is already saturated and set in motion peak hour pricing and slot allocation. This will achieve long term delay-reduction far better than building runway 14/32. There will always be delays. New England weather will continue to create airport disruptions regardless of how many runways are built. Long range planning should focus on selecting an alternate airport. 234.3

In short, stop killing us with deafening noise and pollution. We're not going to sit idly and allow our lives to be destroyed by the self-serving interests of Massport, Governor Cellucci and their obsequious confederates. Governor Cellucci recently stated prior to his operation, "It's a matter of **quality of life**". Isn't it strange that he considers his quality of life important but not the thousands of residents adversely affected by airport expansion. Boston is renowned for struggling against tyranny. Once again we are faced with forced servitude and will rise to the occasion. NO MORE NOISE! NO MORE POLLUTION! 234.4

Sincerely yours,

Craig L. Jolliffe

Linda M. Jolliffe

Craig and Linda Jolliffe

Letter 234
Craig and Linda Jolliffe
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
234.1	Public Health	Effects	The pollution and noise, resulting from thousands of increased jet aircraft operations, promises to create intolerable living conditions.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.
234.2	Alternatives	Impacts	[East Boston has recently undergone some significant rebirth and renewal. The proposed airport expansion will counteract that by driving people out of the community.]	Comment noted.
234.3	Alternatives	Peak Period Pricing	It's time to face the fact that Logan is already saturated and set in motion peak hour pricing and slot allocation. This will achieve long term delay-reduction far better than building Runway 14/32.	Neither federal nor state scoping directives required an analysis of slotting. Imposition of slot controls constitutes a federal policy that has been preempted to the FAA under federal law and is not within Massport's jurisdiction. Congress determined that the slot program has a number of significant problems. The U.S. DOT has studied options for reducing slot controls at airports. As a result, the AIR-21 Act, which was enacted in March 2000, eliminates all slots at three of the nations slot controlled airports. Slots at the Chicago O'Hare airport will be eliminated by July 1, 2002 and slots at New York LaGuardia and New York JFK will be eliminated by January 1, 2007. PPP represents a market approach that should encourage the highest value services to use Logan Airport during periods of scarce capacity without the market disruption and other inefficiencies related to slot control. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport, and provides an assessment of the extent of the benefits of PPP under such circumstances. See Section 4.5 of the Supplemental DEIS/FEIR.
234.4	Regional Transportation	Regional Airport	Long range planning should focus on selecting an alternate airport.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions

LETTER 235

Airport
Dr. and Mrs. Gilbert R. Lavoie
422 Sumner Street
East Boston, MA 02128
March 8, 1998

A VISION FOR LOGAN AIRPORT

More Noise? More Pollution?

What will more noise do to our historic as well as our modern neighborhoods? What will more noise do to our harbor recreation involving boating, swimming, fishing, wildlife and island play areas? 235.1

Let us not wreck our beautiful world famous landmark known as Boston. As was done at the Regan International Airport in Washington, D.C., can we create and maintain a beautiful small airport which will complement our beautiful city while allowing recreation, work, transportation, and even wildlife to have a reasonable access to the city, harbor, harbor islands, and ocean.

As in D.C., Boston has no room to expand. As in D.C., Dulles and Baltimore Airports alleviate the congestion. We can alleviate congestion with not only Manchester and Green Field Airports but also include Worcester and the 128 Air Force Base. We must nurture our present airport and make it fit in with and work to support our present roads, parks, neighborhoods, and work places. 235.2

This plan will make Boston Better!

Dear Mr Lamont,
We cannot noise-proof the boat & recreation areas. Please consider the total tourist package known as "Boston"
Sincerely, Gil & Bonnie Lavoie

Letter 235
Dr. and Mrs. Gilbert R. Lavoie
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
235.1	Noise	Impacts	What will more noise do to our historic as well as our modern neighborhoods? What will more noise do to our harbor recreation involving boating, swimming, fishing, wildlife and island play areas?	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.. The Boston Harbor Islands, while within the No Action Alternative (Alternative 4) 65 dB Day-Night Sound Level (dB DNL) contour, will have no noise increase with the Preferred Alternative. Refer to Section 6.3.3 of the Supplemental DEIS/FEIR for additional discussion of parklands relative to the Preferred Alternative.
235.2	Regional Alternatives	Regional Airports	We can alleviate congestion with not only Manchester and Green Field Airports but also include Worcester and the 128 Air Force Base.	Noise data were acquired in Roxbury for the tests of the Runway 27 departure procedure in the winter of 1991 to 1992. These data indicated a reasonable correlation between measurement and modeling based on the radar tracks. In 1997, a permanent noise monitor was installed in the Boston Latin Academy in Roxbury under the new flight path. The data for part of 1997 were reported in the 1997 Annual Update in Table 5-5, and the data for 1998 were reported in the 1998 Annual Update in Table 5-6. The 1998 data show both the total noise and the total noise from aircraft, as well as the INM-calculated values of DNL. The agreement is excellent.

LETTER 236

RICHARD C. LYNDS ESQ.
90 HOMER STREET EAST BOSTON, MA 02128
617-568-9676

March 14, 1999

Secretary of Environmental Affairs
Attention Mr. Arthur Pugsley-MEPA Office
100 Cambridge Street 20th Floor
Boston, MA 02205

RE: EOEA No. 10458

Dear Mr. Pugsley:

As an attorney and lifelong resident of the East Boston community, I write to voice my opposition to the above referenced project and ask that my comments be recorded in the negative.

In 1995, the Massachusetts Port Authority (Massport) filed their Environmental Notification Form (ENF) with the Massachusetts Secretary of Environmental Affairs, officially commencing the environmental review process to construct a new runway and centerfield taxiway at the General Edward Lawrence Logan International Airport. The need for such construction, as cited by Massport, was to improve efficiency and reduce delays at the nation's 13th busiest airport. As most of us who live in the surrounding communities already know, Logan is situated on land ill suited to house the nation's 13th busiest bus terminal, never mind an international airport. Although Massport's plan to construct a new runway intends to place less flights over the surrounding communities, their approach serves only as a band aid solution to a bigger problem.

Massport predicts that passenger growth at Logan will increase from its current 25 million passenger to anywhere from 35 to 45 million passengers by the year 2010. Furthermore, operations at Logan, which currently peak at 120 per hour, are expected to increase as well. While Massport cites that the need for a new runway at Logan is to help solve efficiency problems, a better solution might be one that contemplates Massport's capacity problems.

Since Massport's feasibility study and ENF were released in 1995, the popularity of regional airports has soared dramatically. The success of airports like T.F. Green in Providence Rhode Island and Manchester Airport in New Hampshire are testament that regional commuters will use airports other than Logan to avoid delays, traffic, and to save money. However, Massport continues to ignore a second major airport as an alternative to reducing delays at Logan. 236.1

For more than twenty five years, this community has endured the prospect of an additional runway. Massport cites that the Project will provide improvements to alleviate the aircraft arrival and departure delay problem at Logan Airport. Yet in the very same breath, they talk about how in order to meet the projected demand of passengers at Logan, a new runway will be necessary. Massport can not have it both ways. Either it is efficiency for today's Logan or expansion of tomorrow's. Either way, the cumulative environmental impacts associated with Logan's expansion are too great for this community to handle.

Massport claims that alternatives have been considered including a Second Major Airport (SMA). However, since the time frame from planning to construction would have taken ten to fifteen years, such an alternative was not feasible. However, that decision was made back in 1989. Had there been a decision to really work towards development of an SMA, we might not have faced this problem today and could be well on our way to much needed relief for our communities. The problem is not that an SMA was not feasible, but that Massport was focused and committed to building a runway at Logan. 236.2

The communities opposing construction of a new runway at Logan have spoken in a unified and loud voice. They do not want to see another runway at Logan Airport and believe that our communities have shouldered enough of the burden. As Massport trudges through the environmental review process with it's army of consultants, the communities do their best to organize against a new Mr.

runway. However, as many of us already know, without the resources to counter Massport's position, this challenge will be difficult if not impossible.

As the Commonwealth's regulatory agency responsible for protecting the environmental rights of our community, I ask that you assess this project cautiously and carefully and consider the burden that this community will be once again asked to face.

Very truly yours,

Richard C. Lynds, Esq.

Letter 236
Richard C. Lynds, Esq.
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
236.1	Regional Transportation	Regional Airports	The success of airports like T.F. Green in Providence Rhode Island and Manchester Airport in New Hampshire are testament that regional commuters will use airports other than Logan to avoid delays, traffic, and to save money.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
236.2	Regional Transportation	Regional Airports	Massport claims that alternatives have been considered including a Second Major Airport (SMA). However, since the time frame from planning to construction would have taken ten to fifteen years, such an alternative was not feasible. However, that decision was made back in 1989. Had there been a decision to really work towards development of an SMA, we might not have faced this problem today and could be well on our way to much needed relief for our communities. The problem is not that an SMA was not feasible, but that Massport was focused and committed to building a runway at Logan.	Comment noted.

LETTER 237

Submitted 4/8/99 by:
William Manning
1 Webster Ave.
East Boston MA 02128

Gentlemen,

I live and work in East Boston and so the issue of runway/airport expansion has twice the importance for me as it might for some people

I want to express my opposition to Massport's proposed plans at Logan for a variety of reasons.

...

Plan Violates Commitments

The Massport proposals violate commitments made to Logan-impacted neighborhoods not to expand the airports physical size or runway configuration. These commitments were the result of a community planning process that got those concessions for not opposing other improvements such as the third harbor tunnel.

237.1

These understandings are referred to in Massport's 1991 General Environmental Impact Review. They were confirmed in recent newspaper articles that quoted a former state Secretary of Transportation and a former executive director of Massport, both of whom knew the wording of the agreement and the intent of those words.

[See attached document]

Equitable Distribution Of Noise

Another rational for Massport's proposal for a new runway is for the equitable distribution of noise. Once again, however, the noise would only be distributed among the same neighborhoods that have **always** had to bear the environmental burden of an expanding airport.

That must stop.

237.2

To distribute noise equitably would mean to site jet service closer to where the passengers who benefit from that service begin and end their trips. With over 55% of Logan's passengers coming from the Route 128 /495 belts, that

II. PLANNED ACTIVITIES

INTRODUCTION

Massport undertakes a capital planning process annually to determine those projects required to maintain and improve the airport. In addition, Massport performs long-term planning studies of current and anticipated future operations at Logan Airport to determine what capital projects are necessary to serve the region's demands. Such studies are documented in the Draft Generic Environmental Impact Report (GEIR) (December 1991).

Based on these studies, Massport has reviewed the present facilities and the need for their modernization. These reviews indicate the need for a variety of physical improvements at Logan Airport including renovation of aging or substandard terminal facilities, enhancement of ground transportation access, consolidation of parking facilities, and improvement of airfield support systems. This chapter describes the status of the modernization program. It explains the principles guiding the development and implementation of the program and outlines the environmental review process anticipated for the individual projects. This Final GEIR does not initiate Massachusetts Environmental Policy Act (MEPA) review of any project described; Massport has prepared and will continue to prepare project-specific Environmental Notification Forms (ENFs), as appropriate.

Logan Airport currently serves approximately 6,600 peak hour passengers and 23 million annual passengers. Modernization planning has been based on a potential future scenario whereby airport facilities and infrastructure would serve nearly twice as many passengers, 12,400 at peak hour and 45 million annually.

PLANNING OBJECTIVES FOR LOGAN AIRPORT

The current planning for the terminal area started with the completion of the 1981 Land Use Plan for Logan Airport. This plan created a series of land use zones for the airport, defining development zones for terminal, cargo facilities, and other airport uses. These recommendations for the distribution of airport land uses have guided most subsequent decisions for the use and development of the airport terminal area.

The publication in 1983 of the I-90/I-93 Draft Environmental Impact Statement by the Massachusetts Highway Department assessed a Third Harbor Tunnel

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To BILL MANNING	From AL PAINE	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

and roadway interchange to Logan Airport. In response to this project, Massport began the Cross Harbor and Regional Transportation Study to examine alternatives for the new tunnel and interchange, to examine future development patterns at Logan Airport, and to examine options to increase high-occupancy vehicle (HOV) use as a means of access to Logan Airport.

The options reviewed included the addition of new unit terminals, an extension of the finger pier/concourse design around the perimeter of the present terminal area, a row of parallel concourses served by people-movers, and a centralized airport. The centralized plan would allow passengers to arrive and depart from a central facility via connections to the present unit terminals.

After extensive review of these options, Massport rejected them as infeasible because of excessive costs, inadequate design, or construction phasing problems. Instead, Massport chose to use the existing facilities where possible.

As Massport approached the 1990s, four specific factors caused Massport to consider particular actions to modernize Logan Airport: the inevitable aging of airport infrastructure and terminals; the anticipated construction of the Third Harbor Tunnel; a shift by the airlines to greater use of higher passenger capacity, widebody aircraft; and continued increases in aviation demand in New England. As a result, Massport initiated modernization studies for Logan Airport aimed at identifying capital improvements that would increase operational efficiency and minimize environmental impacts. The aim of these studies was to:

- Retain present airport size, physical boundaries, runways, and runway configurations;
- Develop a balanced allocation of facilities to provide for all types of airport land uses;
- Preserve future flexibility to adapt to changing conditions at the airport and within the aviation industry; and
- Incorporate the recommendations of prior studies and plans and ongoing articulated policy commitments into the modernization program.

Over the past two years, Massport has undertaken comprehensive planning and programming studies to define each of the key projects needed to modernize Logan Airport. Architectural studies also were completed to establish design guidelines addressing aesthetics, passenger convenience, and functionality of future projects at Logan Airport. These projects are now defined in enough detail to initiate design and environmental review.

Concurrent with planning for major facilities is Massport's ongoing capital planning and budgeting process which includes many small projects such as repairs, access improvements, landscaping, minor alterations, equipment purchase and installation, design and environmental studies and mitigation measures, and data gathering and analysis efforts.

VI. MITIGATION

INTRODUCTION

Massport has worked over the years to mitigate the environmental impacts associated with Logan Airport activities. Massport has been a consistent proponent of innovative mitigation measures to improve the quality of life in neighboring communities. The comprehensive review of long-term impacts in this Generic Environmental Impact Review (GEIR) is aimed at establishing additional effective mitigation procedures for the future operation of Logan Airport.

In 1987, Massport initiated the Logan Growth and Impact Control (LOGIC) Study to determine whether it was possible to keep Logan Airport impacts at or below the level of impacts in 1987 for various future operational scenarios. Phase I and Phase II of the LOGIC Study demonstrate that, with appropriate mitigation, the Logan Airport-related impacts can be kept at or below the 1987 Baseline Conditions for scenarios involving 45 million annual passengers. This is the passenger level assumed to occur in 2010 (in the LOGIC Study Phase II) or in 2024 under the more moderate expectations of Massport technical staff.

As a result of the LOGIC Study, Massport proposes as its overall mitigation goal to keep impacts at or below the 1987 Baseline Conditions. The premise of limiting impacts at levels at or below those experienced in 1987 is the starting point for determining specific mitigation commitments. In support of this goal, Massport will continue its current mitigation policies and further will implement the specific mitigation actions described below. Moreover, Massport proposes to monitor regularly the impacts associated with airport operations in order to measure impacts and to determine the effectiveness of the mitigation program. Massport proposes to file annual updates regarding ground transportation, noise, and air quality, and proposes to file a GEIR every five years. These regular reports will demonstrate whether Massport is achieving its goal and will monitor the effectiveness of the mitigation measures proposed in this Final GEIR. Subsequent GEIRs will describe actual passenger demand growth, future passenger forecasts, impact assessments, and additional mitigation proposals/commitments.

This chapter summarizes the mitigation actions which Massport will undertake. In addition, ongoing mitigation measures are described as well as additional mitigation measures to be studied for their feasibility. Detailed discussion regarding each technical study area can be found in Chapter IV, Environmental Issues, and Chapter V, LOGIC Phase II Findings.

POLICY FRAMEWORK

The effects of Logan Airport's activities upon neighboring residential areas has led to increasing community participation in the airport planning process. Discussion between the community and Massport about the future of the airport resulted in the development and adoption of the 1976 Logan Airport Master Plan, which established policies on physical growth and development at the airport. Guidelines for limiting future growth in land area were established along with other policies committing Massport to be more sensitive to community and environmental concerns. While the policies in the 1976 Master Plan were intended to guide decisions for Logan Airport over the subsequent five- to ten-year period, they continue to guide planning for Logan Airport and have helped form the framework for subsequent mitigation initiatives such as the Noise Rules, the school and residential soundproofing programs, and the Preferential Runway Advisory System, among others.

Since the publication of the 1976 Master Plan, passenger demand at Logan Airport has doubled.[1,2] However, this increase in aviation traffic has been and will continue to be accommodated without expansion of overall runway capacity or airport physical boundaries. Massport has initiated a major new project designed to improve the airport's neighborhood edge and reduce the airport's impact on the community.

Massport is committed to a pro-active approach to control the impacts of the inevitable growth in passenger demand. Massport will continue to follow the major policy commitments summarized within this chapter including the 1976 Logan Airport Master Plan; the Bird Island Flats Agreement; the Massport Environmental, Health, and Safety Policy; and the provision of technical resources to community groups.

1976 Logan Airport Master Plan

With the adoption of the Master Plan in 1976, Massport established a policy framework for airport planning. In the introduction to the Master Plan, Massport presented its objective of balancing regional transportation and economic needs with the needs of Logan Airport's neighbors. The Master Plan has provided guidance to Massport since its adoption by the Board, and Massport will continue to follow its guidelines in the future.

The Master Plan addressed six major policy areas: growth, noise, land use, ground access, the planning process, and affirmative action. In each of these areas, the Master Plan identified proposals to be studied and adopted. Among the notable actions which resulted from the Master Plan are the Noise Abatement Program including a program for soundproofing schools and residences; the divestiture of residential properties in East Boston; the Neptune Road relocation program; ground access service initiatives; and an active and continuing community participation program.

Logan Growth and Impact Control (LOGIC) Study, Phase I, prepared for Massport by Frederic R. Harris, Inc. June 1991.
Annual Report, Massport, 1990.

Letter 237
William J. Manning
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
237.1	Mitigation	Initiatives	The Massport proposals violate commitments made to Logan-impacted neighborhoods not to expand the airports physical size or runway configuration...These understandings are referred to in Massport's 1991 General Environmental Impact Review [Generic Environmental Impact Report]'.	Massport disagrees with this statement.
237.2	Noise	Impacts	Another rational [sic] for Massport's proposal for a new runway is for the equitable distribution of noise. ... To distribute noise equitably would mean to site jet service closer to where the passengers who benefit from that service begin and end their trips.	Comment noted.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <BIJOM@aol.com>
Subject: Runway 14/32 Environmental Review
Date: Thursday, April 22, 1999 5:51:38 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 238

Webster Avenue 1

Boston, MA 02129 East

21, 1999 April

Arthur Pugsley
MEPA
100 Cambridge St.
Boston, MA 02128

Pugsley,

I want to strongly oppose Massport's attempt at squeezing another runway into Logan Airport. It is environmentally unsound, a violation of environmental justice guidelines, and an attempt to undo agreements not to expand Logan that were made to surrounding communities in the early '90s in exchange for previous air and landside improvements that included the third harbor tunnel. 238.1

From an environmental standpoint, a projected reduction in noise that is claimed by Massport through the addition of the new runway can't be guaranteed because there is no guarantee of unidirectional use of 14/32. The runway will only attract new air traffic, just as new highways always attract new auto traffic, and will add to the noise and pollution in the area.

Runway 14/32 will clearly have an adverse impact on yet another area of East Boston, the Jeffries Point neighbor. With flights going out over the water on take-off, exhaust and jet noise will blow directly back into that heavily populated community and ruin the ambiance of Piers Park, built at great expense and intended as a neighborhood amenity. That park and the surround neighborhood will get the full brunt of gets taking off and landing if 14/32 is allowed to be constructed. 238.2

There is too great a reliance on Logan as it is, and additional expansion of facilities and capacity will only make it worse. Massport's projection of future traffic over the next 20 years will make East Boston, Winthrop and other hard-hit communities. unlivable. Their projected "conservative" estimate of so-called equivalent jet operations, furthermore, is expected to grow by 50% over the next decade. 238.3

The benefits of further conversion to Stage 3 aircraft, furthermore, are grossly overstated vis a vis future noise levels at Logan. And federal policy also establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan, so Massport's claims to the contrary are ludicrous -- as are its delay models which are in conflict h the FAA's own statistics. 238.4 238.5 238.6

e serious is the fact that Massport, in violation of the National Environmental Policy Act, has not explored all the alternatives available to it, including the development of a new major airport, use of Hanscom field, and peak pricing alternatives. 238.7

Massport is continuing its history of bad faith with the community and distorting the truth in order to place its revenue goals ahead of the well-being of the neighborhoods it has often treated with contempt over the years. That treatment is in stark constrast to its solicitousness toward the communities that surround Hanscom Field, in the 128/495 corridors, who make up more than half of Logan's Massachusetts passengers.

I urge you out of concern for the air we breath and what remains of our quality of life, do not grant Massport the certification it seeks and which it so richly doesn't deserve.

Sincerely,

William J. Manning
1 Webster Avenue
East Boston, MA 02128

Letter 238
William Manning
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
238.1	General Opposition		[The Logan expansion] is environmentally unsound, a violation of environmental justice guidelines, and an attempt to undo agreements not to expand Logan that were made to surrounding communities in the early '90s in exchange for previous air and landside improvements that included the third harbor tunnel.	Massport disagrees with this statement.
238.2	Alternatives	Runway 14/32	Runway 14/32 will clearly have an adverse impact on yet another area of East Boston, the Jeffries Point neighbor…exhaust and jet noise will blow directly back into that heavily populated community.	The dispersion modeling results indicate that concentrations of pollutants will be below the NAAQS at all times. The Supplemental DEIS/FEIR reports worst-case conditions, meaning air quality will be better than this under almost all conditions. A full year of actual weather data was used to conduct the dispersion analysis. In summary, actual wind conditions have been used to model pollutant concentrations at Jeffries Point, where no violations of the NAAQS were projected. Furthermore, Runway 14/32 will primarily be used for arrivals. Also it will not increase the number of operations during northwest winds, but will allow projected operations to be accommodated with fewer delays. One-hour VOC concentrations (used as an indicator of odor) increase only slightly at Jeffries Point with the Preferred Alternative, when compared to the No Action Alternative. The predicted increase is so small that changes in odor will remain imperceptible, as measured against the No Action Alternative. Concentrations decrease at all other receptors with the Preferred Alternative. The proposed projects evaluated under each of the alternatives are located on the existing airfield. Implementation of any of the proposed projects will not physically change the urban characteristics or the design of the built environment within adjacent communities when compared to the No-Action Alternative. Off-airport noise impacts from the Preferred Alternative are discussed in Section 6.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
238.3	Ground Transportation	Access to Logan	Massport's projection of future traffic over the next 20 years will make East Boston, Winthrop and other hard-hit communities. unlivable.[sic] Their projected "conservative" estimate of so-called equivalent jet operations, furthermore, is expected to grow by 50% over the next decade.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today no would occur in the future if no action is taken. PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere.
238.4	Noise	Hushkitted Aircraft	The benefits of further conversion to Stage 3 aircraft, furthermore, are grossly overstated vis a vis future noise levels at Logan.	The study does not overstate the benefit of further conversion to Stage 3 aircraft on future noise levels. It uses two fleet scenarios in which almost all aircraft meet Stage 3 requirements, either as hushkitted Stage 2 aircraft or new Stage 3 aircraft, and three fleet scenarios in which all the aircraft meet Stage 3 requirements. Most of the aircraft are new high-bypass, engine-powered Stage 3 aircraft. Many of the hushkitted aircraft have been retired.
238.5	Environmental Review Process	FAA/NEPA	... federal policy also establishes that this project must be considered and evaluated as stimulating growth in aircraft operations at Logan, so Massport's claims to the contrary are ludicrous.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives.

Code	Topic 1	Topic 2	Comment	Response
238.6	Delay	Model	Massport's delay models are in conflict with the FAA's own statistics.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIS forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

Code	Topic 1	Topic 2	Comment	Response
238.7	Environmental Review Process	NEPA	Massport, in violation of the National Environmental Policy Act, has not explored all the alternatives available to it, including the development of a new major airport, use of Hanscom Field, and peak pricing alternatives.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR. Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.

173 Lexington Street
East Boston, MA 02128

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

LETTER 239

March 8, 1999

Dear Secretary Durand,

As a life long resident, environmental activist and homeowner in East Boston, I write to urge you to oppose Massport's proposed runway 14/32, which has very little to do with delay reduction and everything to do with expansion of capacity at Logan. According to Massport's MEPA EIS report, the runway would reduce delays only 20% of the time AND would be effective only until the year 2003, when delays at Logan will be *at or above* today's levels. The permanent environmental damage that would be inflicted on Boston residents cannot be justified by this short-sighted, ineffective proposal. 239.1

Because of increased flight operations on existing runways if 14/32 is built, residents of Boston and surrounding areas *who already bear an unfair portion* of the noise, air pollution and auto traffic caused by Logan will be permanently and dangerously impacted with triple the amount of planes passing over our homes. With 14/32, operations on runway 27 (impacting Roxbury, South Boston, the South End, Dorchester, Jamaica Plain, Roslindale, West Roxbury and Brookline) will increase from 18,000 to 56,495 annually. Operations on runway 33 (affecting East Boston, Chelsea, Charlestown, Revere, Somerville, Cambridge, Winthrop, Melrose) will increase from 6,082 to over 21,000 annually.

Massport's EIS report makes the case for a new runway at Logan, but doesn't mention <u>that every year since 1992, delays at Logan have gone down</u> or remained stable. This information is publicly available in the Federal Aviation Administration's 1998 ACE (Airport Enhancement Capacity) Report. The only reason that Massport can claim the Logan has a "delay problem," is because Massport chooses to use exceedingly high "maximum capacity" goals. The ideal number of planes that an airport handles per hour (Maximum Capacity) varies nationally from airport to airport and ranges from anywhere to 50 planes per hour to 150 planes per hour. The determination of maximum capacity goals depends on the location of an airport. 239.2

Obviously, airports such as Dallas or Denver, located on wide open, relatively unpopulated land can aim for higher maximum capacity numbers. Airports located in the middle of densely populated urban areas must accept the fact that because of environmental and health concerns, their maximum capacity will be lower than that of airports in non-urban areas. Massport claims to be number 5 in national airport delays (actually, according to the 1998 FAA ACE Report, they are number 7). In any case, the only reason they are able to claim that Logan is a "high delay" airport is because they aim for 120 planes per hour as their maximum capacity. If they set their goals to a more realistic 90 planes per hour (used in other urban airports), Logan would not have a serious delay problem.

Massport's EIS represents the interests of airlines and airport-related businesses, all of whom stand to make big profits if Logan's overall capacity is increased by runway 14/32. None of these groups care about the impact 14/32 will have on human beings, because none of them live in the impacted communties. The EIS does not take into account health impacts (Boston's inner city neighborhoods already have the highest asthma, emphysema and respiratory infection levels in the State - conditions greatly aggravated by plane and car fumes). The EIS does not take into consideration the environmental and quality of life issues of Boston's inner city residents. The EIS does not include the negative indemnity of real estate prices for the thousands of homes under the flight paths, nor the City's future lost tax revenues when what's left of Boston's middle class leave the area because they can no longer stand the persistent and excessive plane noise and fumes. These are serious concerns that demand your 239.3 239.4

attention. Please reject Massport's EIS, support the present court injunction against 14/32, and encourage Massport to seek alternative methods to handle projected air travel increases.

Massport should direct significantly more flights to Hanscom Airport located just 25 minutes from Boston and presently utilized at only a third of its capacity. Hanscom presently has the runway capacity to handle commercial commuter planes. Massport could redesignate Hanscom as a commercial commuter airport instead of an elitist "small corporate jet" airport, as it is now designated. By increasing air traffic at Hanscom, Worcester, Manchester and Providence to the maximum capacity possible, Massport can avoid future delays at Logan AND allow Boston residents to maintain some semblance of a healthy quality of life. 239.5

Another alternative which Massport has been unwilling to implement is Peak Hour Pricing, a demand management tool which is very successfully used in the hotel and tourism industry as well as the electric utility industry. For profit reasons, airlines prefer to increase capacity rather than manage demand. In a democratic society, profit motives must not overrule the well-being of that society's citizens. Massport has the regulatory power and political clout to become a national trail blazer in airport demand management and should at least give this tool a year long trial implementation before proposing band-aid solutions that cause extreme environmental danger and hardship for Boston residents. Even the Volpe National Transportation System Center, which works closely with the FAA, admits on their website that "the present and predicted demands on airports cannot be met by constructing additional runways". 239.6

I write to you as a fourth generation East Bostonian who would like to be able to raise my children in the community where my parents, grandparents and I grew up. My home is located under the Runway 33 flight path (but according to Massport's outdated noise contour lines, we do not qualify for sound proof windows). As I write this, a plane passes over my house every 2 minutes and I can't imagine what our lives will be like if the number of flights on runway 33 triples. Thank you for your attention to this critical issue.

Sincerely,

Regina Marchi

Regina M. Marchi

Letter 239
Regina M. Marchi
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
239.1	Analysis Assumptions/ Methodologies	Planning Period	According to Massport's MEPA EIS report, the runway would reduce delays only 20% of the time AND would be effective only until the year 2003, when delays at Logan will be at or above today's levels. The permanent environmental damage that would be inflicted on Boston residents cannot be justified by this short- sighted, ineffective proposal.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
239.2	Delay	Model	Massport's EIS report makes the case for a new runway at Logan, but doesn't mention that every year since 1992, delays at Logan have gone down or remained stable. ...Federal Aviation Administration's 1998 ACE (Airport Enhancement Capacity) Report. The only reason that Massport can claim the Logan has a "delay problem," is because Massport chooses to use exceedingly high "maximum capacity" goals.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent and continued to increase in 2000. In 2000, Logan was the second most delayed airport in the United States for arrivals. This represents the worst rank in Logan Airport's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.

Code	Topic 1	Topic 2	Comment	Response
239.3	Public Health	Effects	The EIS does not take into account health impacts (Boston's inner city neighborhoods already have the highest asthma, emphysema and respiratory infection levels in the State--conditions greatly aggravated by plane and car fumes). The EIS does not take into consideration the environmental and quality of life issues of Boston's inner city residents.)	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
239.4	Alternatives	Impacts	The EIS does not include the negative indemnity of real estate prices for the thousands of homes under the flight paths, nor the City's future lost tax revenues when what's left of Boston's middle class leave the area because they can no longer stand the persistent and excessive plane noise and fumes.	Section 1.3 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to the regional economy. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
239.5	Regional Transportation	Regional Airports	Massport should direct significantly more flights to Hanscom Airport, located just 25 minutes from Boston and presently utilized at only a third of its capacity.	Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.
239.6	Alternatives	Peak Period Pricing	Another alternative which Massport has been unwilling to implement is Peak Hour Pricing, a demand management tool which is very successfully used in the hotel and tourism industry as well as the electric industry. ... In a democratic society, profit motives must not overrule the well-being of that society's citizens.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport, and provides an assessment of the extent of the benefits of PPP under such circumstances. See Section 4.5 of the Supplemental DEIS/FEIR.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
<REGMIR@aol.com>
Subject: MASSPORT HAS NOT INFORMED NEW COMER POPULATIONS
Date: Wednesday, April 21, 1999 17:20:23 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 240

Dear Mr. Pugsley,

I urge you to reject Massport's DEIS on the grounds that it uses old data to mislead the public regarding the delay situation at Logan. Delays at Logan were a non-issue before Massport began its campaign to build 14/32. Why did Massport develop its own delay measurement tool rather than use the FAA-approved delay measurement procedures? Why does Massport find it necessary to spenf 3 million dollars on consultants and advertisments? BECAUSE THEY ARE MISLEADING THE PUBLIC. 240.1

More importantly, MASSPORT HAS NOT TRANSLATED ANY INFORMATION REGARDING 14/32 or its impacts into Spanish, Haitian Kreyol, Vietnamese or Cambodian, even though these populations comprise a significant amount of the residents who will be affected by 14/32 in areas such as East Boston, Chelsea, Jamaica Plain, Roxbury, Dorchester, Roslindale and the South End. At present, most these people have no idea that Massport is planning to build a runway that a triple plane noise over their homes and make auto traffic and air pollution unbearable. Translation of important information is standard practice in both state and city agencies..even the utilitiy companies offer multi-lingual information. Under MEPA and NEPA regulations, Massport had an obligation to inform the public, particularly the affected communities, of the 14/32 plan and its impacts. By not translating information, they have failed to do this. 240.2

Sincerely,

Mrs. Regina Marchi
173 Lexington Street East Boston, MA 02128

Letter 240
Regina M. Marchi
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
240.1	Delay	Model	Delays at Logan were a non-issue before Massport began its campaign to build 14/32. Why did Massport develop its own delay measurement tool rather than use the FAA-approved delay measurement procedures?	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
240.2	Environmental Justice	Demographic Data	Massport has not translated any information regarding 14/32 or its impacts into Spanish, Haitian Kreyol [sic], Vietnamese or Cambodian, even though these populations comprise a significant amount of the residents who will be affected by 14/32...Under MEPA and NEPA regulations, Massport had an obligation to inform the public, particularly the affected communities, of the 14/32 plan and its impacts. By not translating information, they have failed to do this.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation.

Elizabeth (Betty) Mazzarini
299 Maverick Street
East Boston, Mass. 02128

March 18, 1999

Mr. John Rodman,
Executive Officer of Environmental Affairs
100 Cambridge Street
Suite 2000
Boston, Ma. 02202

LETTER 241

Dear Mr. Rodman:

This is a letter in opposition to the 14/32 Runway being proposed by the Massachusetts Port Authority.

As a life-long resident of the East Boston community, what happens at Logan Airport is of great concern to me.

There have been many battles my community has fought in order to bring some peace and tranquility into the lives of those who want to live in the homes of their own choice.

One of these battles was fought in 1968 when dirt trucks were bringing illegal fill onto Bird Island Flats until the "Maverick Street Mothers", of which I am a member, stopped them bodily until Massport got the necessary papers and built an alternative road on their own property in order for them to continue bringing in the fill again.

Another battle in 1970 was against the STOL (Short Take Off and Landing) Runway. This runway, was proven not to be beneficial in alleviating any noise or air pollution from our neighborhood or any other neighborhood and was ultimately defeated. An injunction was instituted so that this STOL Runway could not be built to this day!

241.1

Massport is now resurrecting the same proposal under the name of 14/32 and trying to have the court injunction lifted so that it can be built. If this proposal failed in the 1970's, what has changed to make it passable now??

The neighborhoods are still here and so is Logan. This proposal would affect not only East Boston, Chelsea, Revere, South Boston, and Winthrop, which all receive the bulk of the air and noise pollution, but, would extend to Saugus, Everett, Charlestown, Cambridge, Dorchester, Quincy, Hull, etc.

Massport has presented 8 volumes of an impact study which I am sure is very impressive and has figures showing decimal levels of the noise in these communities at a low percentage. But, we, the people who live in these communities surrounding Logan, are unable to document our living conditions. We have neither the money, nor the means, to present volumes of data in opposition to the figures given by the Massport studies.

You, the deciding factor, have to rely on our word!

In the summer, when having a cook-out, you get the smell of jet fumes, instead of Bar-B-Que. Our windows have to remain closed all summer because of the smell of these same fumes and the noise, which makes it impossible to enjoy our own homes. If you hang your clean wash on a line out-doors, your clothes have the smell of jet fumes and soot when you bring them in. And, when you fall asleep or are watching T.V., the noise of planes flying overhead either awakens you or, comes at the most important part of the movie and drowns out the sound.

These, Mr. Rodman, are some of the so-called "benefits" to living so close to Logan. How would you like living under these conditions?

Because Logan exists and is here to stay, we try to accept it. But, WE DO NOT have to accept the fact that it wants to continue to grow so as to accomodate the travelers and the big businesses of this city. WE DO NOT have to, nor intend to, sit back and allow our constitutional rights to be taken from us or over-looked. We, as residents of East Boston, WILL continue to fight for our homes and living conditions! We hope that those who must make the decisions which involve, include, and affect OUR way of living, will realize that we, too, are entitled to live where we choose, with the same considerations as those who live in the suburbs.

Never, do we expect complete peace or tranquility because of Logan being within our midst. But, we can hope to maintain the level of what we now have and, not allow it to be taken away completely.

Please take our plight seriously and consider the neighborhoods surrounding Logan.

Vote to maintain the injunction on this runway and help us defeat the Massport proposal again. The need for another airport is the issue. Logan HAS, indeed, reached its saturation point many years ago.

Thank you.

Sincerely,

Betty Mazzarini

Elizabeth (Betty) Mazzarini
East Boston resident

cc: Robert Durand, Secretary EOEA
East Boston Times
East Boston Sun Transcript

Letter 241
Elizabeth Mazzarini
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
241.1	Environmental Review Process	Public Process	[Massport has continuously expanded with no regard for the residents of neighboring communities. Why is the current proposal for runway 14/32 different from the STOL runway stopped by the courts in the 1970s?]	The proposed uni-rectional Runway 14/32 is different from the runway proposed in the 1970s because under the current proposal all operations would occur over water, i.e., aircraft would arrive to the Runway 32 end with an approach over water and aircraft would depart from the Runway 14 end with a departure track over water. There would be no arrivals to the Runway 14 end and no departures from the Runway 32 end. Uni-directional Runway 14/32 would allow Logan Airport to maintain a three-runway configuration in Northwest winds, which would significantly reduce aircraft delays that occur in northwest winds. If Runway 14/32 was available in 1998, runway related delays would have been reduced by Runway Runway 32 percent. The proposed unidirectional Runway 14/32 would also provide FAA air traffic controllers with the ability to redirect more aircraft over water and away from people.

LETTER 242

April 8, 1999

Robert Durand
Massachusetts Environmental Policy Agency
100 Cambridge Street Suite 2000
Boston, MA 02202

James M McBride
10 Orleans Street # 404
East Boston, MA 02128

Dear Mr. Durand,

I am an 11 year resident of East Boston and would like to express my opinion regarding Massports expansion and proposed runway 14/32. East Boston residents have always lived in the shadow of Logan. I knew that when I moved to 10 Orleans Street here in East Boston. But to think Boston can survive another century without a second airport is crazy. 14/32 is a Band-Aid at best. There is a court injunction from the 1970s prohibiting Massport in building 14/32. There must be compelling reasons in that court decision why 14/32 is a bad idea. Health concerns and excess noise is fueling my opposition to runway 14/32. The proposed runway will directly affect my neighborhood. When second airports come up in conversations with either massport or the governor's office, Providence and Manchester's airports are mentioned as alternatives. It doesn't seem realistic that Massport and the Commonwealth would, or should give up the lucrative revenues (taxes) which come with the traveler. Massachusetts needs a second regional airport! Massport admits delays will surpass today's figures in 6-10 years even with the addition of 14/32. 242.1

These issues are bringing East Boston residents together like I have never seen before. I would be very interested in knowing how you stand on this issue? Thank you for listening.

Sincerely,

Jim McBride

Letter 242
Jim McBride
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
242.1	Public Health	Effects	[Massachusetts needs a second major airport. The construction of Runway 14/32 is a temporary measure and will only serve to increase health effects in my East Boston neighborhoods.]	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.

LETTER 243

56 Princeton Street
East Boston, MA 02128
April 22, 1999

Exuctive Office of Environmental Affairs
ATTENTION MEPA OFFICE
Arthur Pugsley #10458
100 Cambridge Street, Room 2000
Boston, MA 02202

Re: Runway 14/32

Dear Mr. Pugsley:

I am writing to voice my opposition to Runway 14/32. East Boston is already saturated with noise and air pollution from Logan Airport. Another 23,000 flights over East Boston each year is simply outrageous. 243.1

Very truly yours,

Francis McHugh, Esq.

Francis McHugh

Letter 243
Francis McHugh
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
243.1	General Opposition		I am writing to voice my opposition to Runway 14/32. East Boston is already saturated with noise and air pollution from Logan Airport. Another 23,000 flights over East Boston each year is simply outrageous.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.

LETTER 244

92 Marginal Street
East Boston, Massachusetts

April 22, 1999

Robert Durand, Secretary
Massachusetts Executive Office of Environmental Affairs
Leverett Saltonstall State Office Building, 20th floor
100 Cambridge Street
Boston
Massachusetts
02202

ATTENTION: Arthur Pugsley

This concerns the Boston Logan Airport runways and taxiways proposal (EOEA #10458).

I understand that a significant percentage of flights *or* passengers from Boston Logan Airport originate at or are destined for New York City and Newark, New Jersey. With the approach of the Northeast Corridor high speed trains between these cities, I believe the planners should first learn the long term effect of the high speed service on the Boston-New York City-Newark market, for express (that is, time-sensitive) cargo as well as for passengers. After this, planning the runways project can proceed with *more* certainty of the needs of travelers than planners have now. 244.1

Considerable terminals and garage expansions have been taking place at the airport. Should the runways and taxiways improvements have been considered before the terminals and garages were expanded? Would Massport seek to expand the latter again if the runways and taxiways expand? 244.2

I appreciate whatever attention you give to this letter and for adding it to the environmental review record for the Boston Logan runways and taxiways improvement project.

Sincerely,

Christopher J. Morton

Christopher J. Morton

Letter 244
Christopher J. Morton
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
244.1	Regional Transportation	Passenger Rail	...planners should first learn the long term effect of the high speed service on the Boston-New York City-Newark market, for express (that is, time-sensitive) cargo as well as for passengers. After this, planning the runways project can proceed with more certainty of the needs of travelers than planners have now.	The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
244.2	Cumulative Impacts	Landside Improvements	... Would Massport seek to expand the [terminals and garages] again if the runways and taxiways expand?	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's Environmental Planning and Status Report (ESPR, formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."

JEAN RIESMAN 188 WEBSTER STREET ♦ EAST BOSTON MA ♦ 02128
PH: (617) 567-2104 ♦ FAX: (617) 567-6748

Robert A. Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge St. – Room 2000
Boston MA 02202

LETTER 245

RE: Logan 2000 Airside Improvements Project Draft EIS/EIR

April 22, 1999

Dear Secretary Durand,

I am writing to ask you to find the Massachusetts Port Authority's Logan 2000 Airside Improvements Project Draft Environmental Impact Statement/Environmental Impact Report inadequate and to require Massport to undertake a full examination of both the true impacts of and the real alternatives to its proposed Runway 14/32 (also known as the Short Take-off and Landing, or STOL, Runway) and new centerfield taxiway. As a longtime resident of East Boston, I am outraged that neither the clear and significant impacts of this "improvements" project on my neighborhood nor the well-founded objections of its residents have not received fair consideration in Massport's environmental documents. 245.1

Since the 1974 court order against Runway 14/32, no Massport administration until now has revived the agency's efforts to complete and open the runway, and for good reason. Its putative benefits are far outweighed by its environmental impacts on surrounding communities already saturated by the noise, pollution, traffic, and other off-airport consequences of airport growth. Because Massport used outdated studies and figures that distort the benchmarks for these impacts, the Draft EIS/EIR does not fairly represent their future intensification. Massport also failed to acknowledge the fact that because a number of major airlines have sought waivers, the conversion of airline fleets from Stage 2 to Stage 3 (that is, from noisier to quieter) aircraft will be significantly slowed, diminishing any noise benefit Massport anticipates from changes in the fleet mix. In addition, Massport departed from established FAA modeling guidelines, further understating the combined effects of Runway 14/32 and the new centerfield taxiway. 245.2 245.3 245.4

Finally, Massport has ignored the full range of available alternatives: regionalization of air traffic, including facilities at Hanscom, Worcester, Providence RI, and Manchester NH, as well as the potential for cargo diversion to Pease in southern New Hampshire. The state and the agency have long skirted the need to seriously consider, study, and set land aside in the area beyond Route 128, where more than half of Logan's traffic originates, for a second airport with a fast-rail link to Boston. 245.5

Please use your statutory authority to require Massport to fulfill its public obligations under MEPA by undertaking a full and accurate study of its proposed airfield expansion program – a study that gives Logan-impacted communities fair consideration and weighs the genuine alternatives available.

Sincerely,

cc: Governor Paul Cellucci
Mayor Thomas Menino
Peter Blute, Executive Director, Massachusetts Port Authority

Letter 245
Jean Riesman
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
245.1	Environmental Review Process	MEPA	...require Massport to undertake a full examination of both the true impacts of and the real alternatives to its proposed Runway 14/32 (also known as the Short Take-off and Landing, or STOL, Runway) and new centerfield taxiway...neither the clear and significant impacts of this "improvements" project on my neighborhood nor the well-founded objections of its residents have not [sic] received fair consideration in Massport's environmental documents..	The Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
245.2	Alternatives	Impacts	...the runway ... benefits are far outweighed by its environmental impacts on surrounding communities already saturated by the noise, pollution, traffic, and other off-airport consequences of airport growth.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
245.3	Noise	Hushkitted Aircraft	Massport also failed to acknowledge the fact that because a number of major airlines have sought waivers, the conversion of airline fleets from Stage 2 to Stage 3 (that is, from noisier to quieter) aircraft will be significantly slowed, diminishing any noise benefit Massport anticipates from changes in the fleet mix.	The phaseout of Stage 2 aircraft operations was complete as of December 31, 1999. The study does not overstate the benefit of further conversion to Stage 3 aircraft on future noise levels. It uses two fleet scenarios in which almost all aircraft meet Stage 3 requirements, either as hushkitted Stage 2 aircraft or new Stage 3 aircraft, and three fleet scenarios in which all the aircraft meet Stage 3 requirements. Most of the aircraft are new high-bypass, engine-powered Stage 3 aircraft. Many of the hushkitted aircraft have been retired.

Code	Topic 1	Topic 2	Comment	Response
245.4	Delay	Model	Massport departed from established FAA modeling guidelines, further understating the combined effects of Runway 14/32 and the new centerfield taxiway.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
245.5	Regional Transportation	Regional Airports	Finally, Massport has ignored the full range of available alternatives: regionalization of air traffic, including facilities at Hanscom, Worcester, Providence, RI, and Manchester, NH, as well as the potential for cargo diversion to Pease in southern New Hampshire.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Dispersion modeling indicates no violation of the NAAQS, which were designed to protect human health and welfare.

3/14/99

LETTER 246

Robert Durand,secretary of environmental affairs

Dear sir:

I have lived in East Boston for almost 47 years and I have seen it, felt the damage and pain Logan has inflicted on this and the surrounding communities over the years. That noise, pollution, and the traffic combine to create stress and other health effects that I know cause premature death! Many of my neighbors whom were 15 to 20 years older than myself growing up have died as a result of cancer and heart disease. I've sat down and talked over the situation and have come up with seventeen people all of whom lived within a stones throw of my house with cancer or have died prematurely from cancer or heart disease. Studies show high levels of asthma, cancer, and heart disease, around airports. Studies done around the world that show the airports are a major source of pollution. On the issue of noise 65 dB average that is used means nothing when you can't get more than three hours sleep. I have lived next door to a school which has been soundproof for years. My house has only a few thousand feet from the proposed new runway and I'm supposed to believe that taking the smallest quietest planes out over the water will actually help alleviate the noise. That may partially help for two or three years, at best. After this peroid when the slots that these planes left open on the longer run ways are filled by larger jets that supposed to handle the increase from 26 to 46,000,000 passengers the situation gets worse. They tell us don't worry the craft in the coming years will all be stage three. The only problem is they've been telling us most of the planes now landing at Logan are stage three. If this is the case stage three is not the solution. Stage three is far too noisy. Another problem with stage three aircraft is that they produce even more NOX gases than stage two did. Massport has done nothing to seek realistic alternatives to Logan even though they knew runways were a problem decades ago. They are now just trying to buy time. They have no long-range plan unless you call having Manchester in New Hampshire or T F Greene in Rhode Island the plan from Massachusetts. They have made no reasonable effort to find a real solution to an over crowded airport which has no room to expand. They make no bones about having to cut down the delays so that people attending the proposed new convention center won't be angry when they get here. Gloria Larsen testified at a Boston city council hearing on runway 14/32 that people coming to the convention center will be angry if they are delayed. That shot cited comment

246.1

caused an uproar, she did not get to finish her testimony. Doesn't she think people get angry when they can't sleep? this shows how of touch the current people running the convention center and massport really are! They have no problem putting money over quality of life. Peter Blute doesn't lived in or around Boston so it doesn't effect his quality of life. He has heard many stories from dozens if not more people all around Boston and the surrounding communities of the degrading effects that Logan has, apparently he doesn't care! Massports study shows that only 20% of the people coming into the airport have Boston as a final destination. Boston should not bear the burden for the entire region, enough is enough, **quality of life must come first!**

Sincerely,

Richard Salini

Richard Salini
617 567 5647

246.2

please note That Volume IV Air Quality model results show That VOC's will more than double at Jeffries Point the closest area To the proposed new runway! (See attachment) Table DM1-8

also I've attatched Air Quality Mitigation promises from The 1993 Annual Update Table VI-6

EOEA 10458
1.4 Appendix M

LOGAN AIRSIDE

Jeffries Point is closest to proposed New Runway

Runway takeoffs start @ J. Pt.
They tell us will have no effect on J. Pt
New Piers Park sits directly in line with proposed Runway 2-3 thousand feet away!

TABLE DM1-8 AIR QUALITY DISPERSION MODEL RESULTS FOR LOGAN AIRPORT
VOC, HIGHEST ONE-HOUR LEVELS (ODOR INDICATOR)
ALTERNATIVE 1 [RUNWAY / TAXIWAY / PEAK HOUR PRICING]

RECEPTOR LOCATION	CONCENTRATION 1999 29M LOW	1999 29M HIGH	2010 37.5M LOW	2010 37.5M HIGH	2010 45M HIGH
1. East Boston (Jeffries Point)	211	210	269	327	* 448
2. East Boston (Const. Beach)	171	139	250	216	263
3. East Boston (Bayswater)	94	89	137	119	145
4. Winthrop (Court/Loring St.)	59	56	52	60	78
5. Winthrop (Cottage Park)	46	39	55	51	63
6. Winthrop (Grandview)	40	42	42	41	48
7. Castle Island	69	81	63	78	90
8. C & Broadway	34	40	34	33	37
9. South End (Union Park)	26	32	26	29	37
10. Eagle Hill	235	258	317	302	372
11. Orient Heights	68	61	99	86	104
12. Revere Beach	30	28	40	35	42

More than double 1999 over 10½ X's Higher than Revere Beach

All concentrations are in micrograms per cubic meter (ug/m³) and does not include background levels.
There is no Ambient Air Quality Standard for VOCs.

Also Much Higher Than Eagle Hill which is also High

Add Background
1 Tunnel Vent Bldg 1500' Away
2 Tunnel Vent Bldgs 1 Mile Away
L St. power Plant 1 Mile Away

Logan Airside Improvements Planning Project - Draft EIS/EIR
URS Greiner, March 1997

Scientists Spending big dollars doing Research to duplicate human Noses for smell, + Tongues for taste, We have 10's of Thousands of real ones here!

From 1993 Annual Update

Table VI-6 Status of Air Quality Mitigation Measures

Objective	Initiatives	Status
Reduce Emissions of VOC, NOx, and CO		
Reduce emissions from 1990 levels to the greatest extent possible.	Pursue reduced engine taxiing for inbound aircraft.	Massport is examining the feasibility of reduced engine taxiing as part of the feasibility analyses being conducted to assess a variety of potential airside improvements. The issues to be evaluated include operational implications, the role of airlines and the Federal Aviation Administration (FAA), and potential noise impacts.
	Prepare and implement a plan to control emissions from Massport's Logan Airport-based fleet vehicles.	Massport has undertaken a comprehensive review of its vehicle fleet at Logan Airport to explore opportunities for acquiring less polluting vehicles and for targeting VOC sources. Massport is committed to developing a plan by 1996 to make all practicable conversions from gasoline or diesel to alternative fuels. As part of this conversion process, Massport currently is purchasing 10 alternative fuel-powered vehicles and also is pursuing the development of a compressed natural gas (CNG) filling station on Logan Airport.
	Encourage Massport tenants to prepare ground service vehicle emissions control plans by 1996, with implementation by 1999.	Massport is supporting tenant vehicle conversion initiatives similar to those underway for Massport vehicles by participating, along with over 80 percent of airport tenants, in a comprehensive study of electric vehicle use at Logan Airport. Massport also is working with tenants to develop a ground service vehicle emissions control plan. Actions taken by Massport to support this plan include a survey and analysis of ground service support vehicle activities and emissions; studies to determine the air quality effects of alternative fuel sources; and a plan for conversion of vehicles to a variety of alternative fuel sources.
	Install vapor recovery systems for fuel storage and handling equipment.	During the design of the new jet fuel distribution system at Logan Airport, Massport will assess the necessity of installing further vapor controls. Since jet fuel is not subject to significant losses via evaporation, major emphasis in designing the new system will be directed toward the more relevant issue of eliminating leaks and spills.
	Construct new jet fuel distribution system.	The new jet fuel distribution system involves the consolidation of distribution activities in a double-loop distribution system around the airfield apron area; the installation and replacement of individual terminal fuel hydrants; the provision of connections between existing and new hydrant systems; and the implementation of an emergency fuel shut-off system. Design is now 30 percent complete and construction is expected to begin in 1995.
	Evaluate power plant energy sources.	Massport is currently evaluating the Central Heating Plant and is evaluating a variety of fuel combinations based on cost and air quality factors. Massport will install NOx Reasonable Available Control Technologies (RACT) measures on the Central Heating Plant in accordance with Clean Air Act requirements.
Reduce Odors		
Reduce perceived odors through reduction of VOC emissions.	Form Odor Panel to study odor sources and reduction strategies.	Massport plans to form an Odor Panel to assess odor impacts and consider strategies and efforts to reduce odor impacts.
	Recommend measures to reduce odor.	Massport has undertaken several initiatives to address the odor issue including an analysis of odor complaints received by Massport to determine locational impacts, operational factors, and contributing environmental conditions; an analysis of odor compounds relating concentration levels and potential public health impacts; and an analysis of the relationship of odors to aircraft engines and airfield activity.
Conduct Monitoring and Reporting		
Conduct additional air quality monitoring.	Conduct BTEX monitoring study.	Massport conducted a study of BTEX compounds at Logan Airport during August 1993; the results of the study are reported in this Annual Update. (See Appendix E.)
Provide annual air quality reporting.	Prepare an Air Quality Annual Update.	This submission forms the first formal Air Quality Annual Update for the years between GEIR filings. This air quality data is included as part of a comprehensive Logan Airport 1993 Annual Update and it provides air quality information for the year 1993.

Note: Ground transportation mitigation measures which reduce VMT and automobile idling times will provide significant air quality benefits. These are described in Chapter V, Ground Transportation.

Letter 246
Richard Salini
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
246.1	Alternatives	Preferred Alternative	Massport has done nothing to seek realistic alternatives to Logan even though they knew runways were a problem decades ago.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
246.2	Air Quality	NAAQS	[The] Volume IV Air Quality model results show that VOCs will more than double at Jeffries Point, the closest area to the proposed new runway!	One-hour VOC concentrations (used as an indicator of odor) increase only slightly at Jeffries Point with the Preferred Alternative, when compared to the No Action Alternative. The predicted increase is so small that changes in odor will remain imperceptible, as measured against the No Action Alternative. Concentrations decrease at all other receptors with the Preferred Alternative.

LETTER 247

March 24, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Sir,

I am writing to tell you of my objections to the airside expansions at Logan International Airport. There are a number of major issues that I wish to discuss here. I am aware that there is much concern for the increase in noise generated by an increase in air traffic. I also am very concerned with this aspect. Because I have other concerns that require consideration I will address the noise issue last.

I do believe that there will be an increase in air travel during the next ten, twenty or even thirty years. With a growing global population what else could occur? However with the increase in passengers there will be a new class of aircraft: they will be larger, heavier, more powerful, and with a greater capacity for carrying goods and passengers. These marvels of flight will be the biggest and most powerful commercial aircraft yet constructed. They are often referred to as NLA, or New Larger Aircraft. Specification for these aircraft include the capability to accommodate 550 to 650 passengers in a three class seating layout on two or three passenger decks, or 966 passengers in an economy layout. The wing span of the behemoth exceeds 260 feet with a length of more than 258 feet as compared to the familiar B747 "Jumbo Jet" with a wing span of only of 195 feet and being 231 feet in length. Maximum weight at take-off will exceed 952,000 pounds, or 476 tons. A fully loaded B747-200 has a maximum take-off weight of approximately 780,000 pounds. The FAA reports that not all airports will be able to accommodate these larger aircraft due to the dimensional requirements and increased difficulty in ground handling.

It will not be the airport infrastructure alone that will require major improvements. Methods to move the hordes of newly arrived passenger will be required. Every passenger that deplanes will be replaced by a passenger set to embark on a plane ride to somewhere else. Logan is a terminus airport. Very few passengers will be simply switching planes without making an impact on the environment. More Buses, More Subway Cars, More Taxi Cabs, More Rental Cars, More Congestion, More Pollution. Everyone will want to know why the CAT project wasn't effective? And what happened to the promise of traffic relief?

Everything that I have researched on the subject, from product overview of the Airbus product to runway and taxiway dimensional requirements of the comparable Boeing

product, coupled with my understanding of aviation and aeronautics has led me to believe that the airside expansion project at Logan is actually being designed to prepare for the use of this next generation of passenger aircraft, NLA. Logan International is not an appropriate place for the operation of these NLA. Logan is a terminus, the final destination. Aircraft with the incredible capacity of an NLA are certainly better suited to regional hub airports. The collateral damage that does occur in the densely populated communities that surround an inner-city airport, such as Logan, will increase disproportionately..

In my opinion the proposed airside changes are not being undertaken wholly for the reasons Massport is claiming. The proposed new center taxiway and other taxiway modifications and improvements are not about reducing engine run time and reducing ground noise and air pollution. The proposed changes are needed to accommodate the ground movement of these dimensionally ungainly aircraft. The addition of a new runway, 14/32, at near parallel to 15R/33L, plus the less publicized proposed lengthening of runway 15L/33R, are not at all about easing delays caused by weather, as Massport claims. The new runway, and modifications to others, are required to allow for the "hold time" between the departure of an NLA and any other aircraft. Aircraft in queue are vulnerable to the wake vortex generated by each previous aircraft taking off. The atmospheric disruption of the NLA would be significantly higher current commercial jet aircraft, making the runway unsafe and unusable for 3 to 5 minutes or longer. Aircraft next-in-line to take-off would be launched from either the proposed 14/32 or 15L/33R until the wake vortex at the end of 15R/33L dissipated and the runway could be safely used. If NLA were otherwise compatible for operation at Logan, this might be constructive planning. Unfortunately NLA are fraught with hazards that are too challenging for this inner-city location. The scheme is simply short-sighted. 247.1

Enabling the use of NLA also invites the potential problems associated with air pollution. With a capacity exceeding that of any aircraft able to currently operate from Logan, the power that will be required to launch these craft airborne will also be considerably higher. More power is More fuel is More pollution. It is simply true bigger engines burn more fuel. The FAA reports that the fuel needs of the engine of an NLA may require a wide assortment of fuel additives in amounts that would cause even greater concern for air quality. The burned by-products of these compounds will be spread over the immediate land and seascape at presumably twice the rate now experienced.

Another facet of the proposed expansion is to request that the FAA "administratively reduce the approach minimums". ***In essence the reduction of these minimums for a pilot's go/no go landing decision making criteria is a reduction in safety protocol.*** It seems that the management and operation of this airport occurs without regard for the existence of the adjacent residential communities. I am in full agreement with the mathematical exercise that shows how delays could be reduced if runways were more available during poor weather. But the math doesn't factor the safety of the life and property involved. There is no accounting of the performance of aircraft in the equation either. Will a DC-9/30 perform in a weather related crisis the same as an A320, B757, 247.2

Dash 8, F.27 or an NLA? They are all individual aircraft with their own unique characteristics and flown by different people who will possess a range of years of professional experience from none to many. Imagine! The reduction of delays would be even more significant if safety protocols were eliminated entirely. Revenues from increased gate fees would certainly offset the occasional disaster.

Noise is an issue. I am appalled at the criteria utilized in the Environmental Impact Statement required by the Massachusetts Environmental Policy Act to quantify the sound levels that occur from aircraft noise events. The measurement of decibels using an "A" weighted scale is totally inappropriate for noise events of the magnitude created by aircraft. The "A" scale is only useful to monitor levels that are audible to the human ear. Very nice for setting up your home stereo system. Noise produced by aircraft covers a spectrum much greater than the audible range. The frequency of sounds from an aircraft range from infrasonic, below the level of auditory sensitivity, to ultrasonic, above the level of human auditory sensitivity. The intensity of all sounds are of concern to me. ***Because I can't hear the frequency at which a sound occurs is not evidence that there isn't any detriment from it.*** We can't see ultraviolet radiation or gamma radiation because they exist beyond our capability to sense them. We are, however very much aware of the physical damage they cause. So it is with sound. The infrasonic impact of the noise event is highly significant. 247.3

Take a walk through the Day Square area of East Boston. When a jet aircraft takes off, you are standing below the flight path. The noise that you hear will prevent you from conversing with people you meet on the street. The infrasonic sound has enough power to move parked cars; and motion-sensitive theft alarm systems will be activated. Even if the audible noise was reduced, the power of the infrasonic sound produce by the aircraft in flight would still move the cars and create a collateral impact of audible noise. The alarms continue for 60 to 90 seconds before the automatically reset. Guess what?? In another 90 seconds another jet will take off and this rude and cacophonous event recurs. An increase in aircraft operations will cause an increase in the frequency of the collateral noise events that are now occurring throughout the area. This type of collateral impact on the environment is directly related, not coincidental, and cannot be overlooked as it has thus far. It is also important to acknowledge that just like radiation that we cannot see, sounds we cannot hear can cause humans physical harm. Infrasonic frequencies can cause motion and irritation to internal body organs.

Window replacement and sound proofing programs are a foolish waste of funds. These programs are socially irresponsible activities that turn citizens into nothing more than prisoners in their homes. An increase in capacity at Logan will render city street, parks, squares, and residential backyard unusable. Community will whither and die; and vacant neighborhoods are a fertile environment for crime. 247.4

In my opinion the airside improvement project is a mistake that will lead to major economic problems in the future. The recent trends in true urban revitilization comprised of a balance of commercial projects and an increase in urban residency, will halt. The

next generation of commercial aircraft is not appropriate for an airport that is situated in a highly populated, residential area of any city. Logan International Airport is simply not able to continue to grow beyond it's current capacity. This airport should be considered fully matured as an operational entity. Acting to enable an increase in capacity of an already over-burdened airport in a fragile, historic Boston neighborhood would be thoughtless and short-sighted. Capital improvements of this nature are not even a Band-Aid solution to the transportation challenges of the future. It is surprising that they would even be considered.

Another airport is required to share the staggering increase of air traffic in the future. Few world class cities operate with only one airport. Paris has four, New York City and Washington, D.C. are served by three. For the New England region and Boston to remain prominent and prosper in the global economy over the next fifty years requires that we all accept the fact that a new, world class regional airport is required. In the near future other means should be implemented to alleviate the over capacity at Logan; expansions of commercial passenger operations at Worcester and Hanscom Field, relocation of cargo operations to Hanscom Field, and Peak-Hour pricing. 247.5

Thank you for taking the time to consider my thoughts on these issues. Please contact me if you have any questions about this letter.

Sincerely,

Mark W. Stettler

Cathryn C. Stettler

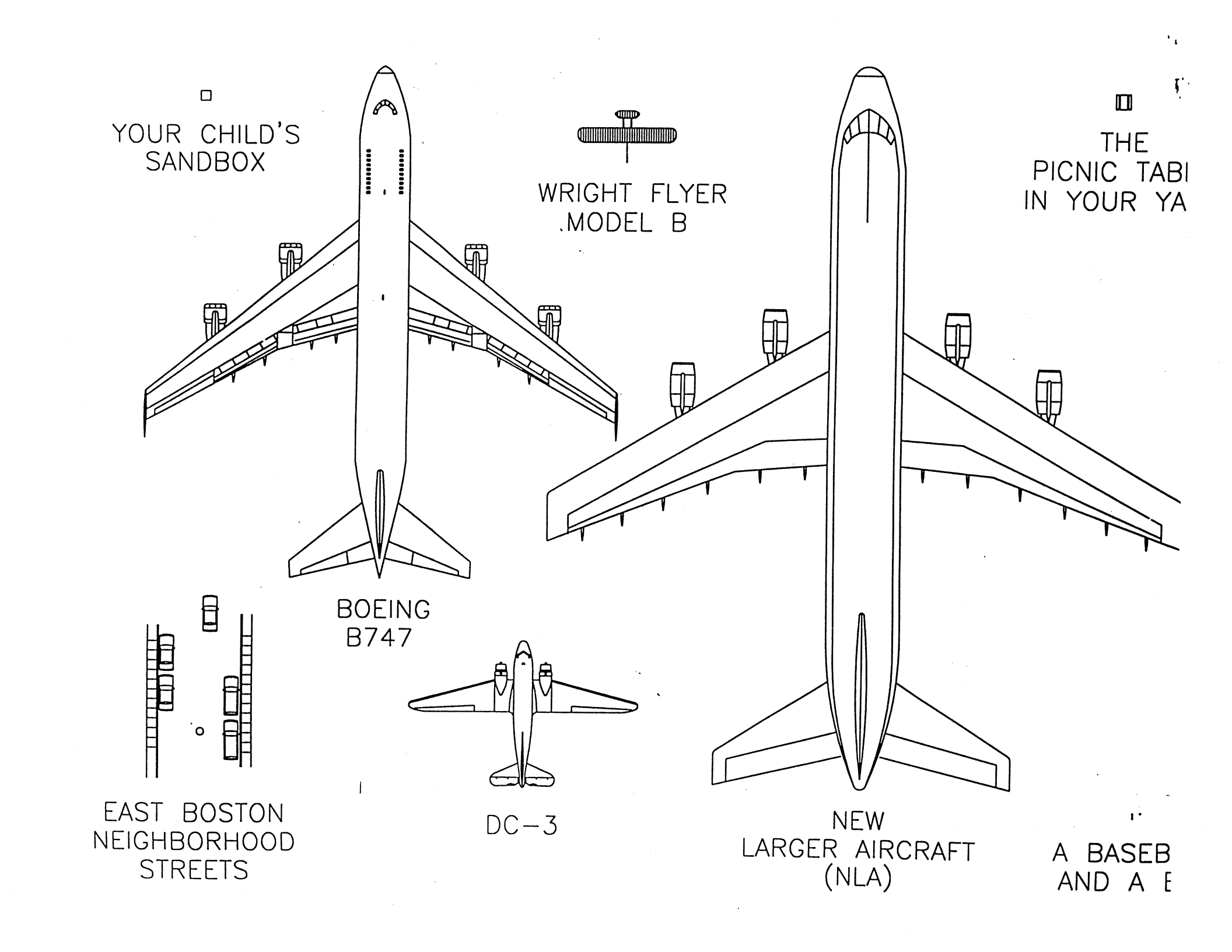
4 Wilbur Court, #1
East Boston, MA 02128

617-443-0400
mws@cidassoc.com

617-561-6307
catmws@erols.com

attachment:

graphic comparison showing the size relationship of familiar items to NLA.


YOUR CHILD'S SANDBOX
WRIGHT FLYER MODEL B
THE PICNIC TABI IN YOUR YA
BOEING B747
EAST BOSTON NEIGHBORHOOD STREETS
DC-3
NEW LARGER AIRCRAFT (NLA)
A BASEB AND A E

Letter 247
Mark W. Stettler and Cathryn C. Stettler
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
247.1	Alternatives	Taxiway Improvements	...The proposed new center taxiway and other taxiway modifications and improvements are not about reducing engine run time and reducing ground noise and air pollution. The proposed changes are needed to accommodate the ground movement of [the next generation of passenger aircraft, New Larger Aircraft (NLA)]... If NLA were otherwise compatible for operation at Logan, this might be constructive planning. Unfortunately NLA are fraught with hazards that are too challenging for this inner-city location. The scheme is simply short-sighted.	So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years.
247.2	Alternatives	Reduced Approach Minima	...the reduction of [approach minimums] for a pilot's go/no go landing decision making criteria is a reduction in safety protocol. It seems that the management and operation of this airport occurs without regard for the existence of the adjacent residential communities.	Reduced landing minimums provide for a safer approach by providing precision guidance at lower altitudes, and thus a safer approach." The reduced landing minimums do not change the approach path nor reduce the clearance between aircraft and the surface. Rather, they shift the location at which a missed approach decision is initiated closer to the airport. For Runways 27 and 22L, the reduced minimums will make the approach procedures flown by pilots more consistent with FAA standards in effect at most other airports. Reduced landing minimums will increase airfield safety by allowing operations more directly into the prevailing wind and will help improve PRAS goal achievement.
247.3	Noise	Impacts	The measurement of decibels using an "A" weighted scale is totally inappropriate for noise events of the magnitude created by aircraft. The "A" scale is only useful to monitor levels that are audible to the human ear. ... Noise produced by aircraft covers a spectrum much greater than the audible range. ...Because I can't hear the frequency at which a sound occurs is not evidence that there isn't any detriment from it.	Use of A-weighted decibels and DNL are by far the most appropriate metrics for evaluating noise impacts at airports as well as many other noise sources; use of the metrics are also required for federal environmental documents. See discussion of noise metrics in Appendix E of the Supplemental DEIS/FEIR.
247.4	Open Space/ Parkland	Impacts	An increase in capacity at Logan will render city street, parks, squares, and residential backyards unusable.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

Code	Topic 1	Topic 2	Comment	Response
247.5	Alternatives	Other Non-Construction Alternatives	In the near future other means should be implemented to alleviate the over capacity at Logan; expansions of commercial passenger operations at Worcester and Hanscom Field, relocation of cargo operations to Hanscom Field, and peak-hour pricing.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 248

April 23, 1999

Mr. Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge St., 20th Floor
Boston, MA 02202

Sir,

I am writing to tell you of my comments on the Draft Environmental Impact Statement for Logan Airside Improvements Planning Project at Logan International Airport. There are a number of major issues that I wish to discuss here. I am aware that there is much concern for the increase in noise generated by an increase in air traffic. I also am very concerned with this aspect. Because I have other concerns that require consideration I will address the noise issue last.

There has been no fair consideration given to the impact on the environment due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications. 248.1

I do believe that there will be an increase in air travel during the next ten, twenty or even thirty years. With a growing global population what else could occur? However with the increase in passengers there will be a new class of aircraft: they will be larger, heavier, more powerful, and with a greater capacity for carrying goods and passengers. These marvels of flight will be the biggest and most powerful commercial aircraft yet constructed. They are often referred to as NLA, or New Larger Aircraft. Specification for these aircraft include the capability to accommodate 550 to 650 passengers in a three class seating layout on two or three passenger decks, or 966 passengers in an economy layout. The wing span of the behemoth exceeds 260 feet with a length of more than 258 feet as compared to the familiar B747 "Jumbo Jet" with a wing span of only of 195 feet and being 231 feet in length. Maximum weight at take-off will exceed 952,000 pounds, or 476 tons. A fully loaded B747-200 has a maximum take-off weight of approximately 780,000 pounds. The FAA reports that not all airports will be able to accommodate these larger aircraft due to the dimensional requirements and increased difficulty in ground handling.

I have researched on the subject, from product overview of the Airbus product to runway and taxiway dimensional requirements of the comparable Boeing product. This information along with my understanding of aviation and aeronautics, leads me to believe that the airside expansion project at Logan is actually being designed to prepare for the use of this next generation of passenger aircraft, NLA. ***Logan International is not an appropriate place for the operation of NLA.*** Logan is a terminus, the final destination. Aircraft with the incredible capacity of an NLA are certainly better suited to regional hub

airports. The collateral damage that does occur in the densely populated communities that surround an inner-city airport, such as Logan, will increase disproportionately.

In my opinion the proposed airside changes are not being undertaken wholly for the reasons Massport is claiming. The proposed new center taxiway and other taxiway modifications and improvements are not about reducing engine run time and reducing ground noise and air pollution. The proposed changes are needed to accommodate the ground movement of these dimensionally ungainly aircraft. The addition of a new runway, 14/32, at near parallel to 15R/33L, plus the less publicized proposed lengthening of runway 15L/33R, are not at all about easing delays caused by weather, as Massport claims. The new runway, and modifications to others, are required to allow for the "hold time" between the departure of an NLA and any other aircraft. Aircraft in queue are vulnerable to the wake vortex generated by each previous aircraft taking off. The atmospheric disruption of the NLA would be significantly higher current commercial jet aircraft, making the runway unsafe and unusable for 3 to 5 minutes or longer. Aircraft next-in-line to take-off would be launched from either the proposed 14/32 or 15L/33R until the wake vortex at the end of 15R/33L dissipated and the runway could be safely used. If NLA were otherwise compatible for operation at Logan, this might be constructive planning. ***Unfortunately NLA are fraught with hazards that are too challenging for this inner-city location.*** The scheme is simply short-sighted.

There has been no fair consideration given to the impact on the environment regarding air and water pollution due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications. 248.2

Enabling the use of NLA also invites the potential problems associated with air pollution. With a capacity exceeding that of any aircraft able to currently operate from Logan, the power that will be required to launch these craft airborne will also be considerably higher. More power is More fuel is More pollution. It is simply true that bigger engines burn more fuel and bigger aircraft need more engines. ***The FAA reports that the fuel needs of the engine of an NLA may require a wide assortment of fuel additives in amounts that would cause even greater concern for air quality.*** The burned by-products of these compounds will be spread over the immediate land and seascape at presumably twice the rate now experienced.

There has been no fair consideration given to the impact on the environment regarding the physical infrastructure of the City of Boston due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications. 248.3

It will not be the airport infrastructure alone that will require major improvements. Methods to move the hordes of newly arrived passenger will be required. Every passenger that deplanes will be replaced by a passenger set to embark on a plane ride to somewhere else. Logan is a terminus airport. Very few passengers will be simply

switching planes without making an impact on the environment. More Buses, More Subway Cars, More Taxicabs, More Rental Cars, More Congestion, and More Pollution. Everyone will want to know why the CAT project wasn't effective? And what happened to the promise of traffic relief?

There has been no fair consideration given to the impact on the environment regarding the safety and welfare of the affected communities due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.

Another facet of the proposed expansion is to request that the FAA "administratively reduce the approach minimums". ***In essence the reduction of these minimums for a pilot's go/no go landing decision making criteria is a reduction in safety protocol.*** It seems that the management and operation of this airport occurs without regard for the existence of the adjacent residential communities. I am in full agreement with the mathematical exercise that shows how delays could be reduced if runways were more available during poor weather. But the math doesn't factor the safety of the life and property involved. There is no accounting of the performance of aircraft in the equation either. Will a DC-9/30 perform in a weather-related crisis the same as an A320, B757, Dash 8, F.27 or an NLA? They are all individual aircraft with their own unique characteristics and flown by different people who will possess a range of years of professional experience from none to many. ***Imagine! The reduction of delays would be even more significant if safety protocols were eliminated entirely.*** Revenues from increased gate fees would certainly offset the occasional disaster.

248.4

There has been no fair consideration given to the impact on the environment regarding the increase of infrasonic sound due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.

248.5

Noise is an issue. I am appalled at the criteria utilized in the Environmental Impact Statement required by the Massachusetts Environmental Policy Act to quantify the sound levels that occur from aircraft noise events. The measurement of decibels using an "A" weighted scale is totally inappropriate for noise events of the magnitude created by aircraft. The "A" scale is only useful to monitor levels that are audible to the human ear. Very nice for setting up your home stereo system. Noise produced by aircraft covers a spectrum much greater than the audible range. The frequency of sounds from an aircraft range from infrasonic, below the level of auditory sensitivity, to ultrasonic, above the level of human auditory sensitivity. The intensity of all sounds are of concern to me. ***Because I can't hear the frequency at which a sound occurs is not evidence that there isn't any detriment from it.*** We can't see ultraviolet radiation or gamma radiation because they exist beyond our capability to sense them. We are, however very much aware of the physical damage they cause. So it is with sound. The infrasonic impact of the noise event is highly significant.

Take a walk through the Day Square area of East Boston. When a jet aircraft takes off, you are standing below the flight path. The noise that you hear will prevent you from conversing with people you meet on the street. The infrasonic sound has enough power to move parked cars; and motion-sensitive theft alarm systems will be activated. Even if the audible noise were reduced, the power of the infrasonic sound produce by the aircraft in flight would still move the cars and create a collateral impact of audible noise. The alarms continue for 60 to 90 seconds before the automatically reset. Guess what?? In another 90 seconds another jet will take off and this rude and cacophonous event recurs. An increase in aircraft operations will cause an increase in the frequency of the collateral noise events that are now occurring throughout the area. This type of collateral impact on the environment is directly related, not coincidental, and cannot be overlooked as it has thus far. It is also important to acknowledge that just like radiation that we cannot see, sounds we cannot hear can cause humans physical harm. ***Infrasonic frequencies can cause motion and irritation to internal body organs. Infrasonic frequencies can also cause damage to buildings and structures.***

There has been no fair consideration given to the impact on the environment regarding the social injustice of sound abatement programs offered by Massport due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications. 248.6

Window replacement and sound proofing programs are a foolish waste of funds. These programs are socially irresponsible activities that turn citizens into nothing more than prisoners in their homes. An increase in capacity at Logan will render city street, parks, squares, and residential backyard unusable. Community will whither and die; and vacant neighborhoods are a fertile environment for crime.

There has been no fair consideration given to the impact on the environment regarding the economic hardship caused by concentration of activity due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications, as compared to a regional air transportation solution. 248.7

In my opinion the airside improvement project is a mistake that will lead to major economic problems in the future. The recent trends in true urban revitalization that are comprised of a balance of commercial projects and of an increase in urban residency, will halt. The next generation of commercial aircraft is not appropriate for an airport that is situated in a highly populated, residential area of any city. Logan International Airport is simply not able to continue to grow beyond it's current capacity. This airport should be considered fully matured as an operational entity. Acting to enable an increase in capacity of an already over-burdened airport in a fragile, historic Boston neighborhood would be thoughtless and short-sighted. Capital improvements of this nature are not even a Band-Aid solution to the transportation challenges of the future. It is surprising that they would even be considered.

Another airport is required to share the staggering increase of air traffic in the future. Few world class cities operate with only one airport. Paris has four, New York City and Washington, D.C. are served by three. For the New England region and Boston to remain prominent and prosper in the global economy over the next fifty years requires that we all accept the fact that a new, world class regional airport is required. In the near future other means should be implemented to alleviate the over capacity at Logan; expansions of commercial passenger operations at Worcester and Hanscom Field, relocation of cargo operations to Hanscom Field, and Peak-Hour pricing.

Thank you for taking the time to consider my thoughts on these issues. Please contact me if you have any questions about this letter.

Sincerely,

Mark W. Stettler

Cathryn C. Stettler

4 Wilbur Court, #1
East Boston, MA 02128

617-443-0400
mws@cidassoc.com

617-561-6307
catmws@erols.com

attachment:

graphic comparison showing the size relationship of familiar items to NLA.

Letter 248
Mark W. Stettler
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
248.1	Alternatives	Operational Restrictions	There has been no fair consideration given to the impact on the environment due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years. Consequently, the NLA was not included in the Future Fleet scenarios.
248.2	Air Quality	Impacts	There has been no fair consideration given to the impact on the environment regarding air and water pollution due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years. Consequently, the NLA was not included in the Future Fleet scenarios. Refer to response to Comment 248.1.
248.3	Ground Transportation	Access to Logan	There has been no fair consideration given to the impact on the environment regarding the physical infrastructure of the City of Boston due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	Refer to response to Comment 248.1.
248.4	Alternatives	Reduced Minima	There has been no fair consideration given to the impact on the environment regarding the safety and welfare of the affected communities due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	The Airside Project analysis is based on alternative 20-year forecasts of operations by aircraft type. Only larger aircraft compatible with the existing facilities at Logan Airport are included in the future forecasts for Logan Airport fleets on which the delay and environmental analyses are based.

Code	Topic 1	Topic 2	Comment	Response
248.5	Noise	Impacts	There has been no fair consideration given to the impact on the environment regarding the increase of infrasonic sound due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	Refer to response to Comment 248.1.
248.6	Noise	Soundproofing	There has been no fair consideration given to the impact on the environment regarding the social injustice of sound abatement programs offered by Massport due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications.	Refer to response to Comment 248.1.
248.7	Regional Transportation	Regional Airports	There has been no fair consideration given to the impact on the environment regarding the economic hardship caused by concentration of activity due to the increased capacity of the airport and the ability of the airport to facilitate the use of New Larger Aircraft (NLA) subsequent to the proposed modifications, as compared to a regional air transportation solution.	Refer to response to Comment 248.1.

LETTER 249

April 12, 1999

Mr. Robert Durand Secretary
Of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No 10458
100 Cambridge Street, 20th Floor
Boston, MA 02202

Gentlemen:

RE: "Draft - Environmental Impact Report #10458" Logan Airside Improvement Plan".

This letter is to reaffirm, without qualification, my opposition to the proposed construction of Runway 14/32 and the Centerfield Taxiway at Logan Airport; there are far too many unanswered questions to allow the runways to be built.

I am opposed to this construction for the following reasons:

- more danger due to increased air traffic
- Harbor Island recreational areas will suffer significant noise impact
- no significant decrease in congestion or delays
- a decrease in property values in the impacted communities

After a few modest reductions in the near term, flights and noise will increase for all

The Draft EIS/EIR is Inadequate and request that it is judge so for the following reasons

- Outdated studies and figures were used
- FAA modeling not adhered to
- Lack of alternative studies, i.e. Hanscom, second airport

249.1

All people who live and work in the impacted communities are entitled to " Environmental Justice, protection of their 'Quality of Life" it should not be jeopardized by Massport's proposal. The citizens who reside in the impacted communities currently experience traffic congestion, noise, and a polluted environment, from the planes; automobiles, trucks, busses and other Massport related operations. Health studies have cited increased cases of asthma, breathing problems, and other health problems as a result of the pollution and noise in the impacted communities. If the proposed construction of Runway 14/32 and the Centerfield Taxiway are allowed to be built it will only exacerbate the existing problems we currently endure. The construction of the new runways at Logan Airport does nothing to enhance the quality of the environment, and in truth potentially has the ability to be very destructive.

249.2

My health and the health or the other people who live in the impacted communities are to precious to be jeopardized by Massport's further expansion into our community.

Massport states that the runway will be uni-directional and the planes will fly out over the water.

If the planes fly over the water and an there is an east wind blowing it will cause the fumes to blow back into the communities, rumbling sounds from the planes will bounce off the buildings and impact the communities in a negative way. The FAA web site states that the plan is to construct a new runway 14/32 and extend runways 15-R/33-L and runway 9. There are three runways involved. The FAA would have the final say about what directions for takeoff and landing. 249.3

The Commonwealth must create a comprehensive plan and no further expansion of Logan can be allowed. Please support the impacted community's position and deny MPA " Logan Airside Improvement Plan". 249.4

Sincerely, Clarene Stevens

Address: 12 Seaver St E Boston
apt # 11
02128

Letter 249
Charlene Stevens
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
249.1	Environmental Review Process	MEPA	The Draft EIS/EIR is inadequate and request that it is judged so for the following reasons: ■ Outdated studies and figures were used ■ FAA modeling not adhered to ■ Lack of alternative studies, i.e., Hanscom, second airport.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. Consistent with the request made by the EOEA in its Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and provide context to the delay problem at Logan Airport. The High and Low Fleet scenarios for 37.5 and 45 million passengers represent a range of possible future activity—both levels and fleet mix—at Logan Airport. A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

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Code	Topic 1	Topic 2	Comment	Response
249.2	Alternatives	Runway 14/32	If the proposed construction of Runway 14/32 and the Centerfield Taxiway are allowed to be built, it will only exacerbate the existing problems we currently endure.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.
249.3	Noise	Impacts	[Even putting more traffic over the harbor would result in air quality, noise and vibration impacts to adjacent communities.]	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR. Noise-induced vibration levels from aircraft, though they may cause rattling, are normally less than footfalls produced by people walking through their own homes.
249.4	Alternatives	Runway 14/32	[Despite Massport's stated intentions, the FAA alone has the authority to designate flight paths and directions for take-off and landing.]	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

LETTER 250

Lauri Webster
192 Gladstone Street
East Boston, MA 02128

April 22, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street 20th floor
Boston, MA 02202
RE: Logan Airside Improvement Project

Dear Secretary Durand:

I have always lived in comfortable middle class communities that had great relationships with their community or regional airports. There is always a reason to feel upbeat about these airports-- aviation exhibitions, balloon festivals, glider rides, flying lessons. Airports are the place you go to catch a vacation flight to Florida, or Colorado or France. I love vacations. Airports are also the place you go to catch flights for business trips. I hate business trips. Good for Business, bad for me. And I want to tell you living near an international airport is not so pleasant either, I am afraid.

As I began reading the EIR/EIS, I started compiling my comments and soon realized they would amount to volumes - something too long for me - a wife, a mother and full time professional to research and organize in 60 days. **What I was most struck by, however, was the inability of the data to adequately portray what the impacts of airport operations are really like.** So, I thought I would introduce you to what its like to live near Logan in layman's terms. Let me start by saying that I am shocked that Massport operations have been allowed to reach the level they have... in this country where we possess a certain environmental awareness and environmental laws.

The blast of the engines crescendos to 95 decibels every 90 seconds as each plane takes off. The screeching and squealing make me clench my teeth. Each plane thunders down the runway, shaking the windows in the house, vibrating china in the closet and tilting pictures on the wall. Sometimes this noise goes on for days-- sometimes weeks-- <u>without a break</u>. The noise wakes us up early in the morning and pounds away while we get ready for work. Every night, it destroys the peace when we come home from a long day. It continues until long after 11 PM, preventing us from going to sleep, and more often than reasonable, blasts us out of a sound sleep in the middle of the night. According to Massport's maps, we live *outside the 65 decibel contour.*

We are impacted in this way all during the warmer months when the wind blows from the south. Forget having a cookout on the deck on a sunny afternoon. Its too

uncomfortable to stand out there over the grill. Forget tending a garden. Normal conversation is impossible, even inside the house! Telephone conversations are interrupted, with the other party inquiring, "What is that noise?" There is no relief in listening to music or watching TV because one has to turn up the volume up too high. It makes me irritable and I snap at my three year old. Sometimes, on Sunday nights, my husband and I pack up and *leave* the house just because we can't take the noise anymore!!!

The smell of jet fuel knows no boundaries either. It hits me in the face when I get of the train coming home from work. It follows me up the hill. It is really disappointing when the odor permeates my home. Sometimes, I cannot get away from the smell even by putting my head under my pillow. It is heavenly when the wind blows in a different direction and the smell of the sea cleanses the neighborhood.

Sometimes when the wind comes from a different direction, it just sounds like a hurricane outside. When the wind changes again and peace returns to my neighborhood, it is delightful. Unfortunately, I know the planes are torturing friends in other neighborhoods and surrounding cities and towns. Though the season or time of day may vary, these impacts are experienced by people in every East Boston neighborhood (33,000 people live in East Boston). I know friends in parts of Revere, Winthrop, South Boston and Chelsea that have similar experiences. These neighborhoods of Boston and surrounding towns and cities are ***home*** to more than **120,000 people.**

Then there are the more insidious impacts - things that are harder to prove... effects that take longer to show up or are harder to quantify. Someone told me that there are 70 pounds of particulates released into the air with every take-off and landing. Is this true? Where do the particulates land besides on my window sills and on my clean laundry, which I hang out to dry? How far are they dispersed? What is their impact on our health? Since I have lived in East Boston, I have heard residents wonder out loud about the impact of Logan operations on their health and the health of family and friends. Here is a sample of questions I have heard: Why is there an abnormally high rate of cancer among the older men who belong to the boat club at the end of the runway? Is childhood asthma on the rise in the Town of Winthrop? Is there is cluster of people with neurological disorders in East Boston? Is there a high rate of miscarriage among young women who live and work in East Boston? Is it true that children in flight paths have more difficulties learning? 250.1

How do we quantify the cost of ill health and ignorance? Shouldn' t all this be part of the equation? The report emphasizes over and over the costs to business that the proposed project will alleviate. But what about the costs to our quality of life? Who is going to compensate me for the time I sit in airport related traffic in my own community? How will I be compensated for all the times I cannot go outside to tend to my garden? Who is going to pay me for every day of every year that my property is further devalued by increased airport activity? How can people who 250.2

complain about the poor and working classes being a drag on our nation act to handicap them further? As you can see, I am completely disgusted with Logan International Airport.

Let me try and summarize the rest of my comments on the report:

• Massport and the FAA should be required to lay out for discussion and analysis in detail every computer modeling program referenced, including all assumptions and line by line listing of the individual computer programming commands. Massport has found errors/deficiencies in other computer models before (i.e. how noise travels over water, the "hill" effect...). 250.3

• Massport and the FAA should be required to submit maps that adequately portray the population densities affected by its current and proposed operations. In this report they have manipulated the scale of the maps and the information provided to support their argument, but not necessarily to reflect what really exists or will exist. 250.4

• Massport continually references how much traffic they are directing over the water, which at times makes the reader forget that the "water" is the Boston Harbor, a living resource that we are paying great sums to clean up. We are also trying very hard to establish the Boston Harbor Islands National Park. The impacts to the Harbor should be better quantified. What will be the impact of increased pollution on the eel grass or the harbor seals that have returned to the Harbor. Will the Snowy Owls continue to come? 250.5

• Similarly, Massport's continuous references to how much traffic they are directing over the water belies the fact that taking off over the "water" means that screaming jet engines are both near and facing neighborhoods. Being "behind" blasting engines is as bad as being buzzed by them. This should be fully analyzed. 250.6

• Massport should be required to address impacts to surrounding parks, including Belle Isle Marsh, Piers Park, Memorial Stadium and other smaller East Boston Parks as well as the parks in Winthrop that are in direct flight paths. 250.7

I thank you for your time in considering these comments. I wish I could feel good about our airport and this expansion project, but I do not. I happen to believe that air travel is still in its infancy... that everything about it is going to get bigger and faster, and there is going to be more of it. It seems like we ought to be defining some boundaries and setting some limits. One region can only take so much.

Sincerely,

Lauri Webster

Lauri Webster

cc Arthur Pugsley

Letter 250
Lauri Webster
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
250.1	Air Quality	Impacts	Someone told me that there are 70 pounds of particulates released into the air with every take-off and landing. Is this true? Where do the particulates land besides on my window sills and on my clean laundry, which I hang out to dry? How far are they dispersed? What is their impact on our health?	The Preferred Alternative will neither incorporate land from nor affect the normal activity or aesthetic value of a public park, recreation area, wildlife refuge, or historic site. In addition, Massport prepares the *Logan Airport Annual Update* and the *EDRs* as part of the review process for the Logan Airport GEIR/ESPR, which presents a series of status updates on conditions and environmental mitigation initiatives at Logan Airport. Massport has carefully planned the airside improvements to reduce delays and improve efficiency without the need for harbor intrusion. Stormwater management will employ Best Management Practices to minimize potential adverse impacts to harbor water quality. No adverse impacts to the Harbor, the Harbor Islands or the surrounding areas are anticipated from this project. Massport employs a GIS mapping system to correlate air quality and odor complaints with meteorology, airport use, and other factors. The soot sampling and monitoring programs indicate that Logan Airport is a very small (*i.e.*, less than one percent) contributor. In addition, the NAAQS serve as an indicator of the acceptability of current pollutant concentrations since these standards were designed to protect human health and welfare. Dispersion modeling indicates no violations of the NAAQS.
250.2	Public Health	Effects	How do we quantify the cost of ill health and ignorance? Shouldn't all this be part of the equation? The report emphasizes over and over the costs to business that the proposed project will alleviate. But what about the costs to our quality of life?	In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.*
250.3	Analysis Assumptions/ Methodologies	Passenger Forecasts	Massport and the FAA should be required to lay out for discussion and analysis in detail every computer modeling program referenced, including all assumptions	All operational and environmental models used in the Airside analysis are approved for use in this EIS/EIR. The FLAPS, DELAYSIM, and Airport Machine models used for the operational analysis were reviewed and approved by the FAA and are discussed in Chapter 4 of the Supplemental Draft EIS/Final EIR. The noise analysis is based on the FAA approved INM model, which is discussed in Chapter 6. The air quality analysis is based on FAA, EPA, and MDEP models and guidelines, which are discussed in Chapter 6. Please refer to the technical appendices in the Draft EIS/Draft EIR and the Supplemental DEIS/FEIR for detailed modeling assumptions.

Code	Topic 1	Topic 2	Comment	Response
250.4	Environmental Justice	Demographic Data	Massport and the FAA should be required to submit maps that adequately portray the population densities affected by its current and proposed operations. In this report they have manipulated the scale of the maps and the information provided to support their argument, but not necessarily to reflect what really exists or will exist.	The estimated population within the 65 dB and 60 dB DNL noise contours for the No Action and Preferred Alternatives is presented for each of the communities within the study area in Tables 6.8-3 through 6.8-8 of the Supplemental DEIS/FEIR. Figures 6.8-1 and 6.8-2 of the Supplemental DEIS/FEIR provide information on the distribution of median household income and minority populations within the study area.
250.5	Ecosystems	Wetlands	The impacts to the Harbor should be better quantified. What will be the impact of increased pollution on the eel grass or the harbor seals that have returned to the Harbor. Will the Snowy Owls continue to come?	No work is proposed in Boston Harbor.
250.6	Noise	Runway Use	...Massport's continuous references to how much traffic they are directing over the water belies the fact that taking off over the "water" means that screaming jet engines are both near and facing neighborhoods. ... This should be fully analyzed.	The operations of Proposed Runway 14/32 would be over the water. The departures on Runway 14 would turn over the inner harbor and proceed out the harbor mouth, as do the departures on Runway 15R, the nighttime preferential runway. Similarly, the last several miles of the approach path to Runway 32 would be over water and largely uninhabited islands. When Runway 14/32 is in operation, it would reduce the noise exposure over populated communities.
250.7	Open Space/ Parkland	Section 4(f)	Massport should be required to address impacts to surrounding parks, including Belle Isle Marsh, Piers Park, Memorial Stadium and other smaller East Boston Parks as well as the parks in Winthrop that are in direct flight paths.	Monitoring of airborne soot levels in the vicinity of Logan Airport have shown that the airport is a very small (less than one percent) contributor to ambient levels. In addition, Nitrogen Oxides emissions associated with the Airside Project are lower, when compared to the No Action Alternative. Construction and operational controls will be implemented to ensure that any potential impacts to natural resources are minimized. In general, these will include a construction soil erosion and sediment control plan, a stormwater management plan and the use of Best Management Practices (BMPs) for daily airfield operations.

LETTER 251

225 Webster Street
East Boston, Mass.
April 21, 1999

Dear Mr. Pugsley,

This is a letter of opposition to the Airside Expansion proposal by the Mass. Port Authority the proposed new runway and the centerfield taxiway would have very adverse impacts on my neighborhood and adjoining neighborhoods.

The proposed new runway would cause three times the present take-offs on Runway 27. It would also triple the departures on Runway 33. The neighborhoods, cities and towns under and near these flight tracks already have

251.1 too much noise. To triple the noise exposure for these residential communities is not acceptable.

In my neighborhood, Jeffries Point, the noise microphone at Jeffries Yacht Club registers noise levels above 65 d.b. most days of the month. Yet the noise contours does not extend beyond the B.I.F. boundary of the

251.2 airport. Relying on the computer model to describe the noise exposure and impact on neighborhoods is not acceptable. Real measurement of noise via the microphone would give a more accurate description.

In my opinion this way of measuring the noise with a computer model is a flaw and distorts the noise experience of people impacted by
251.2 airport operations. A new study using the
(cont.) real noise readings to determine noise impacts is necessary.

Take-offs on a proposed new runway would impact Jeffries Point heavily. The take-off roar would increase the low-frequency noise very much. We in Jeffries Point already suffer a great deal from the take-offs on Runway 9. The taxiing noise and the extremely loud roar and rumble shake the very foundations of our homes and cause everyday living to be interrupted till the take-off is completed. But then, a minute later another take-off starts and causes the same impact and life disruption. These existing impacts must
251.3 be addressed and mitigated before the Port Authority thinks about any new expansion proposals.

The proposed centerfield taxiway would
251.4 cause more impacts of noise and pollution. More airplanes under power would be lined up between the 4/22's at the same time as other planes would be lined up on existing taxiways. In my opinion this would allow

a large increase in capacity for the airport. And the increase in noise and air pollution for the nearby neighborhoods of Orient Heights and Winthrop would be awful.

The state, the F.A.A., the E.P.A. and
251.5 any other agency involved in future planning for transportation must take a broader, regional look at transportation needs and solutions. Since the present proposal was done, several regional changes have begun to happen. The airport in Rhode Island, T.F. Green and the Manchester airport have begun new services which take passengers and operations away from Logan. In addition, Pease A.F.B. in New Hampshire has proposed new operations there. Also the new N.E. corridor rail service between Boston, New York and Washington will take passengers away from the airlines when the travel time is greatly reduced with higher speed trains.

In addition, airline delays have decreased since 1993. This delay reduction must be factored into the present situation. And management techniques such as peak hour pricing must be given a chance to

demonstrate the effectiveness at reducing delay before any expansion is approved for the airport. In fact the Chairman of the Board of Directors of the Port Authority agreed to do peak hour pricing as a delay reduction technique before considering airside expansion. But right after the November election for Governor the expansion proposal was taken off the shelf and the agreement was forgotten by the Chairman.

251.6 The Draft E-IR does not address health impacts from airport operations. In fact the neighborhoods in Boston have the highest asthma, emphysema and respiratory infection levels in the state. These conditions are aggravated by plane and car fumes.

251.7 Lowering of the minimums on landings will allow more aircraft to attempt landings in bad weather conditions. This, too, will impact close-in communities. The impact is not only in quantity of operations, but in safety issues as well. If a plane cannot land and attempts to abort, people are afraid that there is more potential for accidents near the airport. If, for instance, a plane cannot land and attempts to turn around and gain altitude quickly, people

are afraid that some planes won't be able to gain altitude fast enough to execute a missed approach and the plane will crash. This sentiment is heard often in the Bayswater St. area and in Belmont.

In the context of environmental justice, it is most unfair to concentrate the impacts and
251.8 burden of airline travel and airport expansion on the people in working class neighborhoods who already bear the burden of significant noise and air pollution. The current impacts must be mitigated by those responsible. And a more far reaching, regional planning approach to solving the transportation issues must be put in place.

Increasing the capacity and use of
251.9 underutilized airports, using peak hour pricing, siting a new airport, reducing the impacts of the present air traffic and creating a night curfew are all things that must be considered before considering an airside expansion project.

I must stress how important I believe it is that the FAA and the

Port Authority change the way they measure noise from aircraft on the ground and in the air. Our real life, daily experience must be taken into account. The actual measurements from the microphones are more descriptive of the impacts than the
251.10 computer models. More microphones need to be put out in the neighborhoods and cities and towns. The noise contours need to be redrawn to reflect the real noise effects.

To misrepresent the noise impacts on people is devious in my opinion. Agencies that use public money should not be in the business of misrepresenting the effects of their proposals. And they shouldn't be misrepresenting other technical data to make a case for their proposals. This is dishonest.

Martin Luther King Jr. said,
" There comes a time when people get tired of being plunged into the abyss of exploitation and nagging injustice."
I and all other people impacted by the environmental injustice of airport expansion are tired of being exploited. For this

and for all the reasons stated in this letter and in the technical comments from the Community Advisory Committee consultants, I ask that this draft E.I.R. be found inadequate.

Sincerely,

Mary Ellen Feld

Letter 251
Mary Ellen Welch
Private Citizens: East Boston

Code	Topic 1	Topic 2	Comment	Response
251.1	Noise	Impacts	The neighborhoods, cities and towns under and near these flight tracks already have too much noise. To triple the noise exposure for those residential communities is not acceptable.	The goals of the Airside Project are to reduce delay, increase airport efficiency, and reduce negative environmental impacts. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. Although safety is the first consideration of any proposed alternative at Logan Airport, this data were not relevant to the Airside Study. However, such questions can be answered by contacting the public affairs offices of the FAA or Massport.

Code	Topic 1	Topic 2	Comment	Response
251.2	Noise	Model	Relying on the computer model to describe the noise experience and impact on neighborhoods is not acceptable. Real measurement of noise via the microphone would give a more accurate description. ... A new study using the real noise readings to determine noise impacts is necessary.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights.
251.3	Noise	Impacts	The existing [noise and vibration] impacts must be addressed and mitigated before the Port Authority thinks about any new expansion proposals.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR. Noise-induced vibration levels from aircraft, though they may cause rattling, are normally less than footfalls produced by people walking through their own homes.
251.4	Alternatives	Taxiway Improvements	[The proposed centerfield taxiway would allow more planes to line up, waiting to take off, increasing capacity for the airport and causing an increase in air and noise pollution.]	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport will not increase noise levels. Aircraft will follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made will be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise. For example, reducing the Runway 22L decision height to 200 feet moves the maximum noise point to approximately 3,000 feet from touchdown which is further from populated areas in East Boston than the current maximum noise point. Although categorically excluded from NEPA review, modeling of the changes in runway availability from reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result were included in the Airside Project in compliance with an earlier agreement among Massport, the FAA and the City of Boston.

Code	Topic 1	Topic 2	Comment	Response
251.5	Regional Transportation	Regional Airports	The state and the FAA, the EPA and [the state agencies] for transportation must take a broader, regional look at transportation needs and solutions.	Massport has been engaged in cooperative regional planning with the FAA, regional airports, and state transportation agencies for a number of years. For example, in November 1999, Massport and Governor Cellucci sponsored a Regional Transportation Summit that involved the New England Governors, transportation officials, and business leaders. The summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives.
251.6	Public Health	Effects	The Draft EIS/R does not address health impact from airport operations.	In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.*
251.7	Alternatives	Reduced Approach Minima	Lowering of the minimums on landings will allow more aircraft to attempt landings in bad weather conditions. This, too, will impact close-in communities.	Reducing the current landing minimums for Runways 15R, 22L, and 27 at Logan Airport does not equate to a reduction in the existing levels of safety and doesn't change noise levels. Aircraft would follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach procedure would be initiated would be moved closer to the airport. Since missed approaches rarely occur, they have no discernible effect on the cumulative noise such as the Day-Night Sound Level (DNL), but are rather single aircraft events. The noise from a missed approach is at maximum value just after engine thrust has been increased for the climb-out. Reducing the Runway 22L decision height to 200 feet, for example, this maximum noise occurs approximately 3,000 feet from touchdown and further from populated areas in East Boston and Winthrop that is currently the case. Ideally, whenever possible, the lowest minimums are used to ensure the greatest availability of a runway during poor weather . Although normally categorically excluded from the NEPA review, the Airside Project study included modeling of changes in runway availability due to reductions in the approach minimums and an analysis of the potential impacts on community noise exposure that may result.

Code	Topic 1	Topic 2	Comment	Response
251.8	Environmental Justice	Impacts	...it is most unfair to concentrate the impacts and burden of airline travel and airport expansion on the people in working class neighborhoods who already bear the burden of significant noise and air pollution.	Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. The existing flight tracks at Logan Airport have been developed over a long period of time with community consultation and provide the best combination meeting both airport requirements and community needs. The redesign of existing flight tracks was not included as a part of the Airside Project. The only new tracks proposed in the Airside Project Draft EIS/EIR are for Runway 14/32 and are over water.
251.9	Regional Transportation	Regional Airports	Increasing the capacity and use of underutilized airports, using peak-hour pricing, siting a new airport, reducing the impacts of the present air traffic and creating a night curfew are all things that must be considered before considering an airside expansion project.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester Airport, T.F. Green/Providence Airport and Worcester Regional Airport, preclude the need for a second major airport. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8.7 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
251.10	Noise	Monitoring	...the actual measurements from the microphones are more descriptive of the impacts than the computer models. ... The noise contours need to be redrawn to reflect the real noise effects.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. Using results from a special study of Terrain Modeling analysis ("hill effects") in Orient Heights and Jeffries Point, Massport applied for and received approval to apply a correction to 1999 contours to account for increased levels in Orient Heights. Also, measurements can only report on the noise that is occurring, not on what may occur under a future scenario. Therefore, it is necessary to use the calculated contour methodology to examine noise from various future scenarios.

Olympia Mastrocola
26 Winthrop Street
Everett, MA 02149

LETTER 252

April 12, 1999

Robert Durand
Secretary of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Sir:

I strongly oppose the expansion of ***Runway 14/32*** and the ***Center Strip Taxiway***.

The noise from incoming planes has impacted my family's quality of life for years, (especially in summer months when trying to sit out in back yard, or having friends over for cookout, the noise is annoying), you only have to check up on the complaints I have made.

There are other ways to satisfy our region's transportation needs such as the utilization of other airports. 252.1

Sincerely,

Olympia Mastrocola

Olympia Mastrocola

Letter 252
Olympia Mastrocola
Private Citizens: Everett

Code	Topic 1	Topic 2	Comment	Response
252.1	Regional Transportation	Regional Airports	There are other ways to satisfy our region's transportation needs such as the utilization of other airports.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Dr. and Mrs. Robert F. Belknap
12 Ringbolt Road
Hingham, MA 02043

LETTER 253

April 17, 1999

Re: Opposed to Runway 14/32

Secretary of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley-EOEA. No.10
100 Cambridge St. 20th floor
Boston, MA 02205

Dear Mr. Secretary,

The agreements of 1987 between Massport and the Massachusetts Executive Office of Environmental Affairs were to limit growth at Logan in a way that would maintain impacts at or below 1987 levels. The current request for runway expansion violates this commitment and should be opposed by EOEA. 253.1

Very truly yours,

Dr. and Mrs. Robert F. Belknap

Dr. and Mrs. Robert F. Belknap

Letter 253
Dr. and Mrs. Robert F. Belknap
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
253.1	Environmental Review Process	MEPA	The agreements of 1987 between Massport and the Massachusetts Executive Office of Environmental Affairs were to limit growth at Logan in a way that would maintain impacts at or below 1987 levels. The current request for runway expansion violates this commitment and should be opposed by EOEA.	Massport disagrees. For all the alternatives, the Airside Project analysis determined that the noise-affected populations, in both 1999 and in future years, are well below the cumulative noise exposed populations that existed in 1987.

LETTER 254 The Townsend Hotel

April 19, 1999

Secretary of Environmental Affairs
MEPA office

Dear Secretary Bagsley:

I am writing to express vehement opposition to expanding Logan airport by building runway 14/32.

In my view, lifting the ban on Logan expansion will create new problems where none now exist. To begin with, Logan airport
254.1 will never be large enough or accessible enough to solve the region's transportation problems. Furthermore, Runway 14/32 would dramatically increase traffic over
254.2 Hingham and other south shore communities. In addition to the human aspects of noise pollution, disturbance of the

nesting patterns of the swans and other migratory waterfowl is inevitable & live on conservation land and these planes fly directly overhead in their approach to runway 32 currently Dramatically increasing this traffic will

254.3 damage the quality of life for all species in the planes' path.

Finally, there is a question of honesty on Massport's part. They have

254.4 stated in public that increased traffic to runway 14/32 would be over water. This is not true. Come to my house when the wind is right and the answer will be evident as to this question.

Sincerely,

Robert F. Belknap III
12 Ringbolt Rd (Belknap
Hingham MA 02043

Letter 254
Robert F. Belknap M.D.
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
254.1	Regional Transportation	Regional Airports	...Logan Airport will never be large enough or accessible enough to solve the region's transportation problems.	Developments at the regional airports and their impacts on Logan Airport are described in Sections 2.3 to Section 2.6 of the Supplemental DEIS/FEIR. Massport considers Logan Airport to be part of a regional system of airports that includes T.F. Green/Providence, Manchester, and Worcester Regional airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of these regional airports. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
254.2	Alternatives	Runway 14/32	...Runway 14/32 would dramatically increase traffic over Hingham and other South Shore communities.	The Supplemental DEIS/FEIR projects that the Preferred Alternative will promote runway use in a manner that is more consistent with annual PRAS goals. Total arrivals to Runway 33L and 32 would increase with construction of the Runway 14/32, but this arrival flight path is primarily over water. This runway operating direction is currently running well below the PRAS goal of 42.3 percent, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goal for Runway 33 arrivals. The PRAS goals were established based on a thorough public participation process in response to community noise concerns.
254.3	Ecosystems	Rare Species	...disturbance of the nesting patterns of the swans and other migratory waterfowl is inevitable...Dramatically increasing [air] traffic would damage the quality of life for all species in the planes' path.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.

Code	Topic 1	Topic 2	Comment	Response
254.4	Alternatives	Runway 14/32	They have stated in public that increased traffic to runway 14/32 would be over water. This is not true.	Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectlionality of Runway 14/32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. We anticipate that any state and federal approvals will also strictly reinforce the unidirectional limitations intended for Runway 14/32. The significant noise exposure from Runway 14/32 occurs over water in Boston Harbor. Even the Day-Night Sound Level 60 dB contour, which extends less than six miles from the runway, is over water. The DNL on the south shore of the harbor at 9 miles from the runway should be less, on the order of 55 dB, which was chosen by the United States EPA as the environmental noise level required to protect public health and welfare with an adequate margin of safety.

LETTER 255

17 Ringbolt Rd.
Hingham, MA. 02043
April 21, 1999

Secretary of Environmental Affairs
attn.: MEPA Office
Mr. Arthur Pugsley - EOEA No. 104
100 Cambridge St. 20th fl.
Boston, MA. 02205

Dear Secretary Pugsley,

We are opposed to the lifting of the ban on expansion of Logan Airport and to the construction of Runway 1432 for the following reasons:

1. Runway 1432 will not solve the problem of Logan's inadequacy as a site. 255.1

2. Regional solutions have not been given adequate consideration. For example, we find that door to door travel time from Hingham to T.F. Greene Airport in Rhode Island is about equal to that to Logan. 255.2

3. Runway 1432 would not be strictly over the water. We are located 9 miles from Logan directly in the glide path and already subject to excessive noise when Runway 33L is in use. 255.3

We request a delay of the construction of Runway 1432 until alternatives are adequately explored.

Sincerely,

Charles W. Berry
Susan B. Berry

Letter 255
Charles and Susan Berry
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
255.1	Alternatives	Runway 14/32	Runway 14/32 will not solve the problem of Logan's inadequacy as a site.	Logan Airport is currently one of the most delay-prone airports in the country, and Massport is striving to achieve the best performance possible from the existing airport site. The benefits of Runway 14/32 are significant: (1) it provides a third runway for operations during northwest winds; (2) it reduces total annual delay by 21 to 35 percent (Alt. 1A vs. Alt. 4); (3) it reduces delays during VFR conditions by 47 to 69 percent (Alt. 1A vs. Alt. 4); (4) it allows controllers to separate aircraft of differing size classes during northwest winds; and (5) it increases the controllers' ability to achieve PRAS goals.
255.2	Regional Transportation	Regional Airports	Regional solutions have not been given adequate consideration.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
255.3	Alternatives	Runway 14/32	Runway 14/32 would not be strictly over the water. We are located 9 miles from Logan, directly in the glide path and already subject to excessive noise when Runway 33L is in use.	The significant noise exposure from Runway 14/32 occurs over water in Boston Harbor. Even the Day-Night Sound Level 60 dB contour, which extends less than six miles from the runway, is over water. The DNL on the south shore of the harbor at 9 miles from the runway should be less, on the order of 55 dB, which was chosen by the United States EPA as the environmental noise level required to protect public health and welfare with an adequate margin of safety.

LETTER 256

JAMES B. CONROY
28 CROYDON RD.
HINGHAM, MASS. 02043

April 18, 1999

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10
100 Cambridge St
Boston, MA 02205

Dear Mr. Pugsley:

As 17-year residents of the Wompatuck End area of Hingham, my wife and children and I have endured a growing parade of air traffic nearly directly overhead, which began as a relatively modest concern but has steadily grown in recent years. The proposed new runway at Logan would dramatically increase that noise pollution, for the sake of expanding traffic at a transportation bottleneck that is already full.

Please record our strong opposition to this plan, on grounds of sight

256.1

fairness as well as sound environmental policy and urban planning. Higham and surrounding communities will be adversely impacted by the new runway to an extent that cannot be justified by the untenable arguments on the other side.

Sincerely,

Jane Long

Letter 256
James B. Conroy
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
256.1	Alternatives	Runway 14/32	The proposed new runway at Logan would dramatically increase that noise pollution, for the sake of expanding traffic at a transportation bottleneck that is already full.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.

LETTER 257

28 Croydon Road
Hingham, MA 02043
April 18, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10
100 Cambridge Street
20th Floor
Boston, MA. 02205

Dear Mr. Pugsley:

I don't believe I can adequately describe the complete sense of dismay I felt when I happened upon the diagram in the March 2, 1999, *Boston Globe,* showing the effect Runway 14/32 would have on the Town of Hingham. Prior to this, I was not even aware that Massport wanted to accommodate more flights into Logan. Really, it never even entered my mind that an expansion would even be considered, adding more traffic both in the air and on the ground to the mass of congestion we know as the City of Boston. At first, I believed the diagram must be in error. I thought that if Hingham were to be impacted by the runway, certainly the town would be made aware of the situation and state and federal studies would be done to assess its impact on our quality of life. So I allayed my fears until further articles in the *Globe* made it clear that indeed Hingham would be severely affected. Massport hadn't even considered the effects on Hingham. 257.1 257.2

Sometimes the noise is so bad here that indoor telephone conversations must be interrupted while a plane passes overhead. But, while certainly stressful, the knowledge that when the wind direction changes so will the flight path makes the noise tolerable. However, the proposed 150% increase in flights would result in fewer, if any, periods of quiet. 257.3

Please consider the significant impact on the quality of life in Hingham and other communities surrounding Logan and reject this proposal.

Sincerely,

Lynn Conroy

Lynn Conroy

Letter 257
Lynn Conroy
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
257.1	Alternatives	Demand	I was not aware that Massport wanted to accommodate more flights into Logan...[This expansion would add] more traffic both in the air and on the ground...	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
257.2	Environmental Review Process	Public process	I thought if Hingham were to be impacted by the runway...[they] would be made aware of the situation...Massport hadn't even considered the effects on Hingham.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.
257.3	Noise	Impacts	...while certainly stressful, the knowledge that when the wind direction changes so will the flight path makes the noise tolerable. However, the proposed 150% increase in flights would result in fewer, if any, periods of quiet.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.

LETTER 258

Edward H. D'Alelio
7 Ringbolt Road
Hingham, Massachusetts 02043

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10
100 Cambridge St., 20th floor
Boston, MA 02205

RE: Opposition to Runway 14/32

Dear Mr. Pugsley:

As a family resident of Ringbolt Farm in Hingham, I am strongly opposed to Runway 1432. The existing noise from aircraft is excessive on my family, beginning in earnest at 4:00 a.m. every morning. It is disruptive to my family, especially my young children who are awakened from sleep. 258.1

I am a frequent business traveler. I have observed no delays in my airline schedule and see no need for further airline expansion. If Massport wants to ease delays, they should expedite baggage retrieval. Logan is by far the worst-performing airport in the country on baggage retrieval. 258.2

Again, I strongly oppose further expansion of Runway 1432. It is unneeded, a costly waste of taxpayer money, and a serious aggravation in potential noise pollution.

Sincerely,

Edward H. D'Alelio

Letter 258
Edward H. D'Alelio
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
258.1	Noise	Nighttime Noise	The existing noise from aircraft is excessive on my family, beginning in earnest at 4:00 AM every morning. It is disruptive to my family, especially my young children who are awakened from sleep.	The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.8 and 6.2.9 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4.1 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
258.2	Purpose and Need	Delays	I am a frequent business traveler. I have observed no delays in my airline schedule and see no need for further airline expansion. If Massport wants to ease delays, they should expedite baggage retrieval. Logan is by far the worst-performing airport in the country on baggage retrieval.	You appear to have been extremely fortunate, but you may not have noticed that the airlines have actually modified their flight schedules to account for delays at Logan Airport. You may have noticed that some carriers now require you to be on board ten minutes before the published departure time.

LETTER 259

Massachusetts Environmental Protection Agency
Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202
April 21, 1999

RE: Logan Airport Indigestion

Dear Mr. Durand:

Massport utilized outdated studies and numbers in its current study. Further, FAA modeling guidelines were not adhered to by Massport. In addition, there was a lack of alternative studies in the report. Some of these involved the better use of regional airports such as Hanscom, study for a other alternate airports (see my comments below), and the greater use of regional rail transportation planning. 259.1 259.2

I have attended a public hearing held at the state's Transportation Building on April 6th, Wednesday evening, to discuss the addition of Runway 14/32 to Logan airport's already crowded runway system. The furtherance of "high technology" in eastern Massachusetts was consistently quoted as a desired objective of the proposed runway addition. Speaking as a currently registered professional engineer, I'm firmly in the camp of "high technology." I am also one of the individuals representing the seemingly parochial interests of Hingham—my town—and indirectly—the towns of Hull, Cohasset & Scituate. In regard to Runway 14/32—if it's turned on, it will produce a tremendous explosion of noise pollution over my town and surrounding towns. This increase will exacerbate the 60-second interval flights that already occur over our heads. 259.3

During the public hearing, "proponents" and "opponents" alternately spoke through a microphone to the assembled audience and media. It impressed me how seemingly automated were the lady and gentlemen "suits" who continually droned mantras about the "great benefits of the new 14/32 runway." Their two most constantly used expressions were "Greater Boston Area" and "high technology." What do these two expressions equate to most of citizens of eastern Massachusetts? Generally recognized by all—these expressions can be equated with areas radiating from within and without Route 495, the western reach of the Mass turnpike beyond Worcester, and Route 128. Surely there is a jest here! The sponsors of expansion for a irremediably boxed-in Logan airport area—a tiny kernel within a very large nut—cannot sincerely be considered to speak for outlying areas at distances by auto up to 1½ or more hours away! Yet Massport has, and will continue, to speak to this entire region unless they are checked.

Currently, tremendous political and economic power, an inertia if you will, is locked into a small-sized area called Logan airport by its Massport sponsors. I suggest that a regional authority much less parochial than Massport mandate the latter to divest itself of its centrist position, and instead begin to represent the greater region called "Massachusetts." After all, the "Mass..." in Massport means Massachusetts, doesn't it? Likewise, since we're considering "air"-planes, the "...Port" in Massport must refer to an "air"-port, which can be located anywhere on land, not just by the sea. 259.4

Why not go further and have a four-state authority representing Rhode Island, New Hampshire, Maine and Massachusetts? Massport could be eliminated altogether, at least in regard to "air" concerns. We really live in a relatively small region, most of the area of which could easily be tucked, with room to spare, into any of our western states. This regional authority could unbiasedly consider the former Hanscom air force base as a candidate for national and international flights. The same authority could explore existing airports–Greene in RI, Manchester in NH, and the Portland airport in ME–for a significant upgrade to national and international status.

Albert J. Engelhart P.E.
96 Martins Lane
Hingham MA 02043
781.749.7076

Albert J. Engelhart P.E.

Letter 259
Albert J. Engelhart
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
259.1	Analysis Assumptions/ Methodologies	Passenger Forecasts	Massport utilized outdated studies and numbers in its current study. Further, FAA modeling guidelines were not adhered to by Massport.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports, by addressing constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

Code	Topic 1	Topic 2	Comment	Response
259.2	Regional Transportation	Regional Airports/Passenger Rail	...[T]here was a lack of alternative studies in the [Draft EIS/EIR]...Some of these [alternatives] involved the better use of regional airports such as Hanscom, study for other alternate airports...and greater use of regional rail transportation planning.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
259.3	Alternatives	Runway 14/32	...Runway 14/32... will produce a tremendous explosion of noise pollution over my town and surrounding towns. This increase will exacerbate the 60-second interval flights that already occur over our heads.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.
259.4	Regional Transportation	Regional Airports	I suggest that a regional authority much less parochial than Massport ...[represent] Rhode Island, New Hampshire, Maine and Massachusetts...This regional authority could unbiasly consider the former Hanscom air force base as a candidate for national and international flights. The same authority could explore existing airports—Greene in RI, Manchester in NH, and the Portland airport in ME—for a significant upgrade to national and international status.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of this Supplemental DEIS/FEIR of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 260

April 14, 1999

Secretary of Environmental Affairs
ATTN: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10
100 Cambridge St., 20th floor
Boston, MA 02205

Dear Mr. Pugsley:

I oppose the proposed runway at Logan Airport which will more than double the flights over Hingham from 32,000-82,000 in two years. In addition, I'm concerned that there are no assurances of future limits on air traffic and its effect on Hingham — 32,000 flights is more than enough! 260.1

The issue of noise and air pollution is of tantamount importance. Please block the proposed runway.

Sincerely,

Robert R. Green
4 Spring Lane
Hingham, MA 02043

Letter 260
Robert R. Green
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
260.1	Alternatives	Runway 14/32	I oppose the proposed runway at Logan Airport which will more than double the flights over Hingham from 32,000-82,000 in two years...there are no assurances of future limits on air traffic and its effect on Hingham... The issue of noise and air pollution is of tantamount importance.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.

LETTER 261

HAROLD AND LORRAINE LINCOLN
5 RINGBOLT ROAD,
HINGHAM MA 02043
U.S.A.
TEL: (781) 740-1190 / FAX: (781) 740-8472
E-mail HGYL@AOL.com

20th April, 1999.

Secretary of Environmental Affairs,
Attention MEPA Office,
Mr. Arthur Pugsley - EOEA No. 10,
100 Cambridge Street 20th Floor
Boston MA 02205

Dear Sir,

We wish to record our opposition to the proposed new Runway 14/32 at Logan Airport. It is our view that the new runway will increase noise and air pollution significantly and lower the quality of life for the people of Hingham and many other areas. 261.1

It is our conclusion, having last week made use of T.F. Green Airport at Providence for the first time, that the solution to increased air traffic requirements for the Boston area is to develop and make greater use of other airports in the region. T.F.Green Airport is, for example, totally under utilised. 261.2

Yours sincerely,

Harold and Lorraine Lincoln

Letter 261
Harold and Lorraine Lincoln
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
261.1	Alternatives	Runway 14/32	...the new runway will increase noise and air pollution significantly and lower the quality of life for the people of Hingham and many other areas.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.
261.2	Regional Transportation	Regional Airports	...the solution to increased air traffic requirements for the Boston area is to develop and make grater use of other airports in the region. T.F. Green Airport is, for example, totally under utilized.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

LETTER 262

Adrienne F. Richardson
10 Ringbolt Road
Hingham, MA 02043

April 17, 1999

Re: Opposed to Runway 14/32

Secretary of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley-EOEA No.10
100 Cambridge St. 20th floor
Boston, MA 02205

Dear Mr. Secretary,

The work of the Logan Growth and Impact Study, begun in 1987 and the Second Airport Study are the future of air traffic in the Boston area. The current proposal to expand Logan Airport asks the EOEA to abandon past environmental agreements because regional solutions are difficult. 262.1

Massport regularly is quoted as saying that much of the traffic added under the 14/32 proposal will be "over water". This is misleading. These flights are over water for a short time and then over Hingham, Hull and Cohasset. 262.2

Please uphold the commitment to maintain Logan environmental impacts at or below 1987 levels.

Very truly yours,

Adrienne F. Richardson

Adrienne F. Richardson

Letter 262
Adrienne F. Richardson
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
262.1	Environmental Review Process	MEPA	The work of the Logan Growth and Impact Study, begun in 1987 and the Second Airport Study are the future of air traffic in the Boston area. The current proposal to expand Logan Airport asks the EOEA to abandon past environmental agreements because regional solutions are difficult...Please uphold the commitment to maintain Logan environmental impacts at or below 1987 levels.	Massport disagrees. The *Logan Airport 1999 ESPR* contains a detailed discussion of Massport's success in meeting its project-related mitigation commitments.
262.2	Alternatives	Runway 14/32	Massport regularly is quoted as saying that much of the traffic added under the 14/32 proposal will be "over water". This is misleading. These flights are over water for a short time and then over Hingham, Hull and Cohasset.	The operations of Proposed Runway 14/32 would be over the water. The departures on Runway 14 would turn over the inner harbor and proceed out the harbor mouth, as do the departures on Runway 15R, the nighttime preferential runway. Similarly, the last several miles of the approach path to Runway 32 would be over water and largely uninhabited islands. When Runway 14/32 is in operation, it would reduce the noise exposure over populated communities.

LETTER 263

April 19, 1999

Re: Opposed to Runway 14/32

Secretary of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley-EOEA No.10
100 Cambridge St. 20th floor
Boston, MA 02205

Dear Mr. Secretary,

I am writing in opposition to the Runway 14/32 expansion proposed at Logan Airport. The fact that the Boston area would continue to grow was given full consideration when airport expansion was banned. This necessary environmental action put Massport on notice that future expansion would have to be part of a regional plan. None of the problems being touted by Massport today, including flight delays, are new. They should serve to illustrate Massport's failure to deal effectively with regional solutions. All such problems were considered, none were found to be more compelling than the environmental need to ban expansion. 263.1

Environmental protection, by its very nature, must avoid the shortsighted thinking that brings this type of temporary relief to your office. Please oppose 14/32 or any Logan expansion.

Very truly yours,

John E. Richardson

Letter 263
John E. Richardson
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
263.1	Regional Transportation	Regional Airports	The fact that the Boston area would continue to grow was given full consideration when airport expansion was banned [putting]...Massport on notice that future expansion would have to be part of a regional plan. ...the problems...today, including flight delays,...were considered, none were found to be more compelling than the environmental need to ban expansion.	The Preferred Alternative is a delay reduction program that promotes the efficiency and safety of airfield operations at Logan Airport. Runway14/32 enhances operating efficiency by providing a third available runway in weather conditions that require northwest-southeast operations. Similar three-runway configurations exist for all other operating directions. Runway 14/32 would not expand the overall capacity of the airport, since Logan Airport's normal operating capacity of 120 operations per hour, which is available approximately 80 percent of the year, is maintained with Runway 14/32. Massport is committed to ensuring that the airfield continues to function as efficiently as possible. The Preferred Alternative achieves this goal responsibly.

15 Seal Cove Rd.
Hingham, MA 02043
April 19, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley EOEA No. 10
100 Cambridge St. 20th Floor
Boston, MA 02205

LETTER 264

Re: Proposed runway expansion Logan

Dear Sir:

I do not work for Massport, the government or the airlines. I have never been connected in any way with them. However, I have lived for twenty-seven years on World's End in Hingham, directly under the approach into Runway 33 at Logan. I recently received a flyer asking me to protest the runway expansion because of the projected noise and air pollution.

I do not see the problem. While I can sit outside and watch the airplanes on their approach path, they are so powered back that one must focus to hear them. As I understand it, the proposed runway is for even smaller aircraft than the big jets currently going overhead. Doubling or tripling the aircraft would not increase the intensity of the noise, only the frequency. When the noise only rarely intrudes into my awareness, I do not see it as a problem. Departures seem to be vectored over the open water so that their noise even more rarely makes it into my awareness. 264.1

The easiest solution has probably already been done, namely, determination of actual sound levels by monitors on the ground. I suspect the dB level is quite low. 264.2

Sincerely,

Elliott Schiffman

Letter 264
Elliott Schiffman
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
264.1	Noise	Runway 14/32	I do not see the problem with the runway expansion...Doubling or tripling the aircraft would not increase the intensity of the noise, only the frequency...I do not see it as a problem.	Comment noted.
264.2	Noise	Monitoring	The easiest solution [is]...determination of actual sound levels by monitors on the ground. I suspect the dB level is quite low.	Comment noted.

LETTER 265

Stephen K. Thress
8 Weir Street Ext.
Hingham, MA 02043

April 20, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley- EOEA No. 10
100 Cambridge Street
20th Floor
Boston, MA 02205

Dear Sir:

I am writing to express my opposition to Massport's proposal to build runway 1432 which we were told is being built in order to ease airline congestion and reduce delays.

This proposal, at best, is a short term fix and does not in any way address the more important long term issue of creating efficient air travel for the New England area. If this is in fact only a short term solution why have I have not seen any alternative proposals? As a first step, I am perplexed why Massport has not significantly increased landing fees to push non-commercial traffic to alternative sites to make room for more passenger carriers. What about other regional solutions? 265.1 265.2

The noise and pollution we already endure is at a critical stage and the increase in air traffic as a result of this runway will significantly reduce the quality of life and safety for the thousands of residents who reside near Logan. 265.3 265.4

What we need is a long term plan that provides the citizens of this Commonwealth a first class airline transportation system. This "band-aid" approach will not cut it!

Sincerely yours,

S. K. Thress

Stephen K. Thress

Letter 265
Stephen K. Thress
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
265.1	Alternatives	Runway 14/32	...[Runway 14/32] is a short term fix and does not in any way address the more important long term issue of creating efficient air travel for the New England area.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
265.2	Alternatives	Other Non-Construction Alternatives	...why [has] Massport...not significantly increased landing fees to push non-commercial traffic to alternative sites to make room for more passenger carriers.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program
265.3	Regional Transportation	Regional Airports	What about other regional solutions?	Refer to response to Comment 265.1.

Code	Topic 1	Topic 2	Comment	Response
265.4	Noise, Air Quality	Impacts	...the increase in air traffic as a result of this runway will significantly reduce the quality of life and safety for the thousands of residents who reside near Logan.	Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport.

LETTER 266

OPPOSED TO RUNWAY 14/32

April 17, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley EOEA No. 10
100 Cambridge St 20th floor
Boston, Ma. 02205

Dear Mr. Pugsley:

The plan to develop Runway 14/32 is unacceptable to us in Hingham.

My neighbors and I have made repeated calls complaining about incoming flights under the glide path and the high volume of flights over us when runway 33 is in use. 266.1

To add 26,000 more incoming flight which would be over Hingham would be unacceptable.

We are opposed to the Runway 14/32 plan and believe the time has come to start using regional airports. 266.2

Sincerely,

Bradford S. Tripp
Jane L Tripp
9 Ringbolt Rd.
Hingham, Ma. 02043

Letter 266
Bradford S. Tripp and Jane L. Tripp
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
266.1	Alternatives	Runway 14/32	...[Concerned about] incoming flights under the glide path and the high volume of flights over us when Runway 33 is in use; adding...26,000 more incoming flights [with Runway 14/32] which would be over Hingham would be unacceptable.	Hingham is not directly under the approach path for Runway 33. There is no evidence to suggest that the levels of environmental noise generated by Logan Airport are a health risk to residents. This is especially true in Hingham where DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.
266.2	Regional Transportation	Regional Airports	...the time has come to start using regional airports.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 267

Mr. Robert A. Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street - Rm 2000
Boston, MA 02202

March-April 1999

Dear Mr. Durand,

I urge you to oppose Runway 14/32, which has very little to do with delay reduction and everything to do with expansion of capacity at Logan. According to Massport's MEPA EIS report, the runway would reduce delays only 20% of the time and would be effective only until the year 2003, when delays at Logan will be *at or above* today's levels. This short-sighted, ineffective proposal cannot justify the permanent environmental damage it will cause residents throughout Greater Boston. Please work with local residents to ensure that the present court injunction against 14/32, placed there to protect us from dangerous environmental impacts, remains in place. 267.1

Residents of Boston and surrounding areas *who already bear an unfair portion* of the noise, air pollution and auto traffic caused by Logan will be permanently impacted with triple the amount of planes passing over our homes, if 14/32 is built. We need airport RELIEF, not additional negative impacts! Massport's present noise contour lines (used to determine sound proofing qualification) have not been updated to reflect the actual noise levels suffered by abutting communities. Noisy night flights at Logan have increased dramatically, violating Massport's previous agreement to voluntarily limit night flights. 267.2 267.3 267.4

Massport should direct significantly more flights to Hanscom Airport located just 25 minutes from Boston and presently utilized at *only a third of its capacity*. Hanscom presently has the runway capacity to handle commercial commuter planes. Massport could redesignate Hanscom as a commercial commuter airport instead of an elitist "small corporate jet" airport, as it is now designated. By increasing air traffic at Hanscom, Worcester, Manchester and Providence to the maximum capacity possible, Massport can avoid future delays at Logan AND allow Boston residents to maintain some semblance of a healthy quality of life. Another alternative which Massport must implement is Peak Hour Pricing, a demand management tool which is very successfully used in the hotel and tourism industry as well as the electric utility industry. For profit reasons, airlines prefer to increase capacity rather than manage demand, and will not voluntarily adopt Peak Hour Pricing unless forced to by public officials. 267.5 267.6 267.7

Massport misleads the public when it claims that Logan has "notorious delays." Since 1992, delays at Logan have gone down, according to data in the Federal Aviation Administration's 1998 ACE (Airport Enhancement Capacity) Report. The only reason that Massport claims that Logan has a "delay problem," is because Massport uses exceedingly high "maximum capacity" goals. Located in such a densely populated urban area, Massport's maximum capacity goals should be 90 rather than 120 planes per hour. Massport's EIS represents the interests of airlines and airport-related businesses, all of whom stand to make big profits if Logan's overall capacity is increased by runway 14/32. None of these groups care about the impact 14/32 will have on human beings, because few if any of them live in the impacted communities. 267.8 267.9

The EIS does not take into account health impacts (Boston's inner city neighborhoods already have the highest asthma, emphysema and respiratory infection levels in the State - conditions aggravated by plane and car fumes). Recent studies done by DPH also associate increased risk of brain tumors in communities abutting airport runways. The EIS does not take into consideration the environmental and quality of life issues of Boston's inner city residents, nor does it mention the devaluation of real estate prices for the thousands of homes under the flight paths. It also does not take into consideration the lost municipal tax revenues when families living in inner city neighborhoods are forced to leave the area because they can no longer stand the persistent and excessive plane noise and fumes. Please reject Massport's EIS, support the present court injunction against 14/32, and encourage Massport to seek alternative, responsible methods to handle projected air travel increases. 267.10 267.11 267.12

Sincerely,

Catherine Goldhammer
135 Martine La.
Hingham. MA 02043

Letter 267
Catherine Goldhammer, Alice Granahan, Mary Furlong, Mike Furlong, Bridget Marganelli, John Tardif, and William Falcetano
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
267.1	Purpose and Need	Airfield Capacity	I urge you to oppose Runway 14/32, which has very little to do with delay reduction and everything to do with expansion of capacity at Logan. According to Massport's MEPA EIS report, the runway would reduce delays only 20% of the time and would be effective only until the year 2003, when delays at Logan will be *at or above* today's levels.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
267.2	Alternatives	Runway 14/32	Residents of Boston and surrounding areas *who already bear an unfair portion* of the noise, air pollution and auto traffic caused by Logan will be permanently impacted with triple the amount of planes passing over our homes if 14/32 is built.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
267.3	Noise	Sound Insulation	Massport's present noise contour lines (used to determine soundproofing qualification) have not been updated to reflect the actual noise levels suffered by abutting communities.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
267.4	Noise	Nighttime Noise	Noisy night flights at Logan have increased dramatically, violating Massport's previous agreement to voluntarily limit night flights.	Table 6.2-17 of the Supplemental DEIS/FEIR shows nighttime jet operations projected to increase from 144 in 1998, to as many as 231 under the No Action Alternative with the 2015 High Regional Jet Fleet. However, regardless of the fleet, many of the future night operations are the result of delays that will occur as demand at Logan Airport continues to increase. One of the direct benefits of the Preferred Alternative is that it will reduce these night operations by 32 to 43 flights depending on the fleet forecast, though *any* alternative to the No-Action scenario will help alleviate some of the projected delays. In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.

Code	Topic 1	Topic 2	Comment	Response
267.5	Regional Transportation	Regional Airports	Massport should direct significantly more flights to Hanscom Airport ... presently utilized at *only a third of its capacity.* Hanscom ... has the runway capacity to handle commercial commuter planes. Massport could redesignate Hanscom as a commercial commuter airport ...	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
267.6	Regional Transportation	Regional Airports	By increasing air traffic at Hanscom, Worcester, Manchester and Providence to the maximum capacity possible, Massport can avoid future delays at Logan AND allow Boston residents to maintain some semblance of a healthy quality of life.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Letter 267: Catherine Goldhammer, Alice Granahan, Mary Furlong, Mike Furlong, Bridget Marganelli, John Tardif, and William Falcetano
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
267.7	Alternatives	Peak Period Pricing	Another alternative which Massport must implement is Peak Hour Pricing ...	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program
267.8	Purpose and Need	Delay	Massport misleads the public when it claims that Logan has "notorious delays." Since 1992, delays at Logan have gone down, according to data in the Federal Aviation Administration" 1998 ACE (Airport Enhancement Capacity) Report.	Section 1.4 and Appendix C of the Supplemental DEIS/FEIR contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
267.9	Delay Model	Model	The only reason that Massport claims that Logan has a "delay problem," is because Massport uses exceedingly high "maximum capacity" goals. Located in such a densely populated urban area, Massport's maximum capacity goals should be 90 rather than 120 planes per hour.	Airfield capacity is a function of the runways in service, the fleet mix using them, prevailing weather conditions, and FAA air traffic control procedures. Massport cannot arbitrarily define the runway capacity or airline schedules. The highest capacity configuration at Logan Airport today for three runways in good weather is about 120 operations per hour.
267.10	Public Health	Effects	The EIS does not take into account health impacts (Boston's inner city neighborhoods already have the highest asthma, emphysema and respiratory infection levels in the state--conditions aggravated by plane and car fumes). Recent studies done by DPH also associate increased risk of brain tumors in communities abutting airport runways.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* The 1999 Massachusetts budget included $150,000 to fund an environmental assessment of the health impacts of Logan Airport on any community located within a five-mile radius of the airport. The final protocol for the study is being developed. The study is expected to be completed in summer 2002. Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
267.11	Cumulative Impacts	Socio-economic	The EIS does not take into consideration the environmental and quality of life issues of Boston's inner city residents, nor does it mention the devaluation of real estate prices for the thousands of homes under the flight paths.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative. Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures.
267.12	Cumulative Impacts	Socio-economic	[The EIS] also does not take into consideration the lost municipal tax revenues when families living in inner city neighborhoods are forced to leave the area because they can no longer stand the persistent and excessive plane noise and fumes.]	Comment noted.

LETTER 268

April 18, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10
100 Cambridge Street 20th Floor
Boston, MA 02205

Dear Mr. Pugsley:

I am writing to you to voice my opposition to Runway 1432. I feel that it will strongly impact the peace and quiet of my Hingham neighborhood and will negatively impact the quality of life that I now enjoy. 268.1

Stop runway 1432!

Sincerely,

James T. Norris
199 Wompatuck Road
Hingham, MA 02043

Letter 268
James T. Norris, Doris M. Hogan, Kathleen Fitzgerald
Private Citizens: Hingham

Code	Topic 1	Topic 2	Comment	Response
268.1	Alternatives	Runway 14/32	I am writing to you to voice my opposition to Runway 1432, [which]...will strongly impact the peace and quiet of my Hingham neighborhood and will negatively impact the quality of life that I now enjoy.	In Hingham DNL levels from Logan Airport overflights are on the order of 55 dB or less, some 20 dB below the highest exposure levels experienced by communities much closer to Logan Airport.

16 Milford St #3
Hull, MA 02045
April 8, 1999

LETTER 269

Dear Mr. Pugsley,

We are opposed to the runway expansion at Logan Airport. There are too many flights now without adding more. The noise will be unbearable. 269.1

It's time to find an alternative site for additional flights. This would ease the disturbance now caused to the surrounding communities in the flight paths. Let's explore reducing the number of flights rather than adding to the noise and air pollution. 269.2

Sincerely,

Nancy Grayton

Letter 269
Nancy Brayton
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
269.1	Alternatives	Runway 14/32	...opposed to the runway expansion at Logan Airport. There are too many flights now without adding more. The noise will be unbearable.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-11, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

Code	Topic 1	Topic 2	Comment	Response
269.2	Regional Transportation	Regional Airports	It's time to find an alternative site for additional flights.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

LETTER 270

Madeleine Carlson
39 Vautrinot Avenue
Hull, MA 02045

April 12, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street 20th Fl.
Boston, MA 02205

RE: Opposition to Proposed Logan Runway Expansion

Dear Mr. Pugsley:

I am a long-time Hull Village resident and realize that we have to bear our fair share of airplane traffic over our home, after all, we occasionally fly, too.

I feel we do already have our fair share and I urge you not to allow for any additional runway at Logan. Please!!! 270.1

Thank you for your consideration of this request.

Sincerely,

M. L. Carlson

Letter 270
Madeleine Carlson
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
270.1	Alternatives	Runway 14/32	I feel we ... already have our fair share [of airplane traffic over our home] and I urge you not to allow for any additional runway at Logan	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 271

Dear Mr. Pugsley,

I am a long time resident of Hull and enough is enough!

It is Sunday 6:00 A.M. and the planes are flying low and loud, Polluting the air and the ears.

Instead of building a new runway, wouldn't it be more economically and environmentally sound to I: have smaller planes pay higher fees during Peak hours to help ease airplane traffic and I: have shuttle buses that are centrally located to take people to Green R.I. and Manchester N.H. airports. More and more people want to use these airports why not make it easier for people to do so?

271.1

271.2

Sincerely
Corinne Case

Letter 271
Corinne Case
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
271.1	Alternatives	Peak Period Pricing	Instead of building a new runway...have smaller planes pay higher fees during peak hours to help ease airplane traffic....	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.
271.2	Ground Transportation	Access to Regional Airports	...have shuttle buses that are centrally located to take people to Green RI and Manchester NH airports.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

LETTER 272

Lory Newmyer and Steve Cooper
52 Highland Avenue
Hull, MA 02045

April 22, 1999

Secretary of Environmental Affairs
Attn: MEPA Office, Arthur Pugeley
EOEA 10458
100 Cambridge Street, 20th floor
Boston, MA 02205

Mr. Pugeley:

We are 20 year, home-owning residents of the town of Hull writing to express our strong opposition to the proposed new runway at Logan. The evidence of excellent, viable alternatives, compounded by the evidence of quantifiable duress, is incontrovertible. Please weight the well-being of the many as heavily as the pocket-books of the few, and without cynicism oppose this action. 272.1

Sincerely,

Lory Newmyer and Steve Cooper

Letter 272
Lory Newmyer and Steve Cooper
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
272.1	Alternatives	Other Non-Construction Alternatives	We...express our strong opposition to the proposed new runway at Logan. The evidence of excellent, viable alternatives, compounded by the evidence of quantifiable duress, is incontrovertible.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of options to Logan Airport. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Pauline DePari
1181 Nantasket Ave.
Hull, MA 02145

LETTER 273

April 14, 1999

Arthur Pugsley
MEPA Office
100 Cambridge Street – 20th floor
Boston, MA 02205

Dear Mr. Pugsley:

I'm writing to give my opposition to the proposed additional runway at Logan. I moved to Hull in 1991 and I was very surprised about the great number of airplanes flying over my home. I was even more surprised when the number has increased ever since then. Friends of mine who have been in planes that took off from Logan have later told me how close they flew over my house and that they looked for me on the front porch. I often still stop in the parking lot to look up at the planes and to very easily read their numbers. My porch faces Boston Light and is a wonderful location, except when planes fly over and all conversation has to stop because of the sound. The addition of another runway, which Mr. Blute has described as having planes "fly over the harbor", is not a reasonable expectation. He must have spent too much time in Central Mass because he doesn't know there are people and towns existing across the harbor.

The elected officials, community activists and citizens of Hull have united with Boston neighborhoods and other communities in strong opposition to the new runway/taxiway proposal being made by Massport. We are extremely upset that the Governor has changed his original position and is now officially endorsing the proposal. Our community leaders and citizens have been actively meeting with our state and federal government legislators to discuss our concerns regarding this specific proposal, as well as the core problem of dealing with the projections for significant increases in air traffic demand for the region.

273.1

I work in Boston everyday and am concerned about the entire Boston area as much as with Hull. Regardless of a new runway, and according to Massport's own projections, demand for passengers and aircraft to come to the area is expected to grow significantly, and flight delays are expected to soar. As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in extreme danger.

Please know that we support economic growth for Boston, the Commonwealth and New England. There are answers to the problem which could bring economic benefit outside of Boston, but trying to increase capacity at Logan is not the answer. Such a course would be severely detrimental to those of us who call the Boston area home and, ironically, to those visitors expected to fly here as well. Our health and safety are already at great risk. Our burden has increased each year. We cannot accept more!

There are serious questions regarding the adequacy, quality and reliability of information supplied by Massport. We ask you to understand that the health and quality of life of Boston area residents is threatened. We hope you agree that full input from all involved communities is essential before your office reaches any decisions that will impact so many Boston area residents.

Sincerely,

Pauline DePari

Letter 273
Pauline DePari
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
273.1	Alternatives	Runway 14/32	[Concerned with]...this specific proposal, as well as the core problem of dealing with the projections for significant increases in air traffic demand for the region. Regardless of a new runway, and according to Massport's own projections, demand for passengers and aircraft to come to the area is expected to grow significantly and flight delays are expected to soar...putting Boston, the Harbor and surrounding communities in extreme danger.	Anticipated future passenger and operations levels can be accommodated by Logan Airport without any airside improvements but not without delays and resulting adverse environmental impacts. The goals of the Airside Project are to reduce delays, increase the airport's efficiency and improve airfield safety in an environmentally responsible manner. Long-term aviation growth is a recognized worldwide condition, based on economic and demographic factors, and is not under Massport's control. Massport estimates that up to 7.3 million Logan Airport air passengers may be diverted to other modes/airports or eliminated through advances in telecommunications. This estimate is based on analyses of passenger origins/destinations and mode choice decisions conducted for other studies. While these alternatives can play a role in providing relief to Logan Airport, they do not eliminate the need for airside improvements.

79 Garden Street
Cambridge, Massachusetts
02138-1499
Phone: 617-495-2600
Fax: 617-495-5898

HARVARD UNIVERSITY PRESS

LETTER 274

April 13, 1999

Secretary of Environmental Affairs
ATTN: MEPA Office
Mr. Arthur Pugsley EOEA No. 10458
100 Cambridge St, 20th floor
Boston, MA 02205

Opposed to Runway 14/32

Dear Mr. Pugsley

As someone who's lived and worked in the greater Boston area my entire adult life, I dearly love this area and its resources. Please do NOT allow the area to be further polluted by the building of the unnecessary RUNWAY 14/32. I hope you will join your voice to those of us trying to preserve the area from further damage by increased air traffic overhead.

274.1

Sincerely,

David Jones, Asst. Production Manager & Hull resident

Letter 274
David Foss
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
274.1	Alternatives	Runway 14/32	Please do NOT allow the area to be further polluted by the building of the unnecessary Runway 14/32.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently. The emissions inventory and dispersion modeling indicate better air quality conditions with Runway 14/32 and the Centerfield Taxiway than with the No Action Alternative.

LETTER 275

April 5, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthut Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02205

Dear Mr. Pugsley,

We are opposed to the Runway 14/32 for the following reasons:

- Increased traffic and resulting noise 275.1
- Fear of catastrophic air collisions 275.2
- Time is now to look for another area for an airport, while the land is still available and within reach financially 275.3

Thank you for your consideration.

Sincerely,

Frank & Eileen Furey
50 Valley Beach Ave
Hull, Ma 02045

Letter 275
Frank and Eileen Furey
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
275.1	Noise	Impacts	[Oppose Runway 14/32 because of] increased traffic and resulting noise.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
275.2	Alternatives	Runway 14/32	[Oppose Runway 14/32 because of] fear of catastrophic air collisions.	The first goal of the FAA and Massport is always to provide safe air transportation. Logan Airport has a tightly controlled system of flight tracks and procedures to prevent aircraft accidents. Runway 14/32 and the other proposed Airside improvements are designed to enhance safety and efficiency of traffic operations in the air and on the ground. The runway will segregate smaller aircraft and reduce congestion during northwest wind conditions, reducing the possibility of mistakes and potential for accidents.
275.3	Regional Transportation	Regional Airports	[Oppose Runway 14/32 because of] time is now to look for another area for an airport, while the land is still available and within reach financially.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

LETTER 276

TO

THE SECRETARY OF ENVIRONMENTAL AFFAIRS

MEPA OFFICE

100 CAMBRIDGE ST 20TH FLOOR

BOSTON MA 02205

FROM DIANA GOODE

36 LST HULL MASS 02045

ATTENTION MR ARTHUR PUGSLEY. EOEA NO 10458

SIR

I PROTEST AND OPPOSE RUNWAY 14/32 276.1

APART FROM because of NOISE AND chemical POLLUTION HULL DOES HAVE 276.2

NESTING OSPREY ~~AND SOME~~ COMMON TERN

~~OCCASIONALLY~~ AND ARTIC TERN which occassionally are present in the

PLANES FLY LOW AND CIRCLE AT

MOST HOURS OF THE DAY. NOISE SHOULD NOT

BE INCREASED AND POSSIBLE CHEMICAL POLLUTION AVOID.

THANK YOU,

Diana Goode

Diana Goode

Letter 276
Diana Goode
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
276.1	Alternatives	Runway 14/32	I protest and oppose Runway 14/32...from noise pollution.	Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
276.2	Ecosystems	Rare Species	[Ms. Goode expresses concerns about the impact of Runway 14/32 on nesting osprey...common tern and arctic tern, which occasionally are present in Hull.] Hull has nesting osprey and some years common tern and occasionally an artic tern.	As evidenced by the extensive and varied bird population at Logan Airport, airport noise has not been found to be a significant deterrent to avian species. In fact, most airports find it necessary to manage the airfield in a manner to reduce the habitat attractiveness for birds. Furthermore, the addition of Runway 14/32 would not result in overflights to new areas in Hull. As such, the Preferred Alternative is not expected to have an adverse impact on osprey and tern populations in Hull.

LETTER 277

Mark P. Ingaciola
20 Newton Street
Hull, MA 02045

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street 20th Floor
Boston, MA 02205

Dear Mr. Pugsley,

I am writing to inform you that I am opposed to Massport's plan to expand Logan Airport and build a new runway - 14/32.

As a resident of Hull, I am well aware that the proposed runway at Logan will more than double the flights over Hull each year, seriously impeding upon the quality of life for the residents of Hull. I am asking you to please prevent Massport from lowering the quality of life in Hull, and to oppose the proposed expansion of Logan Airport. 277.1

Thank you for your attention to this matter.

Sincerely,

Mark P. Ingaciola

Letter 277
Mark P. Ingaciola
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
277.1	Cumulative Impacts	Runway 14/32	I am opposed to Massport's plan to expand Logan Airport and build a new runway - 14/32...the proposed runway at Logan will more than double the flights over Hull each year, seriously impeding upon the quality of life for the residents of Hull.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 278

Secretary of Environmental Affairs
Att: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge St.
20th Floor
Boston, MA 02205

March 30, 1999

Dear Sir:

I feel the need to express my opposition to the Logan Airport runway expansion. My husband and I are senior citizens. After owning a business in Boston for many years, we have retired and purchased a home in Hull. We fell in love with the sea views, and the quiet slower-paced approach to life which we found here.

278.1

Prior to moving here last summer, we had lived in the North End of Boston. But the noise and pollution from the destruction and construction in that area took away all the beauty of the waterfront.

It would be a shame to have the same noise and air pollution here which we feel will come from increased flights over Hull as a result of an added runway.

Very sincerely yours,

Marjorie Rilleau Kallman

Marjorie Rilleau Kallman
15 Spinnaker Hill Lane
Hull, MA 02045

Letter 278
Marjorie Rilleau Kallman
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
278.1	Noise	Runway 14/32	I...express my opposition to the Logan Airport runway expansion. It would be a shame to have the ...noise and air pollution here which we feel will come from increased flights over Hull as a result of an added runway.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 279

April 22, 1999

Stephen Lathrop
14 Western Avenue
Hull, Massachusetts 02045

DRAFT EIR
Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

Dear Mr. Silva:

Enclosed please find my reply to the Draft EIR for Massport's 14/32 runway project. I would like to note that the time allowed for comment was too short to permit much of what I would have liked to research. Given the complexity of the project, I think it's easy to see that 2 weeks is not a reasonable time to develop researched rebuttal arguments following hearings. The difficulty in my case was compounded by the fact that no copy of the EIR was available at the Hull Public Library, apparently because none was ever provided there by Massport. 279.1

Sincerely

Stephen Lathrop

COMMENTS OF STEPHEN LATHROP

ON

DRAFT EIR: EOAE NO. 10458

AND

DRAFT EIS: ANE-600

HULL GETS IT COMING AND GOING: THIS 747 WHICH FLEW NEARLY DIRECTLY ABOVE HULL HIGH SCHOOL AT ABOUT 1:00 PM ON APRIL 19, WAS THE LAST OF A STRING OF RUNWAY 33L ARRIVALS WHICH HAD BEEN DOING MORE OR LESS THE SAME THING SINCE BEFORE 6:00 AM. AIR CONTROLLERS AT LOGAN THEN SWITCHED TO RUNWAY 27 ARRIVALS, AND RUNWAY 22 DEPARTURES. THE RESULT IN HULL CAN BE SEEN IN THE PHOTO AT THE BACK OF THIS REPLY. LATER ON, CONTROLLERS SWITCHED BACK TO RUNWAY 33 ARRIVALS, AND THIS SCENE WAS REPEATED LONG INTO THE NIGHT. TO PERMIT ENOUGH VISUAL INFORMATION TO ESTABLISH THE LOCATION OF THIS SCENE, A WIDE ANGLE LENS WAS CHOSEN FOR THIS PHOTOGRAPH; ANOTHER EFFECT WAS TO MAKE THE AIRPLANE APPEAR MORE DISTANT THAN IT WOULD TO AN OBSERVER ON THE GROUND. THE RUNWAY 33L GLIDE SLOPE PUTS AIRPLANES IN THIS LOCATION AT AN ALTITUDE OF 1500 FEET OR LESS.

COMMENTS ON: EOEA #10458 AND ANE-600
LOGAN AIRSIDE IMPROVEMENTS PLANNING PROJECT
DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT
WITH PARTICULAR REFERENCE TO NOISE IMPACTS
IN THE VICINITY OF HULL, MASSACHUSETTS

OPENING COMMENT

A *Boston Globe* report (March 2, 1999), based on Massport's projected data, shows that if Massport's new runway is approved, approximately 82,540 airplanes per year will fly low over Pemberton Point in Hull, the site of Hull High School. Almost all of these airplanes will fly within 1700 feet of the High School, many closer than 1600 feet. These distances are measured upward from the school to the airplanes themselves, not to the paths of the airplanes projected on the ground. No airplane on any runway ever comes so close to the FAA control tower at Logan airport. Massport's Report presents tables which, taken together, seem to assert that under such conditions noise at Hull High School would then be equivalent to that experienced by residents of a "Small Town Cul-de-Sac." 279.2

SUMMARY OF COMMENTS

There are 5 principal objections to acceptance of the *Draft Environmental Impact Statement/Report* contained in this reply: (1) that the Report fails to study noise impacts in the vicinity of Hull, Massachusetts, even though such study is warranted and mandated; (2) that data presented in the report which appear to justify the exclusion of Hull from the study area are in fact incorrect and insufficiently documented, and that noise modeling methods used by Massport to exclude Hull from the study area are also incorrect and insufficiently documented; (3) that exclusion of Hull from the study area forecloses consideration of the harm which Massport's runway expansion plans might do to future noise abatement using new technology in the vicinity of Hull; (4) that operation of

the proposed runway is likely to cause shifts in air traffic patterns which will cause more airplanes to fly over Hull, but this possibility is not examined in the Report; (5) that the people of Hull have not been adequately notified of Massport's plans because no copy of the report has been delivered to the Hull Public Library.

SUMMARY OF OBJECTION 1: The *Draft Environmental Impact Statement/Report*, hereafter called the Report, is inadequate because it fails to study noise impacts in the vicinity of Hull, Massachusetts. There are compelling reasons to believe that Hull meets the criteria for study established by Massport and by Federal regulations. Accordingly, the Report should not be accepted as written.

Reasons to believe that Hull falls within the mandated study area are the following:

1. In *Volume IV* of the report, containing Technical Appendices L–O, numerous figures appear which place Hull on the very edge of the study area modeled by Massport as the area within the 60 dB DNL contour. This suggests that even small data or modeling errors, if corrected, might put Hull within the mandated study area.

279.3

2. Actual noise measurements at Hull High School, where Massport has for years maintained a noise monitoring station, contradict the Report's noise projections. The Report places Hull outside the 60 dB noise contour adopted by Massport as the threshold for environmental study. The historical measurements say Hull is already deeply within the contour, although it has yet to experience the increase in aircraft operations projected by the Report.

According to Massport data, noise measurements at Hull High School, after adjustment to remove exceptional noise events such as winter storms, exceeded 60dB in each of a sample of 24 summer months save one, and in all of a sample of 23 winter months without exception. The monthly measurements were for the summer months June, July, and August, and the winter months December, January, and February, beginning in June of 1991 and ending with February 1999.

The highest monthly average measurement result was 68.4dB in February of 1992, the lowest 59.7dB in August of 1997, the only figure below 60dB. All figures

were monthly averages. Of these monthly averages, 13 exceeded 65dB, mostly in the years before 1996, but also twice in 1997.

The general pattern of the figures seems to show a decline in monthly noise from 1991 to 1996, followed by an apparent increase in 1998. There are only 2 months in the 1999 sample and these are lower than the equivalent 1998 years, but still far above the 60dB threshold at 63.4dB and 63.9dB.

Perhaps more to the point, Massport has recently begun measuring what it thinks is the actual contribution of noise from airplanes at Hull High School. This involves the removal of other noise sources from the overall noise measurement to derive an airplanes-only figure. Such figures are now available for months starting in January 1998 and ending with January 1999. These are Massport's monthly average airplanes-only noise levels at Hull High School: January 1998: 59.2dB; February 1998: 58.5 dB; March 1998: 59.4dB; April 1998: 59.3dB; May 1998: 58.6dB; June 1998: 59.3 dB; July 1998: 59.5dB; August 1998: 57.7dB; September 1998: 59.2dB; October 1998: 59.8dB; November 1998: 59.8dB; December 1998: 59.8dB; January 1999: 59.5dB. These figures, which represent only noise which can be correlated with specific aircraft operations, establish clearly that an increase in aircraft operations much smaller than the Report's Preferred Alternative would put Hull within the 60dB contour on the basis of airplane-related noise alone.

Probably, however, the figures noted in the previous paragraph are too small, and Hull is already within the 60dB contour on the basis of aircraft noise, if that could be properly measured. Hull's unique location in Boston's air traffic pattern complicates correlation of aircraft operations with noise monitor data, something which anyone who wishes to isolate and remove background noise must do. Unfortunately, in Hull, background noise is airplane noise.

The noise monitor at Hull High School is commonly affected by 4 or more jet operations simultaneously, because airplanes departing Logan via Runways 22L/R fly a semicircular pattern around the monitor. It is an ordinary occurrence to see one jet approaching the monitor from the west over Boston Harbor, while another, which has just passed the monitor, turns south over Nantasket Beach, as yet another, which preceded the first off the runway at Logan by perhaps 90 seconds, turns west over Hull Bay and approaches once more toward the monitor on the side opposite its original pass. In addition, takeoff thrust and thrust reversals at Logan

itself are often clearly audible at Hull High School, and sometimes they are loudly audible. It seems unlikely that all of this noise activity can be successfully correlated to specific aircraft operations; perhaps only one operation at a time can be so correlated. If so, then a large aircraft-related noise component is being assigned to background noise, and all of the figures which Massport has computed for airplanes-only noise are smaller than they should be.

To think of the problem another way, consider this: without Logan and its airplanes, Hull Village would surely be one of the quietest communities in eastern Massachusetts. Hull Village has no commercial zone, so trucks are rarely seen on its streets. It doesn't have through traffic, because no one can drive through Hull Village, only to it, or from it; it is on the end of a small peninsula. There isn't any industry to make noise. And yet a noise monitor in Hull Village stays constantly above 60dB, often pushing 65dB. According to the Report's Figure 5.2-2 a typical small town suburban environment ought to measure somewhere in the high 40s. There isn't any obvious reason why Hull Village would be any noisier, except Logan Airport.

3. The Report contains significant data errors. The flight tracks offered by the Report to represent the historical pattern of aircraft operations in the vicinity of Hull do not reasonably approximate the patterns of aircraft operations in the vicinity of Hull during the previous 10 years, nor at the present time.

Figures 5.2-5, 5.2-6, 6.2-1, and 6.2-3, which purport to show the historical and projected paths of aircraft in the vicinity of Hull are all drawn in such a way that no aircraft are shown crossing the upper end of the Hull Peninsula. In a brief course of observation which I conducted on Saturday, April 17, between the hours of 11:43 a.m. and 12:35 p.m., (when observation was interrupted by rain), and again between 5:53 p.m. and 6:28 p.m., I observed 31 airplanes which departed Logan on Runway 22 and then flew toward Hull. Of these, 4 flew directly over the upper end of the Hull Peninsula, and 4 more skirted its shoreline so closely that essentially nothing of either side of these airplanes could be seen as I stood on the seawall. I have documented these observations photographically.

In another brief course of observation which I conducted on Monday, April 19, between the hours of 8:22 a.m. and 10:15 a.m. I observed in the vicinity of Hull

Gut as 34 airplanes approached runway 33L. Of these, all but one flew directly over the end of the Hull Peninsula or skirted its shoreline so closely that essentially nothing of either side of these airplanes could be seen from my point of observation on the shoreline at Hull Gut. I have documented these observations photographically as well.

On the basis of personal experience gathered while living for 10 years in Hull Village, which is on the end of the Hull Peninsula, I estimate that these two observation sessions fairly represent the usual pattern of aircraft operations to be found there, although the accuracy of the conclusions could surely be improved by more extensive observations, or better yet by study of FAA radar track data.

All of the airplanes noted in these two observations sessions were jet airplanes; I saw many turboprop airplanes during the second observation session, but they were not counted for the purpose of these comments.

There is nothing in the Report to suggest that planned changes will cause future aircraft operations in the vicinity of Hull to conform to the patterns of operation presented by the Report. These inaccurately presented patterns of operation are identified in the Report as the basis of Massport's modeling of both historical and projected noise in the vicinity of Hull.

4. The actual patterns of aircraft operations in the vicinity of Hull bring aircraft closer to Hull, and over Hull, more often than the Report's modeling data show. This raises noise levels in Hull above those shown by the Report's modeling.

5. The actual patterns of aircraft operations in the vicinity of Hull are not as dispersed as the Report's modeling data show. The more concentrated actual character of these operations tends to raise noise levels in the vicinity of Hull as compared to the Report's modeled operations.

6. The Report presents no actual measurements of airplane noise in Hull, even though Massport has operated noise measurement equipment in Hull for many years, a fact which is noted in the Report. Citing actual historical measurements of high noise levels in Hull would call into question the validity of the noise modeling results presented by the Report.

7. The report presents modeled estimates of airplane noise in Hull, but these estimates appear to defy common sense, and also contradict measurements actually made in the past. For instance, Figure 5.2-2 in the Report (Typical Outdoor Day/Night Sound Levels (dB)) presents a graph which indicates that 54dB is a typical DNL sound level for a "Small Town Cul-de-Sac." In Volume IV of the Report a table appears (Table 2.3, Day-Night Sound Level Values (Ldn) in dB From Flight Operations at 23 Selected Locations, 2010 37.5 Million Low). This table presents modeled sound levels for Hull High School under Massport's Preferred Alternatives, Alt 1 and Alt 1A. Sound levels under both alternatives are shown to be 54.6 dB, essentially as quiet as the small town cul-de-sac of Figure 5.2-2.

It is difficult to credit the notion that Hull High School, which would then be experiencing more than 100,000 equivalent air operations a year, the majority of them low-level overflights and near-overflights at altitudes under 1600 feet, would then be as quiet as a small town cul-de-sac. Hull High School is not that quiet now. Massport has sound measurement data collected throughout the 1990s which show much higher monthly noise levels at Hull High School produced by many fewer equivalent operations. These data are discussed briefly under Number 2 above, but they are not published in the Report. The Report does not discuss these contradictions.

SUMMARY OF OBJECTION 2: Methods used by Massport to develop data for the Report are not sufficiently documented. This makes it impossible to assess the likelihood that the data used accurately represent the cases they are claimed to represent. Even if the data are accurate and representative, the methods used by Massport to process the data into noise models are largely undocumented. The Report does not allow a reasonable person to assess whether the resulting noise models accurately reflect the data inputs. Some data presented in the Report could lead to a conclusion that the modeling software used by Massport lacks the sophistication necessary to model accurately the complex noise situation in the vicinity of Hull. For these reasons too, the Report should not be accepted as written. 279.4

Reasons to question the Report's noise modeling data and methods are the following:

1. In its modeled flight tracks for arrivals and departures, past and future, the Report shows multiple flight paths per runway. The Report is vague about the basis for choosing the particular tracks shown. It offers no explanation of whether these tracks represent sampled actual tracks of real flights, or composites, nor any discussion of whether the tracks properly represent particular seasonal conditions and states of airport activity. The Report also does not indicate whether all tracks from each runway are weighted equally when computing noise models.

2. In some areas near Hull flight tracks from different runways are shown intermingling. One such case involves takeoffs from Runway 22L, Runway 22R, Runway 15R, and Runway 9, as shown in Figure 5.2-5 (Modeled Departure Flight Tracks for Existing Runway Configurations) In all, 20 tracks seem to be involved, five per runway (the quality of Massport's presentation of these tracks is so poor that track count must remain an estimate), of which 17 intermingle. The Report does not answer this question: In computing noise models in the intermingled area, does each track from each runway count equally? Runway 15R sees very few departures; Runways 22L and 9 are the busiest departure runways at Logan. Even assuming that all the tracks are properly located, if they are not weighted properly to reflect the different intensity of traffic each track experiences there will be distortions in any resulting noise model. If these tracks are weighted equally, the resulting distortion would tend to improperly move modeled noise away from Hull.

3. Figure 5.2-6 in the Report (Modeled Arrival Flight Tracks for Existing Runway Configurations) shows most arriving flights destined for Runway 33L crossing either the Northern end of Peddocks Island or the western side of Hull Gut. None are shown crossing the end of the Hull Peninsula.

An electronic beacon marking the approach path for Runway 33L is located on the end of the Hull Peninsula, and is approximately 500 yards east of the easternmost point on Peddocks Island. The Report does not answer the obvious question: why would arriving airplanes destined for Runway 33L be more likely to fly above Peddocks Island than above the beacon put on the Hull Peninsula for that purpose?

If the Report has misrepresented the approach situation at Hull Gut, as seems obvious, then correcting that misrepresentation would result in a noise model that would predict more noise in Hull.

4. Figure 5.2-6 (Modeled Arrival Flight Tracks for Existing Runway Configurations) shows a broad fan of 10 approach paths which converge at a point over Boston Harbor, about a mile northwest of the end of the Hull Peninsula. Opposite Hull Gut this fan is shown with a width of approximately .6 mile.

Visual observation at Hull Gut shows that a large majority of airplanes destined for Runway 33L have already converged along an axis southeast of Hull Gut before overflying the end of the Hull Peninsula at Hull Gut. With the sun standing in the south southeast, directly behind approaching airplanes, it is possible for an observer to sit still on the cobbled beach while the shadow of airplane after airplane passes over her.

Rather than being fanned out as shown in Figure 5.2-6, airplanes cross the end of the Hull Peninsula in an intensely focused stream. This pattern of operation, which requires no special equipment or expertise to observe, if entered as data into noise modeling software, would yield larger noise values for Hull than the fan of approach tracks presented by the Report.

5. The fan of approach tracks for Runway 33L at Hull Gut, which is presented in Figure 5.2-6 in the Report, is marked by a dog-leg a short distance before the point of convergence. The Report shows no similar dog-leg in the approach tracks to any other runway. The Report offers no explanation for the dog-leg shown on the approach to Runway 33L. There is no apparent purpose for a dog-leg in that position. If the dog-leg were not present in the modeled approach path for Runway 33L, the resulting noise model would predict more noise in Hull.

6. When arrivals are destined for Runway 33L, residents of Hull Village, near the end of the Hull Peninsula, usually experience multiple direct overflights per hour, but Figure 5.2-6 shows no arrival paths crossing Hull Village. If direct overflights of Hull Village were among the modeled approach tracks for Runway 33L the resulting noise model would predict more noise in Hull.

7. Figure 5.2-5 of the Report (Modeled Departure Flight Tracks for Existing Runway Configurations) shows a large number of modeled flight tracks from 4 runways intermingling over Boston Harbor north of Hull. Some of the difficulties of this modeling situation were noted in Number 2 above.

Another question arises because of the locations of the tracks themselves. Among 15(?) tracks departing Runway 22L, 22R and 15R, the Report shows no track directly over Hull Village. Overflights of Hull Village are a common occurrence, usually seen multiple times per hour, and sometimes nearly continuously, whenever Runways 22L and 22R are used for departures. The Report shows 1 track skirting the north shore of the Hull Peninsula, and 2 in the vicinity of the south shore of Georges Island, approximately .8 nautical mile north of Hull. The Report shows 4 modeled paths distributed northward from the middle part of Lovell's island, 1.5 nautical miles north of Hull

The visual observations discussed above make it seem doubtful that many airplanes from 22L and 22R fly so far north. If Massport's noise modeling software assigns equal weight to each of these tracks, then Figure 5.2-5 shows modeling inputs that seem to under-represent the number of flights which travel close to Hull, or over Hull, while over-representing those that miss Hull by a large distance. Correcting such a misrepresentation would result in a noise model which would predict more noise in Hull.

8. Although Massport has access to Federal Aviation Administration radar tracking data, no statistical samples of such data appear in the Report. A statistically rigorous sampling of FAA radar tracks, presenting cases to represent common airport operating conditions, would provide the soundest possible basis for noise modeling because it would provide a historically based and geographicall accurate characterization of the patterns of aircraft operation around Logan Airport. and in the vicinity of Hull. The fact that Massport has not documented a statistically rigorous application of this obviously powerful tool calls into question the validity of all the flight track data upon which the Report's noise modeling is based.

9. Close examination of the noise contours produced by Massport's noise modeling software shows striking failures to predict obvious and inescapable noise effects that

would be not only apparent, but even intrusive, for most observers. For instance, Volume IV of the Report presents numerous graphical representations of modeled noise contours. One presentation, titled "Day-Night Sound Level Contours 2010 49M High, Alternative 1," shows perfectly symmetrical sound contours at the departure end of Runways 22L and 22R. The fact that 109,000 equivalent departures (Volume III, "Aircraft Operations by Fleet, Alternative, Runway End and Operation" , otherwise unnumbered and unpaginated) are modeled to make sharp left turns over Castle Island seems completely unrecorded in any of the contours except (possibly) the 60 dB contour, which bulges almost imperceptibly near Thompson Island. However technically accurate this model might or might not be, it seems obvious that in this case it has produced a result that would confound the expectations of any human observer with normal hearing.

Similarly, the contours projecting from the departure end of Runway 15 remain undisturbed by the substantial cross-traffic of Runway 22 departures, but a human observer on a boat in the vicinity would surely find the noise intrusive. If Massport's modeling program does not make models which closely match real human experience, then the presence of those models in this Report should be a reason to reject the Report as misleading.

SUMMARY AND CONCLUSION OF OBJECTION 3: Previously, representatives of Massport and of the Federal Aviation Administration have offered the prospect that future technological improvements would facilitate more efficient noise abatement in the vicinity of Hull. The Report does not discuss such future improvements and it seems reasonable to believe that implementation of the Preferred Alternative would complicate or preclude their implementation. 279.5

One technology so mentioned was the application of approach procedures based on the satellite-based Global Positioning System to Runway 33L, guiding incoming airplanes farther from Hull along curved approach paths. It seems possible that construction of Runway 14/32 would complicate or preclude such an improvement, but the issue of Global Positioning System approach paths is not discussed in the Report.

Another approach to the same goal would be to install glide slope and locator electronics on Thompson Island, to project their beacons eastward over Shag Rocks.

Under VFR conditions such an installation would enable an accurate approach to Runway 33L that begins as a westward leg roughly parallel to the north shore of Hull, but offset more than a mile to the north. This track intersects the current approach path at its current altitude almost 3 miles from the touchdown point on 33L. A 55 degree turn at the point of intersection would put airplanes on the current track, to land as they always have. This proposed new track is almost perfectly parallel to Runway 9/27, and more than 3 miles south of a line projected eastward from Runway 9. Use of such an approach would enormously benefit the people of Hingham, Hull, and Weymouth, who would all be freed of probably half or more of the airplane noise they now experience, while adversely affecting no one. Unfortunately, this approach path would also put incoming airplanes on an intersecting course with airplanes approaching projected Runway 32, so construction of 14/32 might preclude or complicate future implementation of this improvement. There is no discussion of these issues in the Report. For this reason too, the Report should not be accepted as written.

SUMMARY AND CONCLUSION OF OBJECTION 4: It seems reasonable to suppose that construction of Runway 14/32 would alter existing patterns of aircraft operations, as both air controllers and pilots adjusted to the presence of a new factor in the navigational mix. As can be seen by comparing Figures 6.2-2 and 6.2-3 with Figures 5.2-5 and 5.2-6, the Report asserts that jet operations in the vicinity of Hull will continue to follow the tracks they have used historically, except that new tracks will be added to the west of the present inbound approach to Runway 33L. 279.6

The inaccuracy of the tracks presented in all four of these figures has already been discussed. With regard to the tracks of inbound airplanes destined for Runway 33L, FAA radar tracking data which is available from Massport reveal what may be a relevant point: airplanes headed for the axis of the Runway 33L approach-path from the west do so at oblique angles; those from the east much more nearly at right angles.

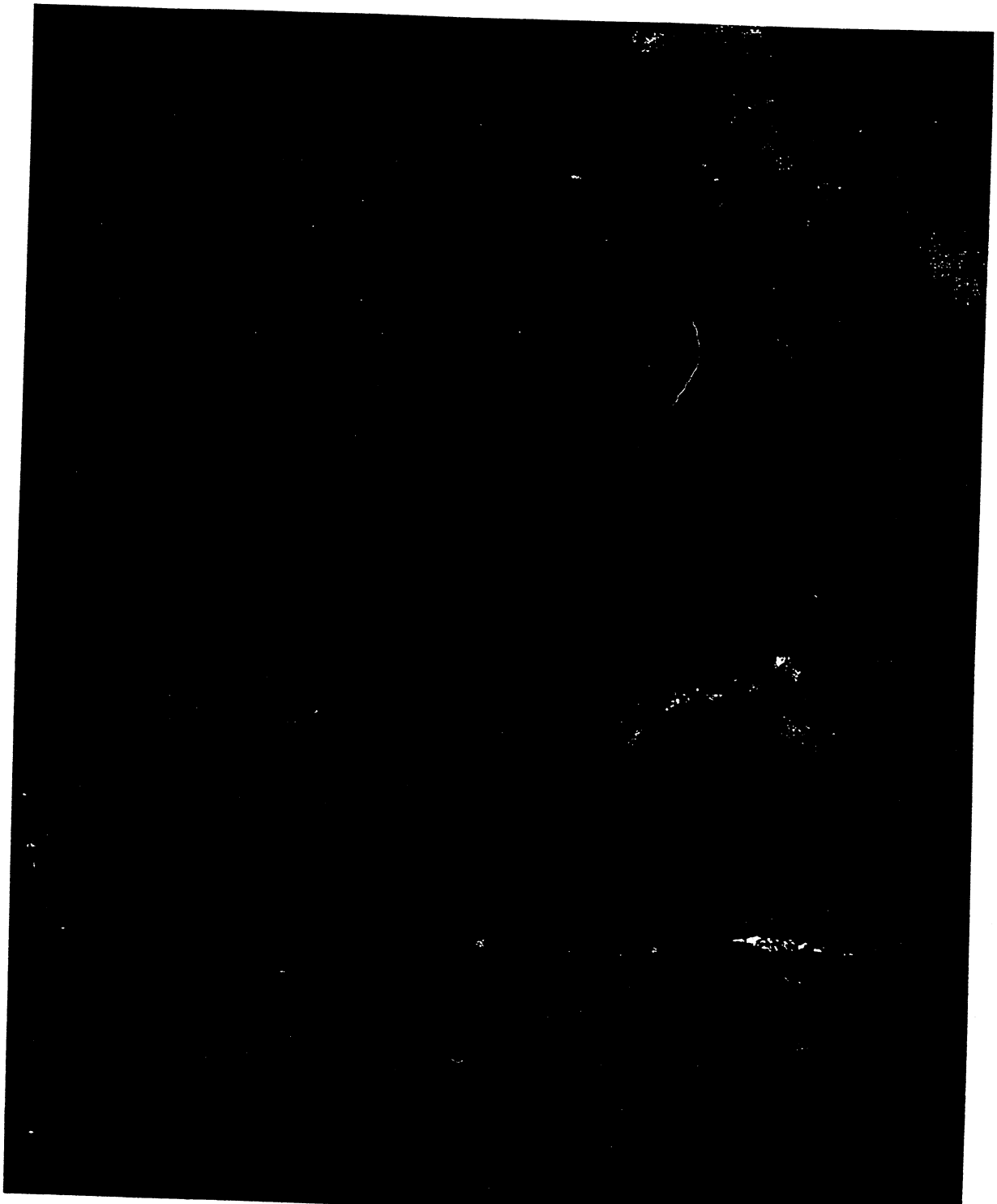
If an approach path to Runway 32 is established as shown in the Report, approximately 1 mile to the west of 33L, it seems logical to suppose that use of the approach to 33L might change in the following ways: First, airplanes which might previously have approached the 33L axis from the west might then choose to

approach from the east, to avoid crossing the paths of airplanes destined for Runway 32. Because many airplanes which approach 33L from the east fly directly over Hull, as the FAA data show, such a change would add to noise in Hull. Second, pilots approaching from the east might choose to use more oblique approach angles than they now do, in the hope that they would thereby reduce the danger of overshooting the axis of the Runway 33L approach path and straying too close to airplanes approaching Runway 32. This would have the effect of directing the tracks of these airplanes more nearly parallel to the axis of the Hull Peninsula, keeping the airplanes over Hull for longer times and distances, and causing them to descend to lower altitudes during their overflights. Noise in Hull would increase as a result.

Neither of these plausibly foreseeable effects is addressed by the Report. For this reason too, the Report should not be accepted as written..

SUMMARY AND CONCLUSION OF OBJECTION 5: The people of Hull have not been adequately notified of Massport's plans regarding Runway 14/32, nor have they had sufficient opportunity or time to respond to the Report. A document accompanying the Report (RE: Transmission of Draft Environmental Impact Statement and Draft Environmental Impact Report ("Draft EIS/EIR") and signed by Betty J. Desrosiers and John C. Silva states on its second page: "The document will be made available for public review at local libraries in the following communities: Boston, Braintree, Brookline, Cambridge, Chelsea, Everett, Hingham, Hull, Melrose, Milton, Quincy, Revere, Somerville, Swampscott, Weymouth, and Winthrop." On April 19, 1999 librarians at the Hull Public Library said this had not yet been done in the case of Hull. For this reason, the Report should not be accepted until the people of Hull have had adequate notification, time, and opportunity to respond to the Report.

279.7



HULL HIGH SCHOOL AGAIN: ALTHOUGH NOT AS VISUALLY IMPOSING AS THE 747 SHOWN AT THE FRONT OF THIS REPLY, THE AIRPLANE IN THE UPPER LEFT OF THIS PHOTOGRAPH, IS USING EXTRA THRUST TO CLIMB OUT OF LOGAN, AND WAS EVEN LOUDER ON THE GROUND—AND THE 747 WAS PLENTY LOUD. THIS RUNWAY 22 DEPARTURE WAS THE VERY NEXT FLIGHT AFTER THE 747 LANDING. THESE TWO PHOTOS ARE A NICE PAIR OF BOOKENDS TO SHOW THE UNIQUELY CONTINUOUS NATURE OF AIRPLANE NOISE IN HULL. THESE PHOTOS ARE PERFECTLY TYPICAL OF WHAT HAPPENS CONSTANTLY IN HULL, ALTHOUGH SOMEONE LOOKING AT THE GRAPHICS IN MASSPORT'S REPORT MIGHT CONCLUDE THAT IT WOULD BE A RARE EVENT FOR AIRPLANES TO BE IN THE LOCATIONS HERE, WHERE THEY WERE PHOTOGRAPHED. THIS AIRPLANE CLOSELY SKIRTED THE SHORELINE; MANY OTHER RUNWAY 22 DEPARTURES FLY WELL TO THE RIGHT, DIRECTLY OVER HULL VILLAGE.

Letter 279
Stephen Lathrop
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
279.1	Environmental Review Process	Public Process	...the time allowed for comment was too short to permit much of what I would have liked to research...2 weeks is not a reasonable time to develop researched rebuttal arguments following hearings. The difficulty in my case was compounded by the fact that no copy of the EIR was available at the Hull Public Library, apparently because none was ever provided there by Massport.	A copy of the Supplemental DEIS/FEIR will be available at the Hull Public Library.
279.2	Noise	Imapcts	A Boston Globe report (March 2, 1999), based on Massport's projected data, shows that if Massport's new runway is approved, approximately 82,540 airplanes per year will fly low over Pemberton Point in Hull, the site of Hull High School. ...[Many] of these airplanes will fly within [1600 or] 1700 feet of the High School...[as] measured...from the school to the airplanes... Massport's Report presents tables which...seem to assert that under such conditions noise at Hull High School would then be equivalent to that experienced by residents of a "Small Town Cul-de-Sac."	Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
279.3	Noise	Model	The Draft Environmental Impact Statement/Report...fails to study noise impact in the vicinity of Hull...There are compelling reasons to believe that Hull meets the criteria for study established by Massport and by Federal regulations...[including: noise measurements at Hull High School that consistently exceed 60 dB and approach 60 dB in noise directly attributable to specific airport operations. Observations of aircraft indicate many low-altitude over flights, and near over flights, which are not presented in the report. Noise monitors in Hull Village consistently exceed 60 dB with no contributing factors except Logan Airport. The report contains no noise measurements for Hull.]	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

Code	Topic 1	Topic 2	Comment	Response
279.4	Noise	Model	Methods used by Massport to develop data for the Report are not sufficiently documented [including: representatives of flight tracks that are presented without adequate basis, representations of flight tracks over the beacon on Hull Peninsula, Flight paths that converge over Hull Peninsula rather than over Boston Harbor, flight paths with inexplicable dog leg patterns, omission of over-flights experienced in Hull, and failure to predict obvious noise effects]. This makes it impossible to assess...[whether] the data...accurately represents the cases they are claimed to represent....the methods used by Massport to process the data into noise models are [also] largely undocumented. The Report does not allow a reasonable person to assess whether the resulting noise models accurately reflect the data inputs. Some data presented in the Report could lead to a conclusion that the modeling software used by Massport lacks the sophistication...to model accurately the complex noise situation in the vicinity of Hull.	Refer to response to Comment 279.3.
279.5	Noise	Impacts	...representative of Massport and of the Federal Aviation Administration have offered the prospect that future technological improvements would facilitate more efficient noise abatement in the vicinity of Hull. [For instance, using GPS to guide incoming flights along curved flight paths and installation of guide slope and locator electronics on Thompson Island to assist in off-setting approach paths, by more than 1 mile to the north.] The Report does not discuss such future improvements and it seems reasonable to believe that implementation of the Preferred Alternative would complicate or preclude their implementation.	Use of GPS in both arrival and departure procedures is beginning to be utilized but is still a relatively new technology. When it does come into wider use (both as instrumentation onboard the aircraft as well as in published procedures used by Air Traffic Control), it may well allow more versatile routing of traffic north of Hull. However, it is not a part of this assessment.
279.6	Noise	Runway 14/32	It seems reasonable to suppose that construction of Runway 14/32 would alter existing patterns of aircraft operations...the Report asserts that jet operations in the vicinity of Hull will continue to follow the tracks they have used historically, except that new tracks will be added to the west of the present inbound approach to Runway 33L. [Based on FAA tracking data, it appears that the new runway configuration would result in different approach paths, increasing approaches from the east and affecting Hull more.]	Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
279.7	Environmental Review Process	Public Process	The people of Hull have not been adequately notified of Massport's plans regarding Runway 14/32, nor have they had sufficient opportunity or time to respond to the Report. [The report was not made available to the Hull Library.}	The Supplemental DEIS/FEIR will be available at the Hull Public Library. Everyone who wrote a comment letter will be notified of the availability of the Supplemental DEIS/FEIR.

LETTER 280

March 28, 1999

Mr. Arthur Pugsley
Secretary of Environmental Affairs
100 Cambridge Street
Boston, MA 02205

Dear Mr. Pugsley:

We are writing to you in an effort to protect the quality of life in Hull, which is being threatened by the proposition of building runway 14/32 at Logan Airport. The proposed runway would more than double the present number of planes flying over Hull overstressing the area. The constant plane traffic will ruin several beautiful and thriving neighborhoods in Hull along with other communities in the greater Boston area already shouldering the burden of constant noise and pollution caused by heavy air traffic. I am not alone in opposing the constant push to expand Logan's air traffic capacity. We hope that the interests of residents preside over the narrow, short term, solution of Massport and the business community. We are all gearing up for a fight and hope to have your support.

280.1

Sincerely,

Daniel Llewellyn

Daniel Llewellyn
Jacqueline Llewellyn
11 James Avenue
Hull, MA 02045

Letter 280
Daniel and Jacqueline Llewellyn
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
280.1	Alternatives	Runway 14/32	...the quality of life in Hull...is being threatened by the proposition of building runway 14/32 at Logan Airport...[which] would more than double the present number of planes flying over Hull overstressing the area. The constant plane traffic will ruin several beautiful and thriving neighborhoods in Hull along with other communities in the greater Boston area already shouldering the burden of constant noise and pollution caused by heavy air traffic.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 281

Dr. Jo Loughnane
Fifty Andrew Avenue
Hull, Massachusetts 02045

April 19, 1999

Gentlemen:

281.1

I am opposed to the proposed runway 14/32 at Logan. I endorse the Worcester plan.

I also oppose the money spent on your ad campaign. Why should the convenience of Logan users be based on the environment of Hull residents?

Sincerely,
Jo Loughnane

Letter 281
Dr. Jo Loughnane
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
281.1	Regional Transportation	Regional Airports	I am opposed to the proposed runway 14/32 at Logan. I endorse the Worcester plan.	Comment noted.

LETTER 282

April 19, 1999

To Whom It May Concern:

I am a resident of 8 HarborView Road Hull, Ma. I am writing to inform you of disapproval of runway 14/32

I have lived at this address for 3 ½ years and I still wake up every night because a jet has flown too low and the noise is very loud. I have called numerous times to Massport Noise Abatement, however I feel that my complaints means nothing. How will I live with additional Noise Pollution!! 282.1

At times we lie in bed and the lights from the jets actually shines in my children's and my own eyes.

Hopefully the new runway will receive enough negativity to stop the once quiet and remote town of Hull.

Sincerely,

Jeannette MacDonald

Jeannette MacDonald
8 HarborView Road
Hull, Ma 02045

Letter 282
Jeannette MacDonald
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
282.1	Alternatives	Runway 14/32	Disapproval of Runway 14/32 and concerns about additional noise and bright lights from airplanes.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 283

DEAR MR Pugsley,

As A home owner in HULL for the PAST 3 YEARS I strongly oppose the construction of RUNWAY 14/32 AT logAN. My WIFE AND I PURCHASED our home in HULL for the the SOLE PURPOSE of SMALL town living with the SOOTHING SOUNDS of the SEA AND All the MARITIME NOISES that it brings EXAMPLE. SEAGULLS, TIDES AND the FOG HORNS AT Boston light NOT FREQUENT, LOW flying AIRPLANES. I WISH I HAD A dollar for every time my family AND I were AWAKENED by these NOISY MACHINES. this winter. THATS with our STORM WINDOWS DOWN SO you can just IMAGINE what the NOISE level is during the BEACH SEASON This is where we chose to RAISE our family. AWAY from the NOISE POLLUTION of city living. AND NOW we STAND to LOSE this forever BECAUSE OF the ALMIGHTY DOLLAR. PLEASE listen to ALL the citizens who OPPOSE this BECAUSE we ARE the ones who will SUFFER. TRAFFIC will ALWAYS be HEAVY AT logAN EVEN if you built 100 new RUNWAYS. You know it's true. PLEASE DO not turn A DEAF EAR on us. 283.1

JAMES MCCAFFERY 35 F. ST HULL MA
James McCaffery 02045

Letter 283
James McCaffery
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
283.1	Noise	Impacts	Opposes Runway 14/32 because of noise, low flying planes.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 284

Kimberly Iris Mills
8 Beacon Road
Hull, Massachusetts 02045

April 17, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street 20th Floor
Boston, Massachusetts 02205

Dear Mr. Pugsley:

I am writing to you in response to the proposed runway at Logan Airport. I am for the expansion of Logan airport 100%; however, the effect of the runway to my neighborhood in Hull might negate any benefit. As I understand, the flight pattern would fly planes directly over the length of Hull. I believe this would lesson the quality of life in Hull by adding noise pollution. Hull already has at least 70,000 flights causing noise and air pollution. The proposed runway would add 50,000 more [illegible] happens not only would our quality of life suffer, but our property val[illegible]l. 284.1 284.2

Already in Hull the schools [illegible] ion. There is a flight pattern that flies almost directly ove[illegible] in attendance at Hull High there were numerous times tha[illegible]. The additional runway would direct flights directly over thre[illegible] not acceptable and neither is the new proposed runway.

DRAFT

We are a small, quite, working [illegible] community and I feel that the state is targeting Hull because we are in a lower social economic class then other towns. Please do not disrupt our peaceful town. 284.3

Sincerely,

Kimberly Iris Mills

Kimberly Iris Mills

Letter 284
Kimberly Iris Millis
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
284.1	Noise	Impacts	I am for the expansion of Logan airport...however, the effect of the runway to my neighborhood in Hull might negate any benefit...planes [flying] directly over the length of Hull. I believe this would lessen the quality of life...by adding noise pollution.	Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
284.2	Alternatives	Runway 14/32	Hull already has at least 70,000 flights causing noise and air pollution. The proposed runway would add 50,000 more....	Refer to response to Comment 284.1.
284.3	Environmental Justice	Impacts	I feel that the state is targeting Hull because we are in a lower social economic class than other towns.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.

LETTER 285

WILLIAM M. REID
Post Office Box 877 - Allerton Station
Hull, Massachusetts 02045-0877
E-Mail: billjan@mediaone.net

(781) 925-0236

April 14, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street - 20th Floor
Boston, Massachusetts 02205

Gentlemen:

I write in opposition to the construction of Runway 14/32 at Logan Airport.

The proposed expansion of Logan follows from the conclusion that the Boston metropolitan area needs more space for increased air traffic. I have no basis for doubting the assumption. However, I think it makes no sense to burden the people who live in existing flight corridors with more noise and pollution. Instead, why not do what other cities faced with similar concerns have done?

New York has three major airports. Houston has three (note that Houston has taken advantage of the closed military airport at Ellington Field south of the city). Dallas has two (note that DFW is further away in time than Worcester), Chicago has two. Washington-Baltimore boasts three. So why don't we build a new regional airport like Denver? Or use Hanscom. Or why not make Worcester Airport an alternative destination by building an access route to it from the Mass Pike? 285.1

Runway 14/32's flight path will put aircraft directly over the Hull peninsula thereby exacerbating the already pervasive noise which makes routine conversation outdoors (and sometimes indoors as well) impossible. I believe we Hullonians suffer enough in support of Logan Airport as it is, so let's share the burden for expanding capacity for air travelers with other airports within the region or build a new airport. 285.2

Please don't build Runway 14/32 and degrade my life. Thank you.

Sincerely,

William M. Reid

Letter 285
William M. Reid
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
285.1	Regional Transportation	Regional Airports	...why don't we build a new regional airport like Denver? Or use Hanscom. Or why not make Worcester Airport an alternative destination by building an access route to it from the Mass Pike?	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Massport supports improved access to the Worcester Regional Airport. Refer to Chapter 2 of the Supplemental DEIS/FEIR for the status of the Worcester Access Road project.

Code	Topic 1	Topic 2	Comment	Response
285.2	Noise	Impacts	Runway 14/32's flight path will...[exacerbate] already pervasive noise.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 286

Secretary of Environmental Affairs
Attention: MEPA Office
100 Cambridge Street 20th Floor
Boston MA 02205

April 16, 1999

Dear Mr. Pugsley:

I am writing in opposition of runway 14/32.

Living close to a major city has it's assets and liabilities. Logan Airport is both and recently has become more liability for the residents of Hull.

I do not mind planes flying overhead – up, up high in the sky. But they are getting lower, skimming rooftops... a slight exaggeration... but it sounds like it. 286.1

Massport claims it does not have control over planes that veer off flight paths or fly too low, therefore, the thought of more planes over Hull that no one seems to be able to control is very upsetting. If they cannot alleviate the present impact, how does Massport claim this new runway will not cause us more problems?

There are so many concerns such as the high percentage of VOC - Volatile Organic Compounds, which we understand already surpass State one-hour standards at times. The traffic impact is already sending many travelers to Green even though we have some good options with the water transit. 286.2 286.3

Massport claims this runway would be for smaller aircraft – why not use other airports for that? Pease wants more business, as it is. Spread the burden out rather than hitting the same communities even harder. 286.4

I am not sure of the proper term, but I know there

is a "beacon" at the Coast Guard Station is Hull. It used to be at Castle Island. A pilot friend said that even moving that to Peddocks could help alleviate part of the problem. 286.5

Massport admits it has problems with terminal space, ticketing, baggage handling. At some point, it would seem there has to be a limit to how many passengers and planes Logan can handle. They should concentrate on how to provide quality services instead of building another runway which they call a short-term remedy. They should be planning how to decrease air traffic that they cannot handle, with peak pricing and routing to other airports. There's only so big they can get. I do not believe they are planning well for future increases, atleast they have not communicated that. 286.6 286.7

I know Massport needs to deal with it's problems and it will be beneficial to everyone if it can do that without creating further problems while many of us are still trying to get some relief from present problems we think they can do more to alleviate.

Please, do not let them further damage the quality of life in Hull.

Sincerely,

Roberta Ridolfi
15 G Street
Hull MA 02045

Letter 286
Robert Ridolfi
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
286.1	Alternatives	Runway 14/32	I am writing in opposition of runway 14/32. I do not mind planes flying overhead—up high...But they are getting lower...Massport claims it does not have control over planes that veer off flight paths or fly too low, therefore, the thought of more planes over Hull That no one seems to be able to control is very upsetting.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
286.2	Air Quality	NAAQS	...the high percentage of VOC - Volatile Organic Compounds... already surpass state one-hour standards at times.	There is no state or federal standard for VOCs for any averaging time.
286.3	Ground Transportation	Access to Logan	The traffic impact is already sending many travelers to Green even though we have some good options with the water transit.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
286.4	Regional Transportation	Regional Airports	...why not use other airports for [smaller aircraft]?	There are two categories of small plane activity at Logan Airport. One category is general aviation activity which consists of private, business, and air-taxi operations. Hanscom Field effectively serves as a general aviation reliever airport to Logan Airport, accommodating 183,000 general aviation operations compared to 32,000 general aviation operations at Logan Airport. The second category consists of scheduled commercial operations by regional airlines with non-jet, commuter aircraft. In 1998, there were over 200,000 regional airline commuter operations at Logan Airport. However, Massport plays no role in the decisions of these private airlines and is prohibited by federal statutes to regulate the air service routes or service levels of the airlines. Regional airlines are unlikely to move a significant number of these flights to other airports, since these airlines are either owned by larger airlines or have marketing agreements with the larger airlines which allow regional airline passengers traveling to Logan Airport to connect to flights operated by the larger airlines. Approximately 50 percent of passengers on regional airline flights connect to other flights at Logan Airport.
286.5	Alternatives	Other Non-Construction Alternatives	...but I know there is a "beacon" at the Coast Guard Station in Hull. It used to be at Castle Island... even moving that to Peddocks could help alleviate part of the problem.	Unable to discern the commentors concern.
286.6	Alternatives	Runway 14/32	Massport...has problems with terminal space, ticketing, baggage handling...there has to be a limit to how many passengers and planes Logan can handle. They should concentrate on how to provide quality services instead of building another runway which they call a short-term remedy.	The Airside analysis evaluates delays related to inefficiencies of the airfield and does not include delays related to aircraft waiting to access gates or outmoded terminals and terminal facilities. Massport and individual airlines are currently undertaking redevelopment of the landside portion of the airport *(i.e.*, terminals, roadways, etc.). These projects are also required to undergo environmental review. For Terminal A, Delta Air Lines received environmental approval for its proposed terminal replacement project in late 1999. *Logan Airport's 1999 ESPR* (formerly GEIR) reports on cumulative impacts of Logan Airport's landside and airside operations.
286.7	Alternatives	Peak Period Pricing	[Massport] should be planning how to decrease air traffic that they cannot handle, with peak pricing and routing to other airports.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport, and provides an assessment of the extent of benefits form PPP under such circumstances. Additional analysis of PPP is set out in Section 4.5 of this Supplemental DEIS/FEIR. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

16 Milford St. #3
Dedham, MA 02026

April 8, 1999 LETTER 287

Dear Mr. Tingley.

We are opposed to the runway expansion at Logan Airport. There are too many flights now without adding more. The noise level will be unbearable. 287.1

It's time to find an alternative site for additional flights. This would ease the disturbances now caused to the surrounding communities in the flight path. Let's explore reducing the number of flights rather than adding to the noise and air pollution. 287.2

Sincerely,

[illegible] Russell

Letter 287
J.D. Russell
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
287.1	Noise	Impacts	We are opposed to the runway expansion at Logan Airport. There are too many flights now without adding more.The noise level will be unbearable.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22 and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
287.2	Regional Transportation	Regional Airports	It's time to find an alternative site for additional flights.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions.

LETTER 288

7 Christine Rd.
Hull, MA 02045
April 9, 1999

Secretary of Environmental Affairs
ATT: MEPA Office
Mr. Arthur Pugsley-EOEA No.10458
100 Cambridge Street 20th Floor
Boston, MA 02205

Dear Sir:

The townspeople of Hull, especially those at the northern tip of Hull, have been bombarded with the sound of departing and arriving aircraft for more than 30 years. No amount of calls to the Massport complaint line has ever made any kind of difference or change. 288.1

I feel that no matter how many letters you receive in protest of Runway 14/32, Massport will do whatever it feels like doing-but I am protesting and I am opposed to the expansion and building of Runway 14/32.

Cordially,

Anne M Rogers

Anne M. Rogers

Letter 288
Ann M. Rogers
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
288.1	Alternatives	Runway 14/32	The townspeople of Hull, especially those at the northern tip of Hull, have been bombarded with the sound of departing and arriving aircraft for more than 30 years...I am protesting and I am opposed to the expansion and building of Runway 14/32.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

Lisa J. Scannell
24 Channel Street
Hull, MA 02045

LETTER 289

April 20, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street 20th floor
Boston, MA 02205

Re: **OPPOSED to Runway 14/32**

Dear Mr. Pugsley:

I am writing to express my strong opposition to Massport's proposed new runway, 14/32. My concern is that the new runway will allow more flights into and out of Logan Airport. As a resident of Hull, I already have too many airplanes flying over my house, beginning at 4:54 a.m. each day. Runway 14/32 will substantially increase the air traffic over my neighborhood. 289.1

In addition to my own personal concerns, I have other reservations regarding any efforts to increase capacity at Logan. One is the traffic on the ground. Getting to and from Logan can be a nightmare even with the new tunnel and increased water transportation. Traffic on the Expressway gets backed up in both directions by cars trying to get to the airport. This has a negative impact on the air quality in Boston. I would be interested to compare the "lost productivity" of all those who get stuck in Logan-related traffic jams to Massport's lost productivity calculations resulting from delayed flights. Adding more airport traffic will only make the current situation worse. 289.2 289.3

As a frequent user of Logan Airport, I applaud efforts to make the operation more efficient. However, increased air traffic will mean longer waits at ticket counters, baggage carrousels, and taxi lines. I would rather see Massport continue to pursue alternatives to Logan such as Worcester and, possibly, Hanscom. 289.4 289.5

Please consider the negative impact that Runway 14/32 will have in terms of noise and air pollution for all of the surrounding communities. Thank you.

Sincerely,

Lisa J. Scannell

Letter 289
Lisa J. Scannell
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
289.1	Alternatives	Runway 14/32	I am writing to express my strong opposition to Massport's proposed new runway, 14/32...the new runway will allow more flights into and out of Logan Airport...I already have too many airplanes flying over my house, beginning at 4:54 a.m. each day.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
289.2	Ground Transportation	Access to Logan	...I have other reservations regarding any efforts to increase capacity at Logan. One is the traffic on the ground. Getting to and from Logan can be a nightmare even with the new tunnel and increased water transportation.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
289.3	Ground Transportation	Access to Logan	...[Traffic to Logan] has a negative impact on the air quality in Boston.	Refer to response to Comment 289.2.

Code	Topic 1	Topic 2	Comment	Response
289.4	Alternatives	Runway 14/32	As a frequent user of Logan Airport, I applaud efforts to make the operation more efficient...increased air traffic will mean longer waits at ticket counters, baggage carrousels and taxi lines.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
289.5	Regional Transportation	Regional Airports	I would rather see Massport continue to pursue alternatives to Logan such as Worcester and, possibly, Hanscom.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

LETTER 290

Arthur Puglsey
Secretary of Environmental Affairs
100 Cambridge Street , 20th Floor
Boston, MA 02205

Franklyn and Barbara Schafer
28 Standish Avenue
P.O. Box 502
Hull, MA 02045

21 April 1999

Dear Mr. Pugsley:

We wish to register our opposition to proposed runway 14/32.

290.1

The noise level over our home, at this time, is already unbearable. We do not want it to be increased.

We seriously question the validity of an additional runway and feel the present advertising campaign being circulated, by those in favor, is very misleading with regard to the facts.

Sincerely,

Franklyn and Barbara Schafer

Letter 290
Franklyn and Barbara Schafer
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
290.1	Alternatives	Runway 14/32	We wish to register our opposition to proposed runway 14/32. The noise level over our home, at this time, is already unbearable. We do not want it to be increased.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

SEAN SHANAHAN
30 HIGHLAND AV
HULL, MA 02

LETTER 291

DEAR SIR,

291.1

I AM WRITING TO VOICE MY OPPOSITION TO THE EXPANSION OF LOGAN AIRPORT, IN THIS CASE RUNWAY 14/32, DUE TO THE INCREASE IN NOISE, TRAFFIC, POLLUTION, AND 291.2 291.3 THE DETRIMENTAL EFFECTS OF THESE UPON THE 291.4 BOSTON AND SURROUNDING COMMUNITIES QUALITIES OF LIFE.

I ATTENDED THE ANTI-RUNWAY RALLY AT THE STATE HOUSE ON MONDAY AND WAS HEARTENED BY THE UNITY SHOWN BY THE VARIOUS NEIGHBORHOODS AND THEIR ELECTED OFFICIALS. PLEASE JOIN US IN THE SEARCH FOR A MORE SUITABLE ALTERNATIVE (THINK REGIONAL) TO RUNWAY 14/32.

YOURS TRULY,

Sean E. Shanahan

Letter 291
Sean Shanahan
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
291.1	Noise	Impacts	I am writing to voice my opposition to...Runway 14/32, due to the increase in noise...	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
291.2	Ground Transportation	Access to Logan	I am writing to voice my opposition to...Runway 14/32, due to the increase in traffic...	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
291.3	Air Quality	Impacts	I am writing to voice my opposition to...Runway 14/32, due to the increase in pollution...	The growth in emissions over time will occur with or without the Airside Project. However, the Preferred Alternative presents a significant decrease in emissions compared to the No Action Alternative. Dispersion modeling shows no violation of the NAAQS.

Code	Topic 1	Topic 2	Comment	Response
291.4	General Opposition		I am writng to voice my opposition to...Runway 14/32 due to the... detrimental effects [the increase in noise, traffic, and pollution will have] upon the Boston and surrounding communities qualities of life.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.

Sperry Group
Marketing • Design • Production
43 Farina Road Hull, MA 02045
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LETTER 292

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge St.
20th Floor
Boston, MA 02205

Dear Mr. Pugsley:
I am strongly opposed to Massport's proposed runway, 14/32.
When I moved here from Winthrop 10 years ago, the primary reason was to escape the constant noise from Logan.

Most Hull residents I have spoken to feel as I do. We have far more noise from the airport now, than we did just a few years ago, and it is already at a borderline intolerable level. I live and work here and it makes too many hours of my day unpleasant, unproductive and perhaps unhealthy. 292.1

I would suggest that you watch the videotape of the April 13 Hull Selectmen's meeting to get a full understanding of the issue as it affects Hull residents. If you do, you will see Massport's representative Ms. Betty Derosiers' attempt to talk her way around the direct questions of a very frustrated board of selectmen. She dodged questions about intended growth in flights. She said it was impossible to "cap" operations and could not consider changing the laws (policy's) that govern such caps. (How did they manage to do it in Washington D.C.?) She said Massport had no control over the actual flight path of pilots using Logan. Most frustrating was the totally bogus charts Massport brought. The charts showed flight paths that missed Hull on both takeoff and landing, an obvious falsehood and actually an insult to our intelligence. You will see Ms. Derosiers do a very bad job explaining away the faulty noise monitors put in place in Hull. 292.2 292.3 292.4

You will see an organization so determined to make this runway a reality that they are willing to ignore the 17 of 19 CARE communities who oppose the runway. If your office made decisions based on arrogance, this case would be closed. The operational fact is that Hull is subject to noise levels that should motivate your office to block this runway. 292.5

Thank you for your concern for the envirionment in which we live.

Yours truly,

Gerard J. Sperry

Letter 292
Gerard J. Sperry
Sperry Group
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
292.1	Alternatives	Runway 14/32	I am strongly opposed to Massport's proposed runway, 14/32. We have far more noise from the airport now, than we did just a few years ago, and it is already at a borderline intolerable level.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
292.2	Alternatives	Other Non-Construction Alternatives	Why is it not possible to cap growth in flights as was done in Washington, D.C.?	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.
292.3	Noise	Studies	Massport's charts incorrectly show flight paths that miss Hull on takeoff and landing.	Graphics have been updated, supplemented and corrected.
292.4	Noise	Runway Use	Noise monitors in Hull were faulty.	Massport disagrees.
292.5	Environmental Review Process	Public Process	Massport is ignoring 17 of the 19 CARE communities opposing the runway.	Comment noted.

LETTER 293

11 Crest Road
Hull, MA 02045

April 21, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge Street 20th floor
Boston, MA 02205

Re: **OPPOSED to Runway 14/32**

Dear Mr. Pugsley:

I am writing to express my strong opposition to Massport's proposed new runway, 14/32. As a resident of Hull, I already have too many airplanes flying over my house. Runway 14/32 will substantially increase the air traffic over my neighborhood. This will increase noise and air pollution for our entire town. 293.1 293.2

Please consider alternatives to Logan expansion such as improved access to Worcester Airport and other regional airport solutions. 293.3

Thank you.

Sincerely,

E. Vincent Sullivan

Letter 293
E. Vincent Sullivan
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
293.1	Alternatives	Runway 14/32	I am writing to express my strong opposition to Massport's proposed new runway, 14/32...I already have too many airplanes flying over my house.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
293.2	Alternatives	Runway 14/32	Runway 14/32 will substantially increase the air traffic over my neighborhood. This will increase noise and air pollution for our entire town.	Refer to response to Comment 293.1.

Code	Topic 1	Topic 2	Comment	Response
293.3	Regional Transportation	Regional Airports	Please consider alternatives to Logan expansion such as improved access to Worcester Airport and other regional airport solutions.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 294

2 Christine Road
Hull, MA 02045
April 1, 1999

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge St.
20th Floor
Boston, MA 02205

Dear Sir:

I wish to go on record as strongly opposing the expansion of Logan Airport with the addition of Runway 14/32 as proposed. 294.1

Currently, air traffic patterns route airliners directly over our neighborhood, instead of over the ocean as we understand was suggested by Massport in the past. The air traffic over our home on the Hull Peninsula is unbearable now without the additional burden such as the introduction of a new runway would bring. 294.2

Thank you for your attention to this matter.

Sincerely,

Geraldine M. Townsend

Geraldine M. Townsend
2 Christine Road
Hull, MA 02045.

Letter 294
Geraldine M. Townsend
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
294.1	Alternatives	Runway 14/32	I wish to go on record as strongly opposing the expansion of Logan Airport with the addition of Runway 14/32 as proposed. Currently, air traffic patterns route airliners directly over our neighborhood, instead of over the ocean as we understand was suggested by Massport in the past.	Runway 14/32 would shift 75,000 flights over water, while reducing total number of nighttime flights. Additionally, by increasing the number of operations over water, Runway 14/32 reduces the total annual hours of dwell and persistence over populated areas.
294.2	Noise	Impacts	The air traffic over our home on the Hull Peninsula is unbearable now without the additional burden such as the introduction of a new runway would bring.	Refer to response to Comment 294.1.

LETTER 295

2 Christine Road
Hull, MA 02045
April 1, 1999

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Arthur Pugsley – EOEA No. 10458
100 Cambridge St.
20th Floor
Boston, MA 02205

Dear Sir:

I wish to go on record as strongly opposing the expansion of Logan Airport with the addition of Runway 14/32 as proposed. 295.1

Currently, air traffic patterns route airliners directly over our neighborhood, instead of over the ocean as we understand was suggested by Massport in the past. The air traffic over our home on the Hull Peninsula is unbearable now without the additional burden such as the introduction of a new runway would bring. 295.2

Thank you for your attention to this matter.

Sincerely,

William E. Townsend

William E. Townsend
2 Christine Road
Hull, MA 02045

Letter 295
William E. Townsend
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
295.1	Alternatives	Runway 14/32	I wish to go on record as strongly opposing the expansion of Logan Airport with the addition of Runway 14/32 as proposed. Currently, air traffic patterns route airliners directly over our neighborhood, instead of over the ocean as we understand was suggested by Massport in the past.	Runway 14/32 would shift 75,000 flights over water, while reducing total number of nighttime flights. Additionally, by increasing the number of operations over water, Runway 14/32 reduces the total annual hours of dwell and persistence over populated areas.
295.2	Noise	Impacts	The air traffic over our home on the Hull Peninsula is unbearable now without the additional burden such as the introduction of a new runway would bring.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 296

Dear Sir

I Am "Opposed to Runway 14/32" 296.1
On some days for hours on end
(like 12) Planes go over my
house every 60 to 90 Seconds

William A Weiser
2 Main St
Hull MA 02045

Letter 296
William A. Weiser
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
296.1	Alternatives	Runway 14/32	I am "opposed to Runway 14/32". On some days for hours on end (like 12) planes go over my house every 60 to 90 seconds.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.

LETTER 297

Robert M. Carney
Wanda C. Willard
45 Farina Road
Hull, MA 02045

April 20, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, MA 02205

Re: Proposed Runway 14/32

Dear Mr. Pugsley:

We are writing to express our strong opposition to proposed Runway 14/32 at Logan Airport. As residents of Hull, we are somewhat accustomed to aircraft traffic and its associated noise. However, the recent proposal to add a runway 14/32 to Logan and increase the air traffic over our community and other communities will clearly have a substantial adverse impact on the citizens of the affected communities including the diminished quality of life and the diminution of property values. We are not alone in our concern. All of our friends and neighbors have felt the effects from the aircraft noise. 297.1

Depending on weather conditions and on certain days, there is a seemingly unending parade of aircraft over the Hull Village area of town where we live. Although the hours for such flights were to be limited to "waking" hours, we have been awakened after 11:00 p.m. and before 6:00 a.m. countless times. In fact, we have taken to sleeping with a fan on in our bedroom to mask the sound of planes. On Sunday afternoons in particular, the aircraft noise often prevents the use of our deck and the enjoyment of our yard due to the frequent and repeated roar and whine of airplanes approaching and departing Logan. To give you some perspective, most large commercial aircraft are low enough for us to clearly see the aircraft landing gear being deployed or retracted. We would agree to have noise measuring instruments in or on our home so the real effect could be recorded for analysis.

As you can imagine, this barrage of noise is extremely disruptive. The proposed runway will more than double the number of flights over our home and surrounding neighborhoods and communities. The effect of this traffic will turn our home, our town and the affected communities into a noise ridden string of flight paths. We ask you to imagine sports fields where childrens' soccer games are interrupted because a referee's whistle can't be heard over the din of planes, or a day at the beach punctuated not by waves crashing or the cry of sea gulls but by an endless roar of a line of aircraft across the horizon. Please consider this community and other similarly situated communities in performing the MEPA review process. 297.2

Apart from our personal feelings and the personal effects described above, we are equally concerned about the approval process Massport has embarked on. Massport has sought to abrogate its agreements with affected communities and to overturn a court order to undertake what appears to be a flawed and short-sighted plan of disruptive expansion. There have been very few real opportunities to be heard on a local and/or a regional level. Information disseminated by Massport has been short on objective analysis and/or inconsistent with recognized methodologies. 297.3 297.4

What's even more shocking about this approach is that it is supported to large extent by public funds.

We and our neighbors recognize that Boston, as a major city and a tourist and business destination, requires a strong transportation infrastructure. However, studies have shown that the projected increase in air traffic will outstrip Logan's capacity in the relatively near future and that the proposed new runway is a costly -- on both fiscal and societal levels -- and poorly-devised plan. Moreover, by increasing air traffic into Boston Massport runs the very real risk of diminishing the value of the Boston area as a destination. Its harbor and historic neighborhoods will be materially affected by the increase in flights and resulting noise. We work in Boston and frequently commute on the Hingham commuter boat and find noise from the aircraft to be a tremendous distraction to the beauty of Boston and the Harbor Islands. Increased noise and pollution will diminish Boston's lure as a tourist or convention location if its downtown hotels and tourist attractions are plagued by noise. As frequent travelers, we find that most major U.S. cities have at least two significant commercial airports in the near vicinity, one of which is located outside of the congestion of the city. It strikes us that Hanscom Airport, with its almost immediate accessibility to Route 128 and other major arteries, could serve this role and should be reviewed. 297.5 297.6 297.7

We urge you to reconsider the expansion of Logan and consider our community and other Boston area communities. We do not make this appeal as a NIMBY argument. Rather, we ask that the very real costs and effects of increased air traffic into and out of the Boston area be measured and evaluated before the decision is made, and that such costs and effects be justly apportioned throughout the metropolitan Boston region and not simply on Boston's neighborhoods and the surrounding towns and communities.

Sincerely yours,

Robert M. Carney and Wanda C. Willard

Letter 297
Robert M. Carney and Wanda C. Willard
Private Citizens: Hull

Code	Topic 1	Topic 2	Comment	Response
297.1	Alternatives	Runway 14/32	We are writing to express our strong opposition to proposed Runway 14/32 at Logan Airport…the recent proposal to add a runway 14/32 to Logan and increase the air traffic…will clearly …[diminish] quality of life and…property values	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative. Operations in the vicinity of Hull increase with the Preferred Alternative primarily due to aircraft landing to the northwest, either on new Runway 32 or because of greater use of Runway 33L. However, the noise exposure levels resulting from these increased operations remains several decibels below 60 DNL as indicated by the specific point analysis at Site 26 in Tables 6.2-8, 6.2-9, 6.2-22, and E-1 of the Supplemental DEIS/FEIR. These levels are nearly 20 dB below the highest exposure in Winthrop and 15 dB below the exposure in parts of East Boston and Revere, which the new runway would help to improve.
297.2	Alternatives	Runway 14/32	…we are… concerned about the approval process Massport has embarked on. Massport has sought to abrogate its agreements with affected communities and to overturn a court order to undertake…a flawed and short-sighted plan of disruptive expansion.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "…the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act…". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
297.3	Environmental Review Process	Public Process	There have been very few real opportunities to be heard on a local and/or a regional level.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
297.4	Environmental Review Process	Public Process	Information disseminated by Massport has been short on objective analysis and/or inconsistent with recognized methodologies.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
297.5	Alternatives	Runway 14/32	...studies have shown that the projected increase in air traffic will outstrip Logan's capacity in the relatively near future and that the proposed new runway is a costly--on both fiscal and societal levels--and poorly-devised plan.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
297.6	Open Space/ Parkland	Impacts	...by increasing air traffic into Boston Massport runs the very real risk of diminishing the value of the Boston area as a destination. Its harbor and historic neighborhoods will be materially affected by the increase in flights and resulting noise.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
297.4	Environmental Review Process	Public Process	Information disseminated by Massport has been short on objective analysis and/or inconsistent with recognized methodologies.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
297.5	Alternatives	Runway 14/32	...studies have shown that the projected increase in air traffic will outstrip Logan's capacity in the relatively near future and that the proposed new runway is a costly--on both fiscal and societal levels--and poorly-devised plan.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
297.6	Open Space/Parkland	Impacts	...by increasing air traffic into Boston Massport runs the very real risk of diminishing the value of the Boston area as a destination. Its harbor and historic neighborhoods will be materially affected by the increase in flights and resulting noise.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
297.7	Regional Transportation	Regional Airports	...Hanscom Airport, with its almost immediate accessibility to Route 128 and other major arteries, could serve this role [of alternate significant commercial airport in the vicinity] and should be reviewed.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Dear MR Pugsley

LETTER 298

I am a long time resident of Hull and enough is enough! It is Sunday 6:00 A.M. and the planes are flying low and loud, Polluting the air and the ears.

Instead of building a new runway, wouldn't it be more economically and environmentally sound to 1: have smaller planes pay higher fees during Peak hours to help ease airplane traffic and 2: have shuttle buses that are centrally located to take people to Green R.I. and Manchester N.H. airports More and more people want to use these airports why not make it easier for people to do so?

298.1

298.2

Sincerely

Letter 298
Unknown Commentor (Illegible Signature)

Code	Topic 1	Topic 2	Comment	Response
298.1	Alternatives	Peak Period Pricing	Instead of building a new runway, wouldn't it be more economically and environmentally sound to have smaller planes pay higher fees during peak hours to help ease airplane traffic[?]	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.
298.2	Regional Transportation	Regional Airports	Instead of building a new runway, wouldn't it be more economically and environmentally sound to have shuttle buses that are centrally located to take people to Green RI and Manchester NH airports?	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

LETTER 299

We would like to register our support for the construction of runways 14-32 at Logan International Airport.

In doing so we would like to state a few facts on the matter of the airport. Reaction to headlines bearing misinformation or half-truths about this construction project has pushed many political entities to ignore a basic need of our International Airport. Our airport needs a second runway when the winds favor the northwest. Flight safety and delay reduction cry out for it. 299.1

Increased noise cannot possibly be used as an excuse. This unidirectional runway is approached over water. This fact alone should have residents enthused. Instead of having to stack up planes during these wind conditions for landing on the single existing runway, the tower will be able to space and land the same number of airplanes in much less time. There are now delays which mean late evening arrivals that would not have to happen. 299.2 299.3

We are natives of Boston and have seen many changes to our great city. We understand that progress needs to be studied and evaluated. We cannot see, however, how the construction of this runway can possibly be labeled as a means of increasing the flow of traffic into Logan. The facts are that our airport, streetside and airside are congested. There is limited terminal space and the parking lots cannot handle more cars. 299.4

The purpose of this runway is simple. There is a demand during all wind conditions and it needs to be met. Please ignore the headlines and stick to the facts.

Please support this construction project.

Thank you,

Robert Strojny and Katherine Strojny

Robert and Katherine Strojny
40 Murphy Road
Hyannis, MA 02601

Letter 299
Robert and Katherine Strojny
Private Citizens: Hyannis

Code	Topic 1	Topic 2	Comment	Response
299.1	Alternatives	Runway 14/32	We would like to register our support for the construction of runways 14/32 at Logan International Airport. Our airport needs a second runway when the winds favor the northwest. Flight safety and delay reduction cry out for it.	Comment noted.
299.2	Noise	Impacts	Increased noise cannot possibly be used as an excuse. This unidirection runway is approached over water.	Comment noted.
299.3	Purpose and Need	Delay	Instead of having to stack up planes during these wind conditions for landing on the single existing runway, the tower will be able to space and land the same number of airplanes in much less time. There are now delays which mean late evening arrivals that would not have to happen.	Comment noted.
299.4	Alternatives	Runway 14/32	We cannot see...how the construction of this runway can possibly be labeled as a means of increasing the flow of traffic into Logan [since]...our airport, streetside and airside are congested. There is limited terminal space and the parking lots cannot handle more cars.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

LETTER 300

April 20, 1999

MEPA
100 Cambridge Street, 20th Floor
Boston MA 02202

Dear Arthur Pugsley:

Please include the following letter as written testimony AGAINST the Logan Airport Runway Extension.

I purchased property and moved to Jamaica Plain last November. The purchase was preceded by careful research to choose a home that would afford a high quality of life. I thought I had checked out everything necessary to support this quality of life.

Within ONE HOUR of moving to this property, I was devastated. The sound of airplanes was deafening. Planes begin flying at 6 AM EVERY DAY OF THE WEEK. This noise severely impacts our home. The ongoing damage to hearing and nervous systems is causing serious medical problems. 300.1

I invite anyone to come to my home at 6 AM any day of the week and listen to the thunderous sound at the rate of one plane avery 60 seconds.

The Runway extension is shortsighted. The only real solution is a new airport. In lieu of this, all citizens of MASSACHUSETTS should share the burden via a REGIONAL solution.

Thank you,

Cheryl Balukonis 43 Boynton Street 3L Jamaica Plain
617 983-9147

Letter 300
Cheryl Balukonis
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
300.1	Regional Transportation	Regional Airports	Please include the following letter as written testimony AGAINST the Logan Airport Runway Extension...The only real solution is a new airport. In lieu of this, all citizens of Massachusetts should share the burden via a REGIONAL solution.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 301

All comments must be received April 22. 1999
All mail concerning the environmental impact review process including filings. comments. and all associated materials must be addressed to:

Bob Durand. Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston. MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

The plan does not take into consideration the cumulative impact of the ground and air congestion. The noise from the airplanes alone is overwhelming. When you add the ground transportation problems, it is clear that proposed Runway is unworkable. 301.1

Name Daniel L. Barnett
Address 16 Alveston St
Jamaica Plain, MA 02130
Phone 617 522 0197

Letter 301
Daniel L. Barnett
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
301.1	Noise, Air Quality, Traffic	Impacts	The plan does not take into consideration the cumulative impact of the ground and air congestion. The noise from the airplanes alone is overwhelming when you add the ground transportation problems, it is clear that proposed runway is unworkable.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 302

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

(1.) Massport has left out reasonable alternatives to Logan's plan to add more runway area. 302.1

(2) Massport's plan contains NO 2010 noise contours. 302.2

(3) The 3 year deadline to file a change of project notice (April 8/98, Massport should not be allowed to file now. 302.3

(4) The EIS uses outdated data from 1993 in its base case information. 302.4

(5) While Massport calculates a cost per delay hour in the air it refuses to attach a cost to problems caused by the negative products of its current plan - traffic, pollution, noise, and so on. 302.5

Name Sarah Bluemann
Address 50 Weld Hill St #3
JP MA 02130
Phone (617 524-0685

Letter 302
Sarah Buchmann
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
302.1	Alternatives	Other Non-Construction Alternatives	Massport has left out reasonable alternatives to Logan's plan to add more runway area.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
302.2	Noise	Model	Massport's plan contains no 2010 noise contour.	Noise contours have been produced for the 29M Low, 37.5M High, and 2015 High Regional Jet Fleets. These various projections are considered to represent the range of operations and their impacts that are likely to occur over the next ten years.
302.3	Environmental Review Process	MEPA	The 3-year deadline to file a change or project notice expired 8/98. Massport should not be allowed to file now.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
302.4	Analysis Assumptions/ Methodologies	Base Year	This EIS uses outdated data from 1993 in its base case information.	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
302.5	Purpose and Need	Delay	While Massport calculates a cost per delay hour in the air it refuses to attach a cost to problems caused by the negative products of its current plan-traffic, pollution, noise and so on.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR documents comply with all applicable NEPA and MEPA requirements. A cost benefit analysis is not required by federal or state law and would not provide appropriate context. Cost information mentioned in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR is intended to provide analytic context.

LETTER 303

April 21, 1999

Robert A. Durand, Secretary
Executive Office of Enviromental Affairs
100 Cambridge Street - Room 2000
Boston, MA 02202

Attention: MEPA Office

Dear Secretary Durand:

I am writing to oppose Massport's plan to construct Runway 14/32 at Logan Airport as I believe this proposal will be harmful to the Greater Boston area in the following ways: 303.1

Building Runway 14/32 will allow Massport to operate Logan Airport at a greater capacity than at present. This expansion of air traffic expands air pollution in communities already suffering the highest rates of asthma in The Commonwealth. Airplanes are not regulated for pollution control; more flights means more pollution.

Increased vehicles traveling to and from Logan will, IN EVERY INSTANCE travel through these same communities. Many of these vehicles will be deisel which are also not regulated and which release a large amount of particulate matter. 303.2

The economic arguments advanced for this expansion are fallacious. They rest, in part, on the assumption that a new Convention Center served by an expanded airport, luxury hotel and restaurant industry will create a regional economic boom with an expansion of jobs.

The truth is that the increase in noise and traffic will devastate many small and medium-sized businesses such as local restaurants, nightclubs and offices, theatres, arts and music venues, the film/location industry. aspects of the tourist industry which will no longer stay in local bed-and-breakfasts and the booming real estate industry. These industries are part of our economic strenght. When our regional economy fell apart in the 1950's and 1960's having an airport at Logan was no help because our economy had been based on a few, large industries that relocated. Diversification, not airplanes, resurrected our economy. 303.3

Airport expansion will create jobs but these jobs are likely to be low-wage, no benefits, dead-end jobs such as chambermaid, airport security, dishwasher etc. which don't create prosperity for anyone other than large banks, large developers and construction companies, large hotel and restaurant owners. These industries pump money OUT of the Boston area because most of the owners and/or corporate headquarters are not located in the Greater Boston area. 303.4

Finally, I am outraged that an agency of state government would continue to forget it's purpose: to serve the best interests of ALL the people of this state. The pitting of City against Suburb, the rich against the less rich may be politics but it is not governance. This proposal doesn't even

303.5

serve the majority of Logan Airport users; people who live between Routes 128 and Route 495. Expanded airport traffic will travel over already saturated roads before reaching the Central Artery and the Third Harbor Tunnel, further delaying travelers.

I hope you consider these and other reasons sufficient to reject Massport's MEPA EIS on the proposal to build Runway 14/32. Many alternative sugestions have been offered. I ask that you encourage Massport to work with the Greater Boston communities and with their own Community Advisory Board to seek true and reasonable solutions to increasing air traffic.

Thank you for this opportunity to comment on this matter.

Sincerely,
Constance R. Cecil
Constance R. Cecil
8 Glenside Avenue
Jamaica Plain, MA 02130

Letter 303
Constance R. Cecil
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
303.1	Alternatives	Runway 14/32	I am writing to oppose Massport's plan to construct Runway 14/32 at Logan Airport…Runway 14/32 will allow Massport to operate Logan Airport at a greater capacity than at present…increasing air pollution in communities already suffering the highest rates of asthma in The Commonwealth. Airplanes are not regulated for pollution control….	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. Emissions are shown to decrease with the Preferred Alternative when compared to the No Action Alternative. Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. The principal effect of the Centerfield Taxiway is to reduce the number of aircraft waiting on taxiways, reducing ground noise and emissions for close-in residents of East Boston and Winthrop. Dispersion modeling indicates no violations of the NAAQS at any of the sites shown on Figure 6.4-1 of the Supplemental DEIS/FEIR, including those at public beaches and residential areas.
303.2	Ground Transportation	Access to Logan	Increased vehicles traveling to and from Logan will, IN EVERY INSTANCE travel through these same communities. Many of these vehicles will be diesel…which release a large amount of particulate matter.	Diesel emissions from motor vehicles are included in the air quality analysis.
303.3	Alternatives	Runway 14/32	The economic arguments advanced for this expansion are fallacious…the increase in noise and traffic will devastate many small and medium-sized businesses such as local restaurants, nightclubs and offices, theatres, arts and music venues, the film/location industry…tourist industry which will no longer stay in local bed- and breakfasts and the booming real estate industry.	Section 1.3 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to the regional economy.
303.4	Alternatives	Preferred Alternative	Airport expansion will create jobs but these jobs are likely to be low-wage, no benefits, dead-end jobs such as chambermaid, airport security, dishwasher etc….	Section 1.2 of the Draft EIS/EIR and Section 1.3 of the Supplemental DEIS/FEIR discuss the importance of Logan Airport to the regional economy.
303.5	Ground Transportation	Access to Logan	Expanded airport traffic will travel over already saturated road before reaching the Central Artery and the Third Harbor Tunnel and further delaying travelers.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 304

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

The cumulative impact of the increase in flights on ground traffic congestion was not sufficiently addressed in the study. 304.1

The solution is temporary, and does not fully address the transportation needs. We'll be back to the same position in five years 304.2

The number of delays has been artificially estimated and exaggerated. 304.3

The report should be sent back for and reworked

Name Peter Clarke
Address 7 Alveston St.
Jamaica Plain, MA 02130
Phone 617 522-9345

4/15/99

Letter 304
Peter Clarke
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
304.1	Ground Traffic	Access to Logan	The cumulative impact of the increase in flights on ground traffic congestion was not sufficiently addressed in the study.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2..
304.2	Alternatives	Runway 14/32	The solution is temporary, and does not fully address the transportation needs. We'll be back to the same position in five years.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
304.3	Delay	Model	The number of delays has been artificially estimated and exaggerated.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

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All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, associated materials must be addressed to:

LETTER 305

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

How will you Address The Cumulative Impacts such As Additional Ground Traffic in The Tunnels and Above ground. 305.1

How will you Address Additional Traffic to the MBTA? 305.2

Your Delay Reports are insufficient, especially To my Area of The City.!!

We are currently under attack with environmental diseases, ie Asthma Cancer in The Area. 305.3

Nancy Doherty

Name NANCY DOHERTY
Address 116 Sedgwick ST
JAMAICA Plain MA 02130
Phone 617-522-3534

Letter 305
Nancy Doherty
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
305.1	Ground Transportation	Access to Logan	How will you address the cumulative impacts such as additional ground traffic in the tunnels and above ground. How will you address additional traffic to the MBTA?	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.
305.2	Delay	Model	Your delay reports are insupportable, especially to my area of the city.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
305.3	Public Health	Effects	We are currently under attack with environmental diseases; i.e., asthma, cancer in the area.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 306

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

- the ground environmental impacts were not looked at there will be increased traffic thru the city + the airport clog downtown + add ~~to~~ misery to the air. 306.1
- MASSPORT delay data is not accurate delays have been reduced 306.2
- Regional Solutions have been half baked at best in the 70's the reason was they were not able to do anything because the military owned the airports now that they can be used they are not 306.3
- Once again Massport is jamming an unacceptable solution down the throats of the poor communities at the expense of Jeffreys + Route 128 306.4

Name Jack Dolan
Address 76 Greenough Ave
Jamaica Plain
Phone ✓ 524 2361

Letter 306
Jack Dolan
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
306.1	Ground Transportation	Access to Logan	The ground environmental impacts were not looked at, these will be increased, traffic through the city and the airport clog downtown and add monoxide to the air.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.
306.2	Delay	Model	Massport delay data is not accurate, delays have been reduced.	Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The delay situation is not at equilibrium. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays, which would be directly affected by Runway 14/32, have risen steadily since 1994. In fact, Logan Airport is the second most delayed airport in the nation for arrivals.
306.3	Regional Transportation	Regional Airports	Regional solutions have been half looked at but in the 70s, the reason was they were not able to do anything because the military owned the airports; now that they can be used they are not.	In October 1996, the civilian Naval Air Station Planning Committee rejected redevelopment the South Weymouth Naval Air Station as a commercial airport because of opposition from the surrounding communities – Weymouth, Rockland, and Abington.
306.4	Alternatives	Runway 14/32	Once again Massport is jamming an unacceptable solution down the throats of poor communities at the expense of Lexington and Route 128.	The Environmental Justice analysis in Section 6.8 was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 307

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

The document is seriously flawed and not supported in it's findings. The Ground Environmental impacts are not looked at and the doubling of the number of passengers will increase the Boston area traffic. 307.1

It's my understanding that the planes go over the water for only a mile and then turn to go over the new Seaport area. That area is to have an Opera House; how can that significant attraction be appreciated by the locals or the tourists with so many planes going over? 307.2 307.3

This document presents a short term "solution" which will end up in the same place w/in 5 years. By then, we've tripled the plane noise and will still not have a long term solution.

The fact that MassPort would ask the Inner City to accept and endure more noise goes against the code of Environmental Justice. Massport needs to consider other alternatives. The state needs to look at a secondary airport that incorporates more modes of transportation, including ground, sea and air. 307.4 307.5

Name MARTY EPP
Address 12 REVERE ST.
Jamaica Plain, MA 02130
Phone 617. 983. 0182

4/15/99

Letter 307
Marty Epp
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
307.1	Ground Transportation	Access to Logan	...the ground environmental impacts are not looked at and the doubling of the number of passengers will increase the Boston area traffic.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.
307.2	Alternatives	Runway 14/32	...the planes go over the water for only a mile and then turn to go over the new Seaport area ...[which will] have an Opera House...[The planes going overhead will adversely affect the Opera House.	The departure paths from Runway 14 are shown in Figures 6.2-3 and 6.2-4. The jet departures from Runway 14 (which would generate the most noticeable noise impacts) continue over water for more than one mile, and the flight tracks are bounded by the existing departures tracks from Runways 22L/R and 33R. Examination of the noise contours in Section 6.2 of the Supplemental DEIS/FEIR shows that the changes in the 65 dB and 70 dB contours due to Runway 14 departures and Runway 32 arrivals occur only over water. Further discussion of the noise impacts of Runway 14/32 can be found in Section 6.2 of the Supplemental DEIS/FEIR.
307.3	Alternatives	Preferred Alternative	This document presents a short term "solution" which will end up in the same place within 5 years...with triple the plane noise and no long term solution.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
307.4	Noise	Impacts	...asking the Inner City to accept and endure more noise goes against the Code of Environmental Justice.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
307.5	Regional Transportation	Regional Airports	Massport needs to consider other alternatives...to look at a secondary airport that incorporates more modes of transportation, including ground, sea and air.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 308

April 15, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge St. 20th Fl.
Boston, MA 02202

Dear Sir,

We are registered voters in the city of Boston, specifically the neighborhood of Jamaica Plain. We are writing to let you know that we support the conclusions within the enclosed report prepared for the Community Advisory Committee regarding the proposed Runway 14/32 at Logan Airport. 308.1

We strongly urge you to publicly stand with us in opposition on this issue. Please see that the Logan Environmental Impact Statement recommending the new runway be withdrawn. It should be redone with a complete study of all alternatives and a realistic focus on regional transportation and long-term planning. 308.2

Thank you for your attention to this matter.

Marty (Martha) Epp
Judy K. Mencher
12 Revere St.
Jamaica Plain, MA 02130
(617) 983-0182

Letter 308
Marty (Martha) Epp & Judith K. Mencher
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
308.1	General Opposition		We are writing to let you know that we support the conclusions within the enclosed report prepared for the Community Advisory Committee regarding the proposed Runway 14/32.	Comment noted.
308.2	Environmental Review Process	MEPA	The Logan Environmental Impact Statement recommending the new runway should be redone with a complete study of all alternatives and a realistic focus on regional transportation and long-term planning.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

LETTER 309

DON EUNSON

34 Jamaica Street, Jamaica Plain, Massachusetts 02130-3819 Tel: (617) 522-4112

April 19, 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA # 10458
100 Cambridge St – 20th floor
Boston, MA 02202

Re: EIR—Logan Airside Improvements Plan EOEA # 10458

Dear Mr. Durand:

As a Boston resident I am vehemently opposed to the proposed expansion of Logan airport with runway 14/32. This is both an environmental issue and a social equity issue. 309.1

Residents of Boston and neighboring communities cannot be expected to tolerate the increased noise pollution and air pollution that would result from tripling the number of planes passing over our homes, a serious deterioration of urban quality of life. If this proposed airport expansion were to occur I am convinced that more and more people who have the economic choice would flee the noise and fumes of Boston for quieter, more peaceful communities. 309.2

Contrary to what business leaders say, this airport expansion and its resulting impact on the makeup of the city would not be good for Boston—neither good for business nor good for tourism. If Boston is to remain a vital economic and cultural hub of New England it must be a livable city.

I urge you to oppose Runway 14/32 and reject Massport's EIS.

Massport must be forced to explore a truly regional air transportation plan that includes expansion and better utilization of Hanscom, Worcester, TF Green and Manchester airports — and perhaps the construction of a second major metroplitan Boston airport. Furthermore, I feel that the City, the Commonwealth, and Amtrak must move forward 309.3

with the construction of a North-South Rail Link, and the continuing expansion of high-speed inter-city rail service (serving Boston-Worcester, for instance). We rely disproportionately on air transportation because other modes of transportation are outmoded and inadequate. 309.4

Finally, I think it is ridiculous to assert that for Boston to be a major city that it must have its primary airport at Logan, 15 minutes from downtown. Please consider that other major cities — such as London with its two airports — are successfully served by airports that are an hour outside the city.

Sincerely yours,

Donald H. Eunson, Jr.

Letter 309
Donald H. Eunson
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
309.1	Alternatives	Runway 14/32	I am...opposed to the proposed expansion of Logan airport with runway 14/32...[the] environmental issue [is increased noise and air pollution.]	Comment noted.
309.2	Environmental Justice	Impacts	[The social equity issue is that] residents of Boston and neighboring communities cannot be expected to tolerate the increased noise [and air] pollution ...from tripling the number of planes passing over our homes.	Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Airside Project Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts. The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR in Section 6.8. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.

Code	Topic 1	Topic 2	Comment	Response
309.3	Regional Transportation	Regional Airports	Massport must...explore a truly regional air transportation plan that includes expansion and better utilization of Hanscom, Worcester, TF Green and Manchester airports—and perhaps the construction of a second major metropolitan Boston airport...Other major cities...are successfully served by airports that are an hour outside the city.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years.
309.4	Regional Transportation	Passenger Rail	...the City, the Commonwealth, and Amtrak must move forward with the construction of a North-South Rail Link, and the continuing expansion of high-speed inter-city rail service (serving Boston-Worcester, for instance). We rely disproportionately on air transportation.	The restoration of Portland-Boston rail service was analyzed in the Airside Project Draft EIS/EIR. According to the Portland Rail study, more than 99 percent of travel in the Portland-Boston corridor is by automobile. The same study estimated that restoration of the rail service would have no impact on the amount of travelers using air because the rail travel time is not competitive with the air mode. Additionally, the air market is estimated at only 100,000 annual passengers. This is less than one-half of a percent of Logan Airport's total passenger traffic in 1999. Refer to Section 2.4 of the Airside Project Draft EIS/EIR. Chapter 2 of the Supplemental DEIS/FEIR provides discussion of the entire region's air transportation system and includes a discussion of alternative modes, specifically, high-speed rail and the extent of Massport's active involvement in this area. Refer to response to Comments 6.6 and 6.7.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 310

All comments must be received April 22, 1999.
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I oppose the plan to build the runway because I disagree that it will reduce delays in the long run. The better strategy is to address the construction or development of another major airport outside the city of Boston to "share equally" the noise, delay, and high demand problem. 310.1 310.2

I also wish to say that I deeply resent and am offended by Massport's strategy of suggesting that opposition to their plan is unfair to other communities who bear a greater brunt of the noise and traffic airport problems. This strategy was downright wrong, sanctimonious, divisive, and untrue, and it has caused me to contact my elected officials and advise them to pass legislation that diminishes Massport's independence and creates greater legislative oversight.

Name Magdalena Fernandez
Address 21 John Andrew St.
Jamaica Plain, MA 02130
Phone 617.524.8133
mst@mit.edu

Letter 310
Magdalena Fernandez
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
310.1	Alternatives	Runway 14/32	I oppose the plan to build the runway because I disagree that it will reduce delays in the long run.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
310.2	Regional Transportation	Regional Airports	...development of another major airport, outside...Boston to "share equally" the noise, delay, and high demand problem./	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

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LETTER 311

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

What about the quality of life for people who already feel the impact of the noise. Increased noise will make the City an unbearable place to live. 311.1
~~Wat~~ World class cities don't destroy their city with a plan like this.

This is a short term solution. The problem will still be here if the runway is built. 311.2
A BLUE RIBBON impartial panal is needed to study for another solution to the runway problem.

Name (Gerard) M. Finch
Address 16 Alveston ST
Jamaica Plain Ma
Phone 617-522-0197

Letter 311
Gerard M. Finch
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
311.1	Alternatives	Runway 14/32	...for people who already feel the impact of the noise, increased noise will make the city an unbearable place to live.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.
311.2	Environmental Review Process	Blue Ribbon Panel	This is a short term solution. The problem will still be here if the runway is built. An...impartial panel is needed to study...another solution.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 312

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

4/16/99

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I am deeply concerned about the impact Runway 14/32 will have on the environment. Massport has not studied the cumulative environmental impact. What will happen to the quality of life around the airport? What will the effects be on the ground & in the air? As a Jamaica Plain resident, I feel Massport must do a much more thorough and accurate study on the impact their actions will have on the environment. 312.1

Sincerely,
Jacqueline Gambarini

Name Jacqueline Gambarini
Address 8 Everett Street
Phone Jamaica Plain MA 02130
617/524-7659

Letter 312
Jacqueline Gambarini
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
312.1	Alternatives	Runway 14/32	I am...concerned about the impact Runway 14/32 will have on the environment. Massport has not studied the cumulative environmental impact...on the ground and in the air...Massport must do a much more thorough and accurate study on the impact...on the environment.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 313

All comments must be received April 22. 1999
All mail concerning the environmental impact review process including filings. comments. and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston. MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

It's ill conceived + short sighted + 313.1
Please send back + develop a
more comprehensive transportation
plan for a long term solution.

Name [signature]
Address 16 Chamber Ave.
Winthrop MA 02152
Phone

Letter 313
Thomas Harrigan
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
313.1	Alternatives	Preferred Alternative	[Runway 14/32] is ill conceived and short sighted. Please...develop a more comprehensive transportation plan for a long term solution.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

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COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 314

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings. comments. and all associated materials must be addressed to:

Bob Durand. Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston. MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

As of 1997 there are flights which caused a great increase in traffic directly over our house in the Bowdoin section of Jamaica Plain. What was once a quiet neighborhood is now noisy because of Mass Port/FAA unwillingness to disperse flights in multiple paths over other parts of JP and Roxbury - runways 27. The last thing I want is more flights over my home. We in the Bowdoin/Geneva corridor 14/32, EOEA #10458 314.1 314.2

Name [illegible]
Address [illegible]
[illegible] MA
Phone JAMAICA PLAIN

Letter 314
Eleanor Horner
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
314.1	Alternatives	Runway 14/32	We in the Bourne section [of Jamaica Plain] oppose 14/32 [because of flight volumes and noise].	Section 4.3 of the Supplemental DEIS/FEIR contains a history of PRAS development and performance at Logan Airport.
314.2	Noise	Impacts	Our once quiet neighborhood is now noisy because of Massport/FAA unwillingness to disperse planes in multiple paths over other parts of Jamaica Plain and Boston's Runway 27.	Refer to response to Comment 314.1.

Arthur L. Johnson
48 Robeson Street
Jamaica Plain, MA 02130
617-524-7911

facsimile transmittal

LETTER 315

To:	Arthur Pugsley, Analyst, MEPA	**Fax:**	e-mail arthur.pugsley@state.ma.us.
From:	Arthur L. Johnson, Esq.	**Date:**	04/19/99
Re:	Comments on FAA & Massport EIS	**Pages:**	3
CC:	Legislators, City Councilors, EPA		

x **Urgent** ☐ **For Review** x **Please Comment** x **Please Reply** ☐ **Please Recycle**

I could not attend the Airport meetings but want to voice my concerns re:

1. Fair distribution of flight increase - Massport means a more equal distribution over current flight parths; not a fair and equal distribution of flights across all neighborhoods. Among those effected, some neighborhoods will have less, others more, **but many will have none!** Is that fair? I cannot imagine my family's quality of life or the plummeting real estate values in the Parkside neighborhood of J.P. once there are 56,000 more flights overhead every year, and that increase is only the beginning of a business that is intent on growth. On weekend mornings in our neighborhood, outdoors one has to stop talking when the planes fly over, because of the excessive noise. After the community's 20 year fight, a law suit and an environmental impact study, Massport aligned all Runway 27 flights over Franklin Park - an area set aside to provide a retreat from urban noise and activity. The decision to move the flight path over Franklin Park was Massport's answer to a quality of life comlaints. So, Instead of addressing the source of and quality of noise impact, Massport just moved the noise to an area where it effected 6,000 fewer people. Is that intelligent problem solving. **And in reality, it doesn't affect fewer people-the planes fly over my house.** 315.1 315.2
2. Noise levels: The FAA states that noise levels will improve as of 2000, because of new requirements on jet engine noise levels. However, the FAA states they have no jurisdiction over small planes or helicopters. 315.3

3. No. of flights per day: Currently, those of us in the northwest flight path have a relief from the constant drone and frequent screams of overhead planes when the winds blow from other directions. The proposed new runway will allow Massport to schedule flights over Jamaica Plain at any time. I start hearing the planes at 6:09 on weekend mornings, and the intervals between planes seems as brief as 1-2 minutes apart. 315.4

4. Increase in number of flights, unacceptable noise levels and intervals between flyovers. These are the key impact issues. But my research has unearthed problems that interfere with resolving any of these issues to the community's satisfaction. Jurisdiction – there is no one entity with the authority to make all the decisions. The FAA has control over flight paths but not the number of planes allowed to land at any one airport. Apparently, no entity can say – enough is enough. We cannot accommodate any more planes at Logan. The FAA and Massport claim they have to accommodate every plane that wants to land. 315.5

5. Community Input opportunities – the environmental impact community process – By the time the environmental impact process is in place, we are all locked into a procedure that does not allow for problems solving. There are rules and regulations on procedures and authority that keep plans fixed in place. This means the community raises questions. Massport answers by defending its positions and plans. Whats the point. 315.6

6. When I talk to the FAA, they answer one question at a time with answers framed by their regulatory authority. They respond with limited, specific information to each question. They are not organized or authorized to solve problems. They only give out information . They have no obligation to paint the whole picture – or to give all the facts and implications of the facts.

7. Here are questions which I would like discussed? Why don't we have a regional authority that has the authority/capacity to direct airport use with the mandate to set limits on Logan's capacity. Business passengers can get to Boston or their destinations at Rte 128 or Rte495 just as quickly from outside in to the City as through the phenomenal traffic jams between the airport and the tunnels and then west. 315.7

8. If the airport has fewer delays, then more planes will be attracted to Logan. It is a fact that the proposed new runway is only a temporary solution, pushing the discussion into 2002 on how much air traffic is too much. All businesses are in the business to grow. Let Massport grow 315.8

in its regional capacity-not in East Boston only and at the sacrifice of the residents and neighborhoods Boston has been working to revitalize for the last 25 years. Protect your constituents. We have invested in this City. You spend Federal dollars to revitalize City neighborhoods. Are we out to undermine the efforts of the last 2 decades? Haven't we learned our lesson around neglect, degradation, blight. Improve the quality of life, do not diminish it.

9. Do not sacrifice us. Businesses in Boston will continue to flourish and grow as long as you protect the quality of life in Boston. There are always new ways to make money. Witness the invention of the condominium. Nothing physically changed. A concept – a way of thinking about a physical resource changed and suddenly landlords had the opportunity to increase the value of their holdings by doing nothing but changing the ownership structure. Massport needs to make a paradigm shift. They wouldn't have even discussed taking over Worcester Airport if the communities had not risen up against Runway 14/32. And now they say they can't help Worcester immediately because of lack of road access. What about public transportation-commuter rail. Wait to impose 14/32 until Worcester access is solved. See if we need it. 315.8 (cont.)

10. Do not allow any process to proceed which will allow Runway 14/32 to become a reality until other ideas have been implemented and the effects observed. Once you build it, you will not be able to turn back. We will suffer forever – and the suffering will increase endlessly.

11. Mitigation is useless – who can soundproof the outdoors – **make the jet engine manufacturers produce quieter planes, planes with no jet fuel sprays.** 315.9

12. Make the airlines meet all maintenance requirements – **prevent parts from falling out onto people's backyards.** Do all of these things and then talk to us about Runway 14/32. 315.10

13. Another important violation of the EIS is that Runway 27 flight path is over almost every public housing complex from South Boston through the Washington Street Corridor. 315.11

including Castle Square, Orchard Park, Academy Homes (I've left out a few) – and then it destroys the tranquility of Franklin Park. Too bad we don't have Hollywood types like Don Henley and Whoopi Goldberg protecting Franklin Park the way they protect Walden Pond.

Sincerely,

Arthur L. Johnson 48 Robeson Street, Jamaica Plain 02130

Letter 315
Arthur L. Johnson
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
315.1	Noise	Runway Use	Massport...[does not propose] a fair and equal distribution of flights across all neighborhoods...some neighborhoods will have less, others more, but many will have none...Massport aligned all Runway 27 flights over Franklin Park [to address quality of life complaints and to affect 6,000 fewer people]...instead of addressing the source of and quality of noise impact.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
315.2	Noise	Runway Use	...my family's...real estate values [will plummet] in the Parkside neighborhood of Jamaica Plain once there are 56,000 more flights overhead every year.	Refer to response to Comment 315.1.
315.3	Noise	Impacts	The FAA states that noise levels will improve as of 2000, because of new requirements on jet engine noise levels. However, the FAA states they have no jurisdiction over small planes or helicopters.	The FAA has rulemaking authority over the noise levels of all new aircraft, including light airplanes and helicopters. In fact there are provisions of FAR Part 36 that apply to those aircraft types.
315.4	Alternatives	Runway 14/32	Currently, those of us in the northwest flight path have a relief from...overhead planes when the winds blow from other directions. The proposed new runway will allow Massport to schedule flights over Jamaica Plain at any time...Increase in number of flights, unacceptable noise levels and intervals between flyovers...are the key impact issues.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.

Code	Topic 1	Topic 2	Comment	Response
315.5	Environmental Review Process	FAA/NEPA	...there is no one entity with the authority to make all the decisions. The FAA has control over flight paths but not the number of planes allowed to land at any one airport. Apparently, no entity can say—enough is enough...The FAA and Massport claim they have to accommodate every plane that wants to land. When I talk to the FAA...they respond with limited, specific information to each question...they have no obligation to paint the whole picture—or to give all the facts and implications of the facts...Why don't we have a regional authority that has the authority/ capacity to direct airport use with the mandate to set limits on Logan's capacity.	Federal constitutional provisions (preemption, commerce clause, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to limit the number of aircraft operations. Since Aviation Deregulation in 1979, airlines have been free to select their own markets, schedules and equipment without Federal, State or local intervention.
315.6	Environmental Review Process	Public Process	...the environmental impact community process [is inadequate]—By the time the environmental impact process is in place, we are all locked into a procedure that does not allow for problems solving...[Instead] Massport...defending its position and plans,	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
315.7	Regional Transportation	Regional Airports	Business passengers can get to Boston or their destination at Route 128 or Route 495 just as quickly from outside in to the City as through the phenomenal traffic jams between the airport and the tunnels and then west...Let Massport grow in its regional capacity....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. With recent service developments, Manchester and T.F. Green/Providence airports are becoming attractive options for air passengers that originate in communities north and south of Routes I-95 and I-495. By its agreement to assume operational responsibility and the eventual ownership of the Worcester Regional Airport, Massport is working to increase air services at Worcester Regional Airport and is working to increase the airport's role in accommodating air travel demand generated in communities west of I-95 and I-495.
315.8	Alternatives	Runway 14/32	...the proposed new runway is only a temporary solution...Massport needs to make a paradigm shift...Wait to impose 14/32 until [ground transportation access to] Worcester...is solved. See if we need it...Do not...allow Runway 14/32 to become a reality until other ideas have been implemented and the effects observed.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
315.9	Noise	Sound Insulation	Mitigation is useless—who can soundproof the outdoors—make the jet engine manufacturers produce quieter planes, planes with no jet fuel sprays.	The FAA has preemptive rule-making authority for quieting aircraft at the source. Neither Massport nor any entity other than the FAA can force manufacturers to comply with noise limits.

Code	Topic 1	Topic 2	Comment	Response
315.10	Alternatives	Runway 14/32	Make the airlines meet all maintenance requirements—prevent parts from falling out onto people's backyards.	All United States and foreign airlines operating at Logan Airport must comply with very strict maintenance procedures and inspections to prevent such incidents. Runway 14/32 will reduce the number of flights over populated areas and increase them over the harbor.
315.11	Environmental Justice	Impacts	...Runway 27 flight path is over almost every public housing complex from South Boston through the Washington Street Corridor....	Winthrop is actually the most severely affected by high noise exposure levels, now and in the future regardless of which alternative is implemented. However, the Preferred Alternative will provide some noise benefit to Winthrop, as well as to parts of East Boston and Revere that are also exposed to higher noise levels than South Boston. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.

LETTER 316

BARBARA KAPLAN
PLANNING & DEVELOPMENT

April 7, 1999

Mr. Arthur Pugsley
MA Environmental Protection Agency
100 Cambridge Street
Boston, MA 02110

Dear Mr. Pugsley:

I urge you to oppose Runway 14/32. Its development has little to do with delay reduction and everything to do with expansion of capacity at Logan. The runway plan is not about improving service for passengers. Its about allowing for undirected, limitless growth. There are many other ways to improve service. **Give us a chance to let you know our ideas.** Massport should be conducting a comprehensive planning process, with residents at the planning table before they push forward with changes at Logan. Their planning process should take into account regional resources, existing and potential intermodal transportation improvements, the future of Boston as a world class city, and the quality of life for those residents who have made a commitment to remain in the City. 316.1 316.2

Residents of Boston and surrounding areas who already bear an unfair portion of the noise, air pollution and auto traffic caused by Logan will be permanently, negatively impacted with triple the amount of planes passing over our homes, if 14/32 is built. We need airport RELIEF, not additional negative impacts! 316.3

The Parkside neighborhood of Jamaica Plain, where I live, abuts Franklin Park. It is now right under the flight path of Runway 27. Flights operate at one minute intervals for takeoffs starting at 6:00am on the days when there is a northwest wind, allowing for no relief from the constant drone overhead. Massport states that "56,000 and growing" flights is the "fair" number projected annually for this neighborhood. When and if they build Runway 14/32 which will work in combination with Runway 27, there will be flights every day over my neighborhood, regardless of wind direction. This number, "56,000 and growing" they say, represents only 17% of all Logan flights. However, 17% translates into an *instant* "40,000" *additional* flights and growing" over my house annually. The prospect is *appalling*. I am already negatively effected by 17,000 – 18,000 planes a year. The other morning, there were a minimum of five, if not six planes roaring overhead in just seven minutes, and this is a common pattern. 316.4

Runway 27's flight path burdens Parkside with Excessive noise, vibrations, environmental pollutions, health and safety factors. This flight path was moved over our heads within the last two years. What a surprise to those of us who had been living in this quiet neighborhood for decades, even generations. In response to a suit against Massport filed by the Runway 27 Coalition, Massport moved the flight path over Franklin Park where it now effects a predominantly poor, minority neighborhood. Instead of addressing the underlying causes of noise and environmental pollution brought up in the suit, Massport chose a cheap and short-sighted tactic – just push the problem southward. This strategy exposed Massport's modus operandi – Find a quick and dirty solution and push it through by riding herd over residents valid concerns. 316.5

Massport never notified Parkside residents that their neighborhood was about to be degraded. They just violated our pristine environment and Boston's unique and historic urban park – site of wild woods, peaceful overlooks, playing fields, a golf course, and a Zoo, all recently upgraded

with mega-dollars of City improvements. Pushing the flight path over our heads was Massport's easy out. **Once again, Massport avoided/ignored the opportunity to create a visionary longterm "real" improvement plan for Logan** and its neighbors. Massport's own data documented that the problems – high levels of noise, air pollution, health and safety factors would remain the same. The only thing that would change was that 6,000 fewer households would be subjected to the impact of the Runway 27 flight path. Did Massport acknowledge that the newly effected area would be home to thousands of minority and poor residents and that it was violating federal laws prohibiting the shunting of environmental problems onto minority neighborhoods. Did they approach the Parkside Neighborhood Association to inquire about the current impact of their flight path on our neighborhood, before they decided to triple the impact. **No!**

Runway 27's flight path affects Parkside residents in at least four ways:

1. The planes not only inflict unacceptable noise levels to the area which force residents to interrupt conversations out-doors until they pass overhead, but they also drone out TV and radio programs indoors.
2. The planes turn north or south towards their final destination over our heads as well. The turn doubles the noise impact by lengthening the duration of noise overhead and shortening the relief of no noise intervals between flights.
3. To make matters worse, many of the planes fly at lower altitudes over Jamaica Plain than do similar flights leaving from other runways. At lower heights, noise levels are louder, further increasing the noise level.
4. The neighborhood faces the prospect of perpetual growth at Logan, *so that the number of flights will continue to increase whether or not Massport builds Runway 14/32.*

316.5 (cont.)

With these five pre-existing conditions, the neighborhood is already demoralized and degraded. Adding "forty thousand and growing" more planes annually, will exacerbate an intolerable situation. Who is there who can put a limit on perpetual growth at Logan? Both Massport and the FAA claim they cannot limit landings. Who can? What is the answer to that and hundreds of other questions that residents never get a chance to ask or have answered fully. I am frustrated with the public forums. Too many prepared speeches – too few honest and informed discussions. There is never enough time to obtain accurate and complete answers to questions. Although public meetings are forums for the public to voice opposition and raise issues, they do not offer the opportunity to sort out any one idea or issue.

316.6

Do we have to leave it to the lawyers and courts or can you require Massport to look to the causes and make a paradigm shift in their planning process. Massport does not discuss issues. They spew facts and figures – the ones they want to present. They are masters at public relations. They are not problem solvers; they are defenders of their plans. They have an answer for everything and dismiss arguments with their own opposing statistics, platitudes and, often a patronizing attitude. What they don't say is key, but there is never enough time to identify the gaps in their arguments. They are self-righteous about not dealing with issues over which they have no jurisdiction and therefore they propose solutions by default. Although it takes longer to effect change at a federal level, Massport can work with the FAA to do so, and they do when it is in their interest. At public forums, they hide behind jurisdictional divides to suit their purposes.

316.7

Can you, and if not you, who can force Massport to work with all parties affected and involved to produce a workable, long-range, plan that addresses long-term growth? This must take place before Massport creates more and bigger problems with its short term, short-sighted solutions. As delays have actually been reduced in the last several years, Massport can and should wait before attempting to implement Runway 14/32. It is a strategy that they themselves acknowledge will only reduce the impact over some neighborhoods by 20% initially. They also acknowledge that there will be increased use of the airport every year, completely eliminating any short term benefits they gain. **Most importantly, they ignore the fact that Runway 14/32 will instantly,**

316.8
316.9
316.10

316.11

permanently harm residents by imposing over "40,000 and growing" more flights over neighborhoods, instantly, permanently degrading quality of life and real estate values.

I beg you and others with authority to intervene, to have Massport withdraw their one-sided and incomplete environmental report now.

- Do not allow their skillfully coordinated public relations effort eliminate the injunction on Airport expansion .
- Do not approve their environmental impact statement.
- Do not let them proceed to the next legal level.
- Stop them now while there is still a chance for a rational discussion, regional, intermodal, participatory planning.
- Include all involved, affected parties and those with creative ideas in the planning process.

Boston will continue to grow and benefit economically whether it takes ¾ hr to get to Boston via a backed up tunnel or bridge or on the MA pike. It has grown despite all the current problems that Massport claims. *Everyone will benefit, Massport included, if the push to change is halted and Massport involves residents and other outside interests at the planning table, not just in the audience during comment periods.*

I believe everyone would avoid the traffic jams at Logan if they had another option. When I visit Washington, I take advantage of lower fares and easier access by flying to Dulles. Boston could offer similar options within its greater metropolitan area. To do this well, there has to be an intermodal transportation plan. Buses and commuter rail have to get people to the various airports along with diverse roadway approaches. ***It can be done. Lets do it.*** Proscribe that all the parties and others with creative solutions work together to develop a structural solution that best meets everyone's concerns and needs.

Do not turn your back on the cities and towns that bear the burden of Logan. When "40,000 and growing" additional planes are allowed to fly over our heads under Runway 27 flight path – many will flee their neighborhoods, repeating the abandonment of the City that took place over a generation ago. An instantaneous increase of "40,000 and growing" flights overhead is unthinkable.

Would you stand for that environmental degradation over your house and yard? I don't think so.

Thank you for your attention to my concerns.

Barbara Kaplan
Concerned Resident

Letter 316
Barbara Kaplan
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
316.1	Alternatives	Runway 14/32	I urge you to oppose Runway 14/32, [which]...has little to do with delay reduction and everything to do with expansion of capacity at Logan.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
316.2	Environmental Review Process	Public Process	There are many other ways to improve service. Massport should be conducting a comprehensive planning process...residents [should be] at the planning table before they push forward with changes at Logan. The planning process should take into account regional resources, existing and potential intermodal transportation improvements...and the quality of life....	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
316.3	Alternatives	Runway 14/32	Residents of Boston and surrounding areas who already bear an unfair portion of the noise, air pollution and auto traffic caused by Logan will be permanently, negatively impacted with triple the amount of planes passing over our homes, if 14/32 is built.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
316.4	Alternatives	Runway 14/32	The Parkside neighborhood...is...right under the flight path of Runway 27. Flights operate at one minute intervals...starting at 6:00 a.m...when there is a northwest wind, allowing for no relief...Massport states that "56,000 and growing" flights is the "fair" number projected annually for this neighborhood. [an increase of 40,000 flights annually]...if they build Runway 14/32...there will be flights every day over my neighborhood, regardless of wind direction.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
316.5	Environmental Justice	Impacts	Runway 27's...flight path was moved over our heads within the last two years. In response to a suit against Massport filed by the Runway 27 Coalition, Massport moved the flight path over Franklin Park where it now effects a predominantly poor, minority neighborhood. ...Massport chose a ...short-sighted tactic [and relocated the flight path to affect 6,000 fewer households]...Massport never notified Parkside residents that their neighborhood was about to be degraded [by relocating the flight path of Runway 27] ...Runway 27's flight path...inflicts unacceptable noise levels, ...[which is extended in duration when] the planes turn north or south towards their final destination over our heads...many of the planes fly at lower altitudes over Jamaica Plain than do similar flights leaving from other runways...the number of flights will continue to increase whether or not Massport builds Runway 14/32.	It is the FAA, not Massport, who was responsible for evaluating and implementing the new departure procedure for Runway 27, and it is the FAA who continues to refine the procedure so that aircraft might improve their conformance with the desired corridor specified by the FAA in its Record Of Decision for the Runway 27 EIS. FAA provided notice and opportunity for comment throughout the Runway 27 EIS process as required by law. The Preferred Alternative with the added flexibility afforded by the new unidirectional Runway 14/32 will result in greater use of Runway 27 than currently exists and will cause increased noise in Jamaica Plain but at DNL levels well below 60 dB.
316.6	Environmental Review Process	FAA/NEPA	Who is there who can put a limit on perpetual growth at Logan? Both Massport and the FAA claim they cannot limit landings. Who can?	The Airside Project will not change Logan Airport's airfield capacity of approximately 120 aircraft operations per hour. Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law.

Code	Topic 1	Topic 2	Comment	Response
316.7	Environmental Review Process	Public Process	I am frustrated with the public forums. There is never enough time to obtain accurate and complete answers to questions...public meetings...do not offer the opportunity to sort out any one idea or issue...Massport...are not problem solvers; they are defenders of their plans...and dismiss arguments....	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
316.8	Environmental Review Process	Public Process	Massport...[must] work with all parties affected...to produce a workable, long-range plan that addresses long-term growth...before Massport creates more and bigger problems with its short term...solutions. Everyone will benefit, Massport included, if the push to change is halted and... [Massport involves residents and other outside interests at the planning table, not just in the audience during comment periods.]	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
316.9	Purpose and Need	Delay	...before Massport creates more and bigger problems with its short term...solutions. As delays have actually been reduced in the last several years, Massport can and should wait before attempting to implement Runway 14/32.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the US. This represents the worst rank in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.
316.10	Alternatives	Runway 14/32	...[The preferred alternative will only reduce the impact over some neighborhoods by 20% initially [and]...there will be increased use of the airport every year, completely eliminating any short term benefits they gain.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.
316.11	Regional Transportation	Regional Airports	...14/32 will instantly permanently harm residents by imposing over "40,000 and growing" more flights over neighborhoods...Boston could offer...[airport] options within its greater metropolitan area. To do this well, there has to be an intermodal transportation plan. Buses and commuter rail have to get people to the various airports along with diverse roadway approaches.	Massport supports improved ground access to Worcester Regional, T.F. Green/Providence, Manchester and Logan airports. These projects are discussed in Section 2.9 of the Supplemental DEIS/FEIR. Since passengers do not travel between New England's regional airports, (*e.g.*, passengers do not first go to Manchester Airport before driving to Logan Airport) it is not clear why improved access between the regional airports would generate any benefit.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
<LYNINA@aol.com>
Subject: comments on FAA/Massport EIS
Date: Thursday, April 22, 1999 14:14:44 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 317

Dear Mr. Pugsley. Today, in Jamaica Plain, There is peace and quiet! There is no Northwest wind - there are also no shrieking planes droning at unacceptable decibel levels overhead constantly - without letup. I didn't purchase my house 14 years ago under a flight path. An earlier (about 2 years ago) EIS decided that fewer people would be affected by the Runway 27 flight path if it moved over a half or mile or so. That decision ruined my peace of mind and my peaceful neighborhood, a neighborhood chosen because it was peaceful. 317.1

I beg you to reject the EIS statement today- Let us all conspire to solve the problem of increased use of Logan, regional options, noise reduction, less pollution, greater safety together. The introduction of the EIS right after the busy year end holidays without greater community discourse on how things might be was grossly unfair. Massport and the FAA have one mindset - how can they operate within their existing regulations. Bring the community in on their discussions and see the perspective broaden instantly. Do not ask for comments. Ask for participatory planning. Let us all take the requisite time to find the best solution. Do not count heads or advertising power. The decision on fairness, equity, parity, delays, no delays - are only a few of the many issues in a comprehensive picture. 317.2

I have a home office and work at my computer all day. I hear every single plane, all day long. Do not pitch the business community - who are not affected by noise in their backyard or their livingrooms and bedrooms - against the residents of affected neighborhoods. An EIS analysis should not be effected by a costly public relations campaign. Be judicious - allow time for more adequate study. Reject the EIS without prejudice. Give us time to work out a reasonable plan. Please.

Barbara Kaplan

Letter 317
Barbara Kaplan
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
317.1	Noise	Impacts	...in Jamaica Plain, there is peace and quiet, [when] there is no northwest wind [and] there are...no shrieking planes...An earlier (about 2 years ago) EIS decided that fewer people would be affected by the Runway 27 flight path if it moved over a half-mile or so...[ruining] my peaceful neighborhood.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
317.2	Environmental Review Process	Public Process	The introduction of the EIS right after the busy year end holidays without greater community discourse on how things might be was grossly unfair...[Massport and FAA's] discussions...ask for participatory planning [to develop]...a comprehensive picture.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <LYNINA@aol.com>
Subject: FAA/Massport EIS-comments on
Date: Tuesday, April 20, 1999 11:26:52 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 318

Mitgation is not the answer for increasing flights over neighborhoods by 115%. The answer is to delay building runway 14/32 until other resources are developed and we can measure their impact. A short term solution is forever. If as Massport says, usage will increase anyway, then the 20% improvement will be eliminated with one or two years anyway. I beg you. Ask them to withdraw their EIS or reject it. Whichever works. Do not torture those of us who live under flight paths. Its easy for you who do not bear the burden to dismiss our concerns as unimportant or even worse - worth the sacrifice for the common good. There are better solutions than runway 14/32. Lets examine them before we rush pell mell into disaster. Barbara Kaplan -

318.1

318.2

Letter 318
Barbara Kaplan
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
318.1	Alternatives	Other Non-Construction Alternatives	Mitigation is not the answer for increasing flights over neighborhoods by 115%...delay building runway 14/32 until other resources are developed and we can measure their impact.	Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
318.2	Alternatives	Runway 14/32	[Runway 14/32] a short term solution...if...usage will increase anyway, then the 20% improvement will be eliminated with one or two years anyway.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 319

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I oppose Runway 14/32 EOEA #10458!!
This plan is not a Logan Airside Improvement.
Already there is an unacceptable level of noise in my neighborhood from existing planes overhead. The plan for a new runway would increase the noise threefold. 319.1

UNACCEPTABLE!!

We need another new airport not another runway at Logan. 319.2

Name Lisa Lederer
Address 2 Wayburn Rd
Jamaica Plain MA 02130
Phone 617-524-1737

Letter 319
Lisa Lederer
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
319.1	Alternatives	Runway 14/32	Already there is an unacceptable level of noise in my neighborhood from existing planes overhead. The...new runway [Runway 14/32] would increase the noise threefold.	There is no indication that Runway 14/32 would increase the percentage of operations that fly in the vicinity of Jamaica Plain compared to the percentage of operations in the late 1990s. Furthermore, the noisiest airplanes were phased out as of December 31, 1999 and the total noise exposure in Jamaica Plain should be improved.
319.2	Regional Transportation	Regional Airports	We need another new airport not another runway at Logan.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

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LETTER 320

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

DURING THE 12 YEARS I HAVE LIVED IN JAMAICA PLAIN THE ENVIRONMENTAL NOISE FROM LOGAN HAS BECOME INCREASINGLY INTOLERABLE. WHILE I LOVE BOSTON, IF THINGS GET WORSE — AND THEY WILL IF THIS PLAN GOES THROUGH, I WON'T BE THE ONLY PERSON DRIVEN OUT OF BOSTON). 320.1

THIS STUDY IS SERIOUSLY FLAWED AND MUST BE WITHDRAWN AND RESTUDIED — [redacted] DOING OTHERWISE WILL SERIOUSLY COMPROMISE THE QUALITY OF LIFE IN EASTERN MASSACHUSETTS. 320.2

I'VE ALWAYS BEEN A VOTER, BUT [redacted] IF THIS UNJUST PLAN GOES THROUGH I WILL BECOME ONE OF MANY WHO BECOME POLITICAL ACTIVISTS.

MASSPORT CONTINUES TO MISREPRESENT THE SEVERITY OF THE ENVIRONMENTAL IMPACT IN ORDER TO MANIPULATE PUBLIC OPINION AND THE POLITICAL PROCESS. HOWEVER, THE RESIDENTS (AND VOTERS) LIVE WITH THE DAILY REALITIES — PLEASE DO ALL YOU CAN TO KEEP MASSPORT FROM DESTROYING OUR ENVIRONMENT AND THE LIVABILITY OF OUR NEIGHBORHOODS.

SINCERELY,

M.L. Lew
4/15/99

Name MIKE LEW
Address 16 ROANOKE AVENUE
JAMAICA PLAIN, MA 02130
Phone 617-524-9176

Letter 320
Mike Lew
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
320.1	Noise	Impacts	During the 12 years I have lived in Jamaica Plain, the...noise from Logan has become increasingly intolerable.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
320.2	Environmental Review Process	MEPA	This study is seriously flawed and must be withdrawn and restudied—...doing otherwise will seriously compromise the quality of life in eastern Massachusetts.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.v

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 321

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

NO TO RUNWAY 14/32. THIS WILL SOLVE NOTHING - IT IS A BANDAID SOLUTION. 321.1

Name SAL LOPES
Address 24 GREENOUGH
J.P. 02130
Phone 522-5263

Letter 321
Sal Lopes
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
321.1	Alternatives	Runway 14/32	...Runway 14/32...is a bandaid solution.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

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LETTER 322

19 Roseway St.
Jamaica Plain, MA 02130
March 15, 1999

MA Environmental Affairs Office
100 Cambridge St.
Boston, MA

To Whom It May Concern,

I am writing in reference to Massport's Report #10458, Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report. While this document is extensive and covers major areas of concern to Boston residents, it falls short of truly describing environmental impacts of Runway 14/32.

Building Runway 14/32 will allow Massport to increase the number of flights per hour. Clearly every flight adds to air pollution, particularly for East Boston residents. To suggest that the air pollution will be negligible is irresponsible. In fact, the levels may continue to be under EPA's maximum standards, but over time they are clearly affecting residents health. Massport has not done its homework to show that it takes the health problems of its neighbors seriously. 322.1

The building of Runway 14/32 will triple operations over several Boston neighborhoods. The South End, Roxbury, and Jamaica Plain will see a staggering increase in flights, from 18,000 a year to 56,000 a year. The statistics represented in the report leave out the number of people affected in these areas. Two years after settling on a route which would affect the smallest number of people, the majority of flights off Runway 27 are still flying over densely populated areas of Jamaica Plain and Roxbury. By its own admission, only 35% of airplanes are flying the route that would affect the smallest number of people. Therefore, when using Runway 27, the majority of Massport's flights are in violation of the legal proceding's settlement. Instead of offering to make other concessions since it is unable to conform to the guidelines of the settlement, Massport is now proposing to triple operations over these neighborhoods. Allowing this makes no sense. Furthermore, there is no plan for noise abatement in these neighborhoods. Again, Massport downplays the effect on these residents' health. Interrupted sleep leads takes its toll on the immune system. Certainly Massport makes no effort to look at the combined effect of a 300% increase in noise pollution with the environmental health risks from diesel fumes and other contaminants, particularly in asthma ridden communities like Egleston Square. 322.2 322.3 322.4 322.5

Massport's current plan is a stop-gap solution. The draft report offers no long-term plan for growth after 2010. Continued expansion at Logan imposes a serious health risks on residents of Boston. Massport must present other options besides not building or expanding operations at Logan. The report is incomplete without serious consideration of Massport's other facility: the Hanscom airfield. At a recent city council hearing, Massport employees testified that the percentage of Boston residents who use Logan is under 25% of its total passenger load. To continue to impose all of the environmental burden on the inner city when the majority of its users are from outside the city lines is inequitable. Before any construction begins, we need a long-term strategy that is truly an equitable sharing of the pollution burden. 322.6 322.7

Sincerely,

Myra N. Love

Letter 322
Myra N. Love
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
322.1	Alternatives	Runway 14/32	...[The] Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report...falls short of truly describing environmental impacts of runway 14/32. Building Runway 14/32 will allow Massport to increase the number of flights per hour [adding]...to air pollution, particularly for East Boston residents...the levels may continue to be under EPA's maximum standards, but...they are clearly affecting residents health.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
322.2	Alternatives	Runway 14/32	The building of Runway 14/32 will triple operations over several Boston neighborhoods...from 18,000 a year to 56,000 a year.	Refer to Section 8.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32 and that Option C requires determination of acceptable level of safety. Refer to Section 8.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32 and that Option C requires determination of acceptable level of safety. There is no indication that Runway 14/32 would increase the percentage of operations that fly in the vicinity of Jamaica Plain compared to the percentage of operations in the late 1990s. Furthermore, the noisiest airplanes were phased out as of December 31, 1999 and the total noise exposure in Jamaica Plain should be improved. The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
322.3	Alternatives	Runway 14/32	Two years later settling on a route which would affect the smallest number of people, the majority of flights off Runway 27 are still flying over densely populated areas of Jamaica Plain and Roxbury. By its own admission, only 35% of airplanes are flying the route that would affect the smallest number of people. Therefore, when using Runway 27, the majority of Massport's flights are in violation of the legal proceeding's settlement....since it is unable to conform to the guidelines of the settlement, Massport is now proposing to triple operations over three neighborhoods.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.

Code	Topic 1	Topic 2	Comment	Response
322.4	Noise	Impacts	...there is no plan for noise abatement in...[the affected] neighborhoods.	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.
322.5	Public Health	Effects	...Massport makes no effort to look at the combined effect of a 300% increase in noise pollution with the environmental health risks from diesel fumes and other contaminants, particularly in asthma ridden communities like Egleston Square.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. The 1999 Massachusetts budget included $150,000 to fund an environmental assessment of the health impacts of Logan Airport on any community located within a five-mile radius of the airport. The final protocol for the study is being developed. The study is expected to be completed in summer 2002.
322.6	Alternatives	Preferred Alternative	Massport's current plan is a stop-gap solution. The draft report offers no long-term plan for growth after 2010.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
322.7	Regional Transportation	Regional Airports	Massport must present other options besides not building or expanding operations at Logan. The report is incomplete without serious consideration of Massport's other facility: the Hanscom airfield. Massport employees testified that the percentage of Boston residents who use Logan is under 25% of its total passenger load. To continue to impose all of the environmental burden on the inner city when the majority of its users are from outside the city lines is inequitable...we need a long-term strategy that is truly an equitable sharing of the pollution burden.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

LETTER 323

Comments not referring to the EOEA file number may not be considered.

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All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

323.1
323.2 The study does not address cumulative impact of airside changes on ground transportation.
"Over the Water" routes also impact Dorchester, South Boston
323.3 Milton Quincy etc.
323.4 Does not take into account disruption of new Opera House
The most important "benefit" the lessening of delays,
323.5 is completely negated within 10 years.
No examination was made of alternative airfields,
323.6 not even Hanscom, which is owned by Massport
Delay figures are not supported by standard methods
323.7 of computing delays.
The report assumes that increasing departures off R27
from 18,000 to 56,000 annually represents no
significant impact.

Name Will Lyman
Address 18 Greenough Ave
Jamaica Plain MA 02130
Phone 617 719 7103

William R Lyman

Letter 323
Will Lyman
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
323.1	Ground Transportation	Access to Logan	The study does not address cumulative impact of airside changes on ground transportation.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways.
323.2	Alternatives	Runway 14/32	"Over the water" routes also impact Dorchester, South Boston, Milton, Quincy, etc.	The analysis in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR shows that, because PPP eliminates a small number of small aircraft operations, it does not produce any environmental benefits or impacts. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR.
323.3	Land Use	Land Use Compatability	Does not take into account disruption of new Opera House.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.
323.4	Alternatives	Preferred Alternative	The most important "benefit" the lessening of delays, is completely negated within 10 years.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
323.5	Regional Transportation	Regional Airports	No examination was made of alternative airfields, not even Hanscom, which is owned by Massport.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
323.6	Analytical Assumptions/ Methodologies	Delay Model	Delay figures are not supported by standard methods of computing delays.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
323.7	Alternatives	Preferred Alternative	The report assumes that increasing departures off Route 27 from 18,000 to 56,000 annually represents no significant impact.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982. The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.

LETTER 324

April 20, 1999

Dear Mr. Pugsley:

We are writing to express our strong opposition to Runway 14/32 and to any further development at Logan Airport. We need amelioration of how bad things already are, not further development. The quality of life in our neighborhood is very bad now because of airplane noise. We pray that one of the fine alternatives to Logan expansion be employed.

324.1

324.2

With appreciation,

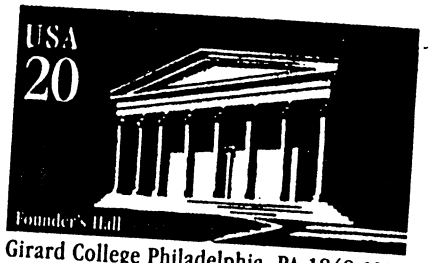
Sincerely,

Joseph M. Nucci

Marilyn J. Nucci

Mr. and Mrs. Joseph M. Nucci

Nucci
238 Wachusett Street
Jamaica Plain MA
02130-4271



Girard College Philadelphia, PA 1848-1998

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MEPA

Mr. Arthur Pugsley
MEPA Unit
Executive Office of
Environmental Affairs
100 Cambridge Street, 20th floor
Boston MA 02202

Letter 324
Mr. and Mrs. Joseph M. Nucci
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
324.1	Alternatives	Runway 14/32	We...express our strong opposition to Runway 14/32 and to any further development at Logan Airport. The quality of life in our neighborhood is very bad now because of airplane noise.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
324.2	Alternatives	Other Non-Construction Alternatives	...one of the five alternatives to Logan expansion [should] be employed.	Comment noted.

19 Roseway St.
Jamaica Plain, MA 02130
March 13, 1999

LETTER 325

MA Environmental Affairs Office
100 Cambridge St.
Boston, MA

To Whom It May Concern,

I am submitting my comments in reference to Massport's Report #10458, Logan Airside Improvements Planning Project Draft Environmental Impact Statement/Report. I hope that you will halt Massport's plans because this report does not address several important points adequately.

The building of Runway 14/32 will triple operations over several Boston neighborhoods. The statistics represented in the report gloss over the number of people affected in various areas. The breakdowns are not adequate to assess the real impact on populations according to neighborhood. Clearly peace and health are hard to tag with a price. Many people will pay for this project through property devaluation and stress levels. To overlook these environmental impacts is a serious deficiency of the report. 325.1

Further, the draft report offers no long-term plan for growth after 2010. Although not guaranteed, there is certainly the possibility of continued growth. Continuing to expand Logan imposes a burden on inner-city residents of Boston. The report is incomplete without serious consideration of Massport's other facility: the Hanscom airfield. 325.2 325.3 325.4

Many of Boston's residents have worked long and hard to preserve green space in the city. Runway 14/32 will negatively impact the green spaces in the Emerald Necklace and it seems that it will also have a severe impact on the new Boston Harbor Islands National Park. This report does nothing to assess the environmental impact on such green spaces, their animal residents, or their potential use by city residents. Airplane noise already diminishes the quality of the experience of Franklin Park Zoo, the golf course and picnic areas. The impact on these valuable public spaces is not addressed. 325.5

I hope you will find that Massport's Draft Plan is in no way a comprehensive look at the true repercussions of the proposed Runway 14/32. Before any construction begins, we need a long-term strategy that is truly an equitable sharing of the pollution burden.

Sincerely,

Martha Merson

Martha Merson

Letter 325
Martha Merson
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
325.1	Alternatives	Runway 14/32	The building of Runway 14/32 will triple operations over several Boston neighborhoods. The statistics...gloss over the number of people affected ...The breakdowns are not adequate to assess the real impact on populations according to neighborhood...through property devaluation and stress levels.	Tables 6.2-3 through 6.2-5 and Table 6.2.21 in the Supplemental DEIS/FEIR show the noise impacted population in each community.
325.2	Analysis Assumptions/ Methodologies	Planning Period	...the draft report offers no long-term plan for growth after 2010.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
325.3	Environmental Justice	Impacts	Continuing to expand Logan imposes a burden on inner-city residents of Boston.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative.

Code	Topic 1	Topic 2	Comment	Response
325.4	Regional Transportation	Regional Airports	The report is incomplete without serious consideration of Massport's other facility: the Hanscom airfield.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
325.5	Open Space/ Parkland	Impacts	Runway 14/32 will negatively impact the green spaces in the Emerald Necklace and it ...will also have a severe impact on the new Boston Harbor Islands National Park. This report does nothing to assess the environmental impact on such green spaces, their animal residents, or their potential use by city residents. Airplane noise already diminishes the quality of the experience of Franklin Park Zoo, the golf course and picnic areas.	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands. The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.

LETTER 326

April 5, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley-EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 02205

Dear Mr. Pugsley,

I am writing to let you and your colleagues know that I do not support the Logan Modernization project, including the construction of runway 14/32. I do support a greater emphasis on regional alternatives, such as high speed rail and the expanded use of other Massachusetts airports. 326.1

Jobs as a result of the proposed expansion and delay problems at Logan are overstated and do not outweigh the quality of life issues that will adversely be effected by the expansion of Logan; issues that ultimately determine where we locate our businesses and where we live. 326.2

Noise, air pollution, and congested roadways resulting from increased traffic in and out of Logan Airport are of great concern to me. 326.3

Expanding our airports and roadways are a short-term answer to a problem that needs long term solutions. Help those of us against the construction of runway 14/32 and the expansion of Logan Airport keep Boston a city in which people choose to not only conduct business, but choose to live. 326.4

Sincerely,

Laura Orlando
31 Moraine Street
Jamaica Plain, MA 02130
Tel 617 524-7017

Letter 326
Laura Orlando
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
326.1	Regional Transportation	Regional Airports	I am writing to let you and your colleagues know that I do not support the Logan Modernization project, including the construction of runway 14/32. I do support a greater emphasis on regional alternatives, such as high speed rail and the expanded use of other Massachusetts airports.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.
326.2	Purpose and Need	Delay	Jobs as a result of the proposed expansion and delay problems at Logan are overstated and do not outweigh the quality of life issues that will adversely be effected [sic]....	Section 1.3 of the Supplemental DEIS/FEIR discusses the importance of Logan Airport to the regional economy.
326.3	Noise	Impacts	Noise, air pollution, and congested roadways resulting from increased traffic in and out of Logan Airport are of great concern to me.	Comment noted.
326.4	Regional Transportation	Regional Airports	Expanding our airports and roadways are a short-term answer....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase. Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

April 9, 1999

LETTER 327

John Rodman
Assistant State Environmental Affairs Secretary
100 Cambridge Street, Fl. 20
Boston, MA 02202

Dear Mr. Rodman,

Please accept my written testimony on the subject of the proposed runway 14/32 at Logan Airport.

Yesterday, when I got off the orange line at Green Street in Jamaica Plain, I sat outside on a bench directly over the train tracks reading in the balmy air for a few minutes. As a train approached I expected a deafening noise. But the orange line was surprisingly quiet, drowned out by a jet that simultaneously roared overhead. I was amazed to find that a train travelling so close to me was not nearly as loud as a jet that was thousands of feet away.

After that I went for a walk in the Arnold Arboretum at dusk. Spring is just beginning to creep in and I lay on my back looking up into towering cedar trees. The Arnold Arboretum is an amazing gem for Boston. You can walk for hours, and there are places where you can genuinely feel far away from a city. I was hoping to "call in" an owl, and a ranger once showed me where and how I may have some luck. I listened to the other birds heading to roost for the night as nocturnal creatures started to creep out. Unfortunately, my experience was marred by the flights taking off from Runway 27. Plane after plane roared overhead and muffled the sounds of nature.

One characteristic of Boston that everyone is aware of is its premium on space. However, the Emerald Necklace is an impressive preservation of open space, and provides refuge to hundreds of thousands of citizens who rely on this tranquility amid the din of everyday city life. It is also a huge draw for visitors, and characterizes the civility and heart of Boston. 327.1

Discouraged, I went home. I live in a modest apartment in an invaluably diverse community in Jamaica Plain, the Parkside neighborhood. I chose to settle here and buy a condominium at the end of a dead-end street one year ago. My backyard abuts a gorgeous wooded section of Franklin Park. We can sit on our back porch and glimpse an endangered peregrine falcon or a red-tailed hawk, bats in the summer, an occasional dog walking with its owner in the park. Our neighborhood is truly serene.

Last night, I lay in bed at 11:35pm. As flights using Runway 27 zoomed overhead I could not sleep. Certainly these planes are violating Boston city ordinances on noise levels. They are so loud that my bed vibrates as they fly over. I am astounded by how intrusive they are, and most importantly, I live nowhere near Logan Airport. When we are walking in the park, or grilling on the back porch, and sometimes even inside our home, we have to halt our conversation as the planes fly over. 327.2

This morning I was awakened by more jets at 6:05, a scant 6 ½ hours since I was lying awake feeling the planes. Today I am exhausted and bleary-eyed. Now I am told that the noise pollution that I am faced with several days every week will triple if the new runway is built. What a shame to ruin some of Boston's last remaining open space.

Emily A. Peckham

Emily Peckham, Jamaica Plain
(16 Glade Avenue)

Letter 327
Emily Peckham
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
327.1	Open Space/ Parkland	Impacts	...my experience [at the Arnold Arboretum yesterday] was marred by the flights taking off from Runway 27. Plane after plane roared overhead and muffled the sounds of nature...the Emerald Necklace is an impressive preservation of open space....	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.
327.2	Noise	Runway Use	As flights using Runway 27 zoomed overhead [at 11:25 pm last night] I could not sleep. Certainly these planes are violating Boston city ordinances on noise levels. I am astounded by how intrusive [flights using Runway 27] are. ...I am told that the noise pollution that I am faced with several days every week will triple if the new runway [Runway 14/32] is built.	Refer to Section 8.2 of the Supplemental DEIS/FEIR, which clearly states that Option C is the preferred layout for Runway 14/32 and that Option C requires determination of acceptable level of safety. There is no indication that Runway 14/32 would increase the percentage of operations that fly in the vicinity of Jamaica Plain compared to the percentage of operations in the late 1990s. Furthermore, the noisiest airplanes were phased out as of December 31, 1999 and the total noise exposure in Jamaica Plain should be improved.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 328

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

Boston and its neighborhoods deserve a long-term solution, not the current stop-gap proposal. The long-term solution should be regional, rather than focused on expanding Logan's capacity and adding to the present traffic and pollution problems in Boston. 328.1 328.2

Name Anne Rogers
Address 46 Lila Rd.
Jamaica Plain, MA 02130
Phone (617) 524-0724

Letter 328
Anne Rogers
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
328.1	Alternatives	Preferred Alternative	Boston and its neighborhoods deserve a long-term solution, not the current stop gap proposal.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
328.2	Regional Transportation	Regional Airports	The long-term solution should be regional, rather than focused on expanding Logan's capacity and adding to the present traffic and pollution problems in Boston.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered. LETTER 329

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Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

- This plan does not take into account the massive increase in surface traffic that will be caused by the increased flights. 329.1
- The plan as written is seriously flawed in its counting of passenger delays. It is also self-serving for the Massport authority 329.2
- ~~is flawed~~ The plan is much too short-term where a long term, regional approach that considers all transport modalities is needed 329.3 329.4

James P. Sliker

Name James P. Sliker
Address 15 Roanoke Ave
Jamaic Plain, MA 02130
Phone 617-524-5898

4/15/1999

Letter 329
James P. Sliker
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
329.1	Ground Transportation	Access to Logan	This plan does not take into account the massive increases in surface traffic that will be caused by the increased flights.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.
329.2	Delay	Model	The plan as written is seriously flawed in its counting of present delays.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
329.3	Alternatives	Preferred Alternative	The plan is much too short-term....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
329.4	Regional Transportation	Regional Airports	...a long term regional approach that considers alt. transport modalities is needed.	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

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COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

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LETTER 330

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All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

1. This will increase not decrease air traffic over Jamaica Plain in the long and short term. 330.1
2. It will not solve the long-term issues regarding increased air traffic at Logan Airport. 330.2
3. The DEIS/DEIR for the Logan Airside Improvements Planning Project is basically flawed in its calculation of present delays and future impact. 330.3
4. There is no plan to handle the massive increases in ground traffic that will be a direct result of the increased passenger flights. 330.4

Lynn Thornton
Name Lynn Thornton
Address 15 Roanoke Ave.
Jamaica Plain, MA 02130
Phone 524-5898

4/15/99

Letter 330
Lynn Thornton
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
330.1	Alternatives	Runway 14/32	This will increase not decrease air traffic over Jamaica Plain....	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
330.2	Alternatives	Preferred Alternative	It will not solve the long-term issues regarding increased air traffic at Logan Airport.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
330.3	Delay	Models	The DEIS/DEIR for the Logan Airside Improvements Planning Project is basically flawed in its calculation of present delays and future impact.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
330.4	Ground Transportation	Access to Logan	There is no plan to handle the massive increases in ground traffic....	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 331

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I am completely against the construction of a new runway. In Jamaica Plain where I live we are only now feeling some relief from the barrage of airplane noise. That would keep us indoors in good weather. Developing more air business at local airports (with commuter shuttles) would be the answer - for now at least. 331.1 331.2

Name Danielle Toth
Address 24 Greenough Ave
J.P. 02130
Phone 522-5263

Letter 331
Danielle Toth
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
331.1	Alternatives	Impacts	I am completely against the construction of a new runway. In Jamaica Plain...The barrage of airplane noise...keeps us indoors in good weather.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.
331.2	Regional Transportation	Regional Airports	Developing more air business at local airports (with commuter shuttles) would be the answer....	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

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LETTER 332

All comments must be received April 22, 1999
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Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

The new runway proposal is NO Solution — Can it now - go back to the drawing board - no one will tolerate living in a city where outdoor life will be intolerable. 332.1

The neighborhoods are not DUPED by this - we will fight to the end -!

Name DANIELLE TOTH
Address 24 Greenough Ave
Jamaica Plain
Phone 617 522-5203

Letter 332
Danielle Toth
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
332.1	Nose	Runway 14/32	The new runway proposed is NO solution...no one will tolerate living in a city where outdoor life will be intolerable.	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.

LETTER 333

24 Cranston St.
Jamaica Plain, MA 02130
April 15, 1999

Bob Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street - 20th Floor,
Boston, MA 02202

Dear Mr. Durand:

I am writing to share my position on Massport's proposed new runway 14/32 with you. I am adamantly opposed to the proposed runway, and I encourage the Executive Office of Environmental Affairs to study the issue closely and stand opposed to Massport's proposal as well.

Yes, Boston needs a healthy transportation system, and an airport plays an important role. However, air travel is the most environmentally damaging way to travel, in terms of fuel consumption per person, noise and air quality degradation, and economics. 333.1

Massport argues that the runway is needed to cut delays, but even this is in dispute, depending on who is interpreting which statistics. More importantly, like the rule for highways, "build it and they will come", a new runway will lead to more flights, more noise, more pollution. Though the runway might have a specific direction and a pledge for restricted use, like HOV lanes nationwide, the restrictions are always eased as the number of users overall continually climbs. The number of flights in and out of Logan will increase to the capacity of the structure. Thus, no new structures. 333.2 333.3

Furthermore, there is an element of environmental justice to the debate. The impacted areas are home to the bulk of metropolitan Boston's poor, minority, colored communities. Meanwhile, the majority of those who fly frequently are wealthier and more likely to live in the suburbs, out of harms way. 333.4

Sane, sustainable transportation policy needs to be build on cutting trips, decreasing noise, fuel consumption, and air pollution. That means focusing on rail travel for long distances. The State of Massachusetts, Massport, and other political entities need to deal with alternative forms of transportation before they increase capacity at an airport, build a new highway, etc. 333.5

For all these reasons, the Executive Office of Environmental Affairs should stand against any airport expansion.

Sincerely,

David Weinstein

Letter 333
David Weinstein
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
333.1	Alternatives	Runway 14/32	I am adamantly opposed to the proposed runway [14/32]....	Comment noted.
333.2	Purpose and Need	Delay	Massport argues that the runway is needed to cut delays, but even this is in dispute, depending on who is interpreting which statistics.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
333.3	Alternatives	Runway 14/32	...a new runway will lead to more flights, more noise, more pollution. Though the runway might have a specific direction and a pledge for restricted use...restrictions are always eased as the number of users overall continually climbs. The number of flights in and out of Logan will increase to the capacity of the structure.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently. The new runway at Logan Airport is not proposed to increase the annual capacity at Logan Airport. Rather, it is proposed to reduce delays, particularly on days with strong northwest winds. The Airside Project Draft EIS/EIR analysis shows that this runway also provides more flexibility in runway use, allowing the FAA controllers to adhere more closely to the PRAS goals with attendant benefits to the neighboring communities that are most highly noise impacted.

Code	Topic 1	Topic 2	Comment	Response
333.4	Environmental Justice	Impacts	...there is an element of environmental justice...The impacted areas are home to the bulk of metropolitan Boston's poor, minority, colored communities...the majority of those who fly frequently are wealthier and more likely to live in the suburbs, out of harms way.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
333.5	Regional Transportation	Regional Airports	The State of Massachusetts, Massport, and other political entities need to deal with alternative forms of transportation [e.g., rail travel] before they increase capacity at an airport....	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

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LETTER 334

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

NO NEW RUNWAY, BECAUSE . . .

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

1) a new runway may (according to Massport or community) relieve delays, but only for a few years. "Build it and they will come." Roads, runways. More capacity means more flights, more air pollution, noise pollution, auto traffic to and from the airport. 334.1 334.2

2) Massport has not yet studied / implemented peak pricing which is proven to decrease traffic + delays at certain times. 334.3

3) The State needs to explore alternatives & GIVE THEM A CHANCE – like high speed rail, expanded rail. Our society spends billions on highways and air travel, but demands cuts and/or no subsidies from Amtrack + the MBTA. 334.4

4) More air travel equals more gas & oil dependency, wars, oil spills, etc.

Name David Weinstein
Address 24 Cranston St
JP MA 02130
Phone 617 983 2242

Letter 334
David Weinstein
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
334.1	Alternatives	Runway 14/32	A new runway may...relieve delays, but only for a few years.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
334.2	Alternatives	Runway 14/32	More capacity means more flights, more air pollution, noise pollution, auto traffic to and from the airport.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2.
334.3	Alternatives	Peak Period Pricing	Massport has not yet studied/implemented peak pricing, which is proven to decrease traffic and delays at certain times.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.
334.4	Regional Transportation	Passenger Rail	...explore alternatives...like high speed rail....	The alternative analysis conforms to FAA and MEPA scoping directives. The impact of the regional alternatives has been addressed through the study of a range of forecast activity levels. Refer to Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives. Massport advocates increased use of the regional airports and high-speed rail services, in addition to construction of Runway 14/32 and the other airside improvement projects at Logan Airport, as a comprehensive plan for ensuring an efficient and balanced regional transportation system. As the analysis in Chapter 2 of this Supplemental DEIS/FEIR indicates, these off-airport alternatives are expected to reduce aircraft traffic growth pressures at Logan Airport, but they will not eliminate airside delays at Logan Airport that occur because of a third operating runway during periods of northwest winds. The Preferred Alternative, which specifically addresses this deficiency, is necessary and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail to New York act to reduce the rate of future growth at Logan Airport.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

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LETTER 335

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings. comments. and all associated materials must be addressed to:

Bob Durand. Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

335.1 THERE ARE ENOUGH FLAWS IN MASSPORT'S ENVIRONMENTAL IMPACT STUDY TO INVALIDATE THEIR PROPOSAL FOR RUNWAY 14/32. FOR INSTANCE:

- THE DELAY FIGURES FOR LOGAN AIRPORT AS PRESENTED BY MASSPORT ARE GROSSLY EXAGGERATED, OUTDATED AND BASED ON "MAXIMUM CAPACITY" GOALS.

335.2 SINCE 1992, DELAYS AT LOGAN HAVE ACTUALLY GONE DOWN, ACCORDING TO THE FA

- MASSPORT'S "NOISE CONTOUR LINES" HAVE NOT BEEN UPDATED TO REFLECT THE ACTU

335.3 NOISE LEVELS SUFFERED BY BOSTON COMMUNITIES. THEIR NOISE MEASURING METHOD ARE HIGHLY FANCIFUL.

335.4

- MASSPORT'S CONCEPT OF "EQUITABLE SHARE OF THE NOISE" PUTS THE BURDEN ON LOW-INCOME, INNER CITY NEIGHBORHOODS WHILE SPARING THE AFFLUENT SUBURBS: HANSCOM AIRPORT, WHICH COULD RELIEVE LOGAN, IS ONLY USED AT A THIRD OF

335.5 ITS CAPACITY.

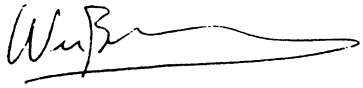
- THE ENVIRONMENTAL IMPACT REPORT DOES NOT TAKE INTO ACCOUNT THE CUMULATI IMPACT OF THE PROPOSAL, NAMELY THE DISASTROUS EFFECTS THE RESULTING

335.6 INCREASE IN AIR TRAFFIC WILL HAVE ON GROUND TRANSPORTATION, AIR QUALIT HEALTH, QUALITY OF LIFE, REAL ESTATE PRICES, MUNICIPAL TAX REVENUES.

335.7 THIS PROPOSAL HAS VERY LITTLE TO DO WITH DELAY REDUCTION, AND EVERYTHING TO DO WITH EXPANSION OF CAPACITY AT LOGAN, UNTIL SATURATION IS REACHED AGAIN A FEW YEARS DOWN THE LINE. THE PRICE PAID BY BOSTON RESIDENTS IS ALREADY TOO HIGH. WHAT WE NEED ARE SENSIBLE LONG-SIGHTED ALTERNATIVES.

Name JACQUES WEISSGERBER
Address 30 NEWBERN STREET #3
JAMAICA PLAIN MA 02130
Phone 617/983 3123

April 18, 1999



Letter 335
Jacques Weissgerber
Private Citizens: Jamaica Plain

Code	Topic 1	Topic 2	Comment	Response
335.1	Delay	Model	The delay figures [in support of runway 14/32]...are grossly exaggerated, outdated and based on "maximum capacity" goals. Since 1992, delays at Logan have actually gone down, according to the FAA.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the US. This represents the worst rank in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur. In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR. Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
335.2	Noise	Impacts	Massport's "noise contour lines" have not been updated to reflect the actual noise levels suffered by Boston communities. Their noise measuring methods are highly fanciful.	The dispersion model portion of the LDMS is an EPA-approved model. The methodology is consistent with FAA and EPA guidelines. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
335.3	Noise	Impacts	Massport's concept of "equitable share of the noise" puts the burden on low-income, inner city neighborhoods [with runway 14/32]....	The Environmental Justice analysis in Section 6.8 was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the Final United States Department of Transportation Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.

Code	Topic 1	Topic 2	Comment	Response
335.4	Regional Airports		...Hanscom airport, which could relieve Logan, is only used at a third of its capacity.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
335.5	Public Health	Effects	The Environmental Impact Report does not take into account the cumulative impact...the increase in air traffic [from runway 14/32] will have on ground transportation, air quality, health, quality of life, real estate prices, municipal tax revenues.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
335.6	Alternatives	Runway 14/32	...[Runway 14/32] has very little to do with delay reduction, and everything to do with expansion of capacity.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
335.7	Alternatives	Runway 14/32	...saturation ...[will be] reached again a few years....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 336

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

This is not the long term solution, nor is it environmentally WISE. ALL MAJOR CITIES WITH AN AIRPORT CLOSE TO THE CITY HAS ALREADY HAD TO REACH OUT TO THEIR SUBERS TO ACCOMODATE GROWTH. THIS IS THE TIME TO START THAT PROCESS NOT USE THIS BANDAID TO THEN STRAIGHT BE BACK TO THE SAME PLACE. I WOULD HOPE THAT OUR POLITICAL LEADERS COULD SEE THAT. 336.1

Name T. Brown
Address 193 OAK ST. #103
Newton, MA 02464
Phone (617) 964-1564

Letter 336
T. Brown
Private Citizens: Newton

Code	Topic 1	Topic 2	Comment	Response
336.1	Alternatives	Preferred Alternative	This is not a long-term solution...This is the time to start...[the] process [of reaching out to the suburbs to accommodate growth]....	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

LETTER 337

Richard Jordan
360 Grove St
Medford, MA 02155-1431
April 2, 1999

Secretary of Environmental Affairs
Attention: MEPA Office
Mr. Arthur Pugsley, EOEA 10458
100 Cambridge St, 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

I am writing to comment on EOEA 10458, Logan Airside Improvements Planning Project. **I am writing in support of the proposed project** which involves a new runway and added taxiways at Logan International Airport for the following reasons: 337.1

- Since the option of no action involves significant adverse environmental impact, particularly from increased noise and increased air traffic delays, this project will serve to manage and reduce noise pollution and will also have some benefit from an air pollution standpoint. 337.2
- The project will improve the safety of the airport particularly in times of high air traffic congestion with high winds. I use the airport about 12 to 20 times per year and this is important to me – especially during severe winter storms. The project is especially designed for higher wind conditions. 337.3
- The project is vital to the economy of Greater Boston since substantial air traffic delays will make travel here less economically attractive. This is particularly important due to the new Boston Convention Center being built.
- The concerns of neighbors do not recognize the fact that a majority of them moved into the area since the airport's use as an international airport and they knew what they were moving into. Many of them have government funded sound proofing in their homes. 337.4
- Alternatives involving other airport(s) may take decades to work out. We cannot wait that long because the impacts on safety and the economy are affecting the Greater Boston community now. 337.5
- Other environmental impacts appear to be minimal.

I appreciate your consideration of my views.

Sincerely,

Richard Jordan

Letter 337
Richard Jordan
Private Citizens: Medford

Code	Topic 1	Topic 2	Comment	Response
337.1	General Support		I am writing in support of the proposed project which involves a new runway and added taxiways at Logan International Airport for the following reasons:	Comment noted.
337.2	Alternatives	Preferred Alternative	...this project will serve to manage and reduce noise pollution and will also have some benefit from an air pollution standpoint.	Comment noted.
337.3	Alternatives	Runway 14/32	The project will improve the safety of the airport particularly in times of high air traffic congestion with high winds.	Comment noted.
337.4	Purpose and Need	Delay	The project is vital to the economy of Greater Boston since substantial air traffic delays will make travel here less economically attractive.	Comment noted.
337.5	Regional Transportation	Regional Airports	Alternatives involving other airport(s) may take decades to work out.	Comment noted.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Jill Richard" <typejill@excite.com>
Subject: Air Traffic
Date: Tuesday, April 20, 1999 15:21:40 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 338

To: Mr. Arthur Pugsley and
Mr. Robert Durand, Sec. of MEPA Unit.
From: Jill Richard, 291 High Street, Medford, MA 02155
Re: Air Traffic/New Runway Reference File #10458E08
Date: April 21, 1999

I am opposed to Massport's Proposal to build a new Runway (14.32)as it will triple the departures through Medford via runway 1533 at Logan Airport. This would be intolerable. It is a quality of life issue. The whole Western part of the state could use a runway in their backyards. It would provide convenience for them, auto traffic congestion is not a factor there, parking would be viable and air traffic would be spread across the state. There is absolutely no sane rationale for adding to the traffic and environmental concerns by adding another runway in the Greater Boston area. Anyone who legitmately cares about the environment is aware of this. Thank You for your attention to this matter.

338.1

338.2

Jill Richard

Letter 338
Jill Richard
Private Citizens: Medford

Code	Topic 1	Topic 2	Comment	Response
338.1	Alternatives	Runway 14/32	...[The] new Runway (14/32)...will triple the departures through Medford via runway 15/33 at Logan Airport. This would be intolerable.	The Supplemental DEIS/FEIR projects that the Preferred Alternative promote runway use in a manner that is more consistent with annual PRAS goals, and Medford is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
338.2	Regional Transportation	Regional Airports	The whole western part of the state could use a runway in their backyards. It would provide convenience for them, auto traffic congestion is not a factor there, parking would be viable and air traffic would be spread across the state.	Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.

LETTER 339

From the Desk of Maryann P. Mahony.....

April 7, 1999

MEPA
State Transportation Building
10 Park Plaza
Boston, MA

RE: Logan Runway 1432
Massachusetts Environmental Policy Act Hearing

To Whom It May Concern:

My name is Maryann P. Mahony. I live at 18 Hummock Road in North Quincy. I am unable to attend tonight's meeting but I would like to be recorded in opposition of Runway 1432. I have lived in Quincy for many years with the current level of service not being sufficient and with the increased noise and pollution. Adding an additional runway would only increase these problems, therefore I strongly suggest you reconsider the Logan Runway expansion. 339.1
]

I feel the Worcester Airport or Hanscan Field would be more appropriate for the expansion. I also feel strongly that more public input is needed from the residence of Quincy and I believe that is important for Massport to hold a community meeting before any decisions are made. I believe these are quality of life issues that will have a major impact on North Quincy, Marina Bay, and Squantum residence. 339.2 339.3

Sincerely,

Maryann Mahony

Maryann P. Mahony
Candidate for Ward 6 Councillor
Home Owner

CC: Peter Blute, Massport, Atlantic Neighborhood Association, Squantum Association

Letter 339
Maryann P. Mahony
Private Citizens: Quincy/North Quincy

Code	Topic 1	Topic 2	Comment	Response
339.1	Alternatives	Runway 14/32	...I would like to be recorded in opposition of Runway 14/32. I have lived in Quincy for many years with the current level of service not being sufficient and with the increased noise and pollution...an additional runway would only increase these problems....	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations.
339.2	Regional Transportation	Regional Airports	...the Worcester Airport or Hanscom Field would be more appropriate for the expansion.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Code	Topic 1	Topic 2	Comment	Response
339.3	Environmental Review Process	Public Process	...more public input is needed from the residents of Quincy...it is important for Massport to hold a community meeting before any decisions are made...these are quality of life issues that will have a major impact on North Quincy, Marina Bay, and Squantum residents.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

LETTER 340

22 Sonoma Road
Quincy, MA 02171

April 14, 1999

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street
20th Floor
Boston, MA 022025

and

John C. Silva
Manager Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Pugsley and Dear Mr. Silva:

It has been said that the new runway and expansion project at Logan is in the bag.

Did you shudder as you read that?

I do hope so. Because, you see, according to statements attributed to John Devillars, Regional Administrator, Environmental Protection Agency, in The Boston Globe (April 4, 1999) that just may be so. Please read them. Do you get the same impression?

He is mighty vocal for someone who will reserve judgment until the review process is complete and, yet, he speaks in the same interview of Massport's significant obligation to compensate the community with other quality-of-life enhancements (such as?). Does he not understand that there is no compensation for what has been taken in peace of mind and qualities of life?

Massport's situation at Logan is a problem of their own creation because of years of not keeping up with the future of air travel and not siting a new airport when projections showed that it was necessary to do so. Their current problems are an accumulation of years of inaction on their part. The current proposal is also short sighted. Massport has apparently captured the hearts of the business community; they have come out pretty

unanimously in favor of Logan's expansion plans, ostensibly because it is good for the economy. Who in that auspicious group of businessmen would make a $25,000,000.00 investment for such a short term solution to such a big problem with such futuristic ramifications? Why do they align with Massport? Economics is what Massport would have everyone believe this is all about. But it does not make good economic sense. So, what is the story behind the story? 340.1

None of the persons, none of the communities who for so long have borne the burden of responsibility for the economic well being of the entire Commonwealth should be burdened with further abuse.

For some it will be better, for others it will be worse. I have read this and heard this expressed. From the North Shore to the South Shore, consider that we are a small segment of a larger body. Moving the pain from the elbow to the knee does not take away the pain. And, in this case, no one seems to have recognized that there is a mid section and left side to this body that has been left out of the equation. It is time to think of us as one body from west to east from north to south. One body. The conditions at Logan are the responsibility of the entire Commonwealth. A very small portion of the Commonwealth has been burdened with the harsh reality of the airport. It is the eastern seaboard and contiguous cities that are bearing the brunt of the calamity called Logan Airport. Massport's hindsightedness has inflicted intolerable noise, air pollution, and quality of life abuses on an area, the population of which is in excess of one million people, 24 hours a day, 7 days a week, 365 days a year. You cannot allow this inequity to continue. The population of the Commonwealth is in excess of six million people.

The Human Element is rarely considered. It is the only factor on which a decision should be made. Every time I hear the word mitigation my stomach turns. It is the equivalent of a prison sentence. It is an inhumane way to live.

We are not laboratory specimens. Just because a specific decibel level is determined to be tolerable or acceptable by a standard, does not mean that we are able to or should have to tolerate that level of noise. Constant noise is intolerable. 340.2

Mr. Crockford (Globe, April 12, 1999) in remarks attributed to him stated, "You cannot discern what's a truck and what's a plane on any accurate basis". This comment was in a statement regarding Massport's monitor data as being irrelevant because it also picks up ground noise. If the reading is that high, it really does not make a difference; the noise is not tolerable. I get more than my fair decibels worth of airplane noise every day of my life. In addition, I am also subjected to train noise, residual expressway noise and extended periods of gun range noise. What is his point?

I must question why Massport continually boasts of the fact that most of the takeoffs will be over the water, thereby lessening impact. Where I live, airplane noise roars off the water. You can hear that roar before you see the planes, and for long after they become minute specks in the sky. Then there are the "ghost" planes, you can hear them, but never see them. For over a year, there has been a marked increase in the volume of that roar and in the number of flights. Something has changed. Many times the feeling is like being at the back end of a rocket booster. The noise starts at 5:35 in the morning. The continuous noise lasts until sometime around 1:00 A.M. Other noise can routinely be heard at 3:15 A.M. Planes are flying closer and making a greater impact. I live nine miles south of the airport. The water does not baffle sound, it enlarges it and it travels over a greater distance. I regret that I have not called the airport every time the noise is intolerable or every time a plane flew so close that it became frightening or every time I was awakened in the night; it would be an every day event. There is some respite, some time, but during the day or night, just about every day and night, the noise is prevalent to the point of distraction. 340.3 340.4

With the prediction of 40,000 more planes in the air by the year 2001, there is no improvement in the quality of life no matter how many runways are added. More planes, more noise; it is as simple as that.

Do you have statistics on the amount of pollution that airplanes reintroduce (every time they take off) into the ocean that we are paying dearly to clean and into the neighborhoods whose residents are paying dearly with their health? 340.5

Do you have statistics on the numbers of people who have to travel from the mid and western areas of the Commonwealth to get to Logan Airport; how much pollution; how much wasted gasoline; how many lost hours to those travelers and business people, because Logan sits at the far side of the Commonwealth? 340.6

Base none of your decision on the reasoning that when you buy a home near an airport you must expect airplane noise and related inconvenience. One fact that comes through loud and clear throughout the hearings and commentary made by those affected, we are communities made up of multigenerational families. We are committed to our communities. We have become caught up with the resurgence of pride in our city and inner city older communities; we are investing in them. Our caring and interest is what makes Boston a nice place to visit. Without us, our caring, the cities would not be worth visiting. We have grown with the aviation technological changes that have occurred in the 75 years that Logan has existed and have been able to maintain the integrity of the cities in spite of Logan. But, enough is enough.

Massport, on the other hand, did not grow with the aviation demands that were placed on them. After the injunction was placed in the 70's, we had every right to think that we could live in peaceful co-existence with Logan/Massport. As soon as the injunction was placed on them, they should have been looking to their future as we have. Instead, they chose to do nothing. They, therefore, must live with their self-inflicted problems. Massport has had 23 years to find the solution. They have been complacent with their lot in life and addressed problems after the fact, not as anticipatory measures. It does not speak well of their ability to run their business. There is no solution for Massport's problems at Logan. A new airport and regionalization are the only solutions. If it takes, ten years to accomplish that end, then so be it. Massport has wasted 23 years, what is another ten years? 340.7

I would like to point out that Massport *did* take the time to meet with the Editorial Staff of our South Shore newspaper, The Patriot Ledger, and, obviously, was very convincing, because the paper came out in favor of airport expansion projects.

Massport *did* meet with the Board of Directors of the South Shore Chamber of Commerce and that body represented that they spoke in behalf of their membership and voted unanimously in favor of expansion projects at Logan. As a member of the South Shore Chamber, I take issue with the fact that they came out in favor of expansion. The airport issue has far reaching negative impact and the Chamber should have brought the issue to the members to enable them to make a decision, instead of representing that 2500 members were in favor. I have made my opinion known to them.

Massport *did not* make an attempt to present their program for expansion to the residents of the South Shore. Instead they presented to persons who had control over large numbers of people, convinced them it was good and encouraged them to go forth and spread that good news to the masses. The Ledger did that. The Globe did that. The Herald did that. Rather sneaky of Massport, I say. 340.8

I do not believe that Boston is the only place for a major airport. I do not believe any of the statements or reports that indicate that other locations are inappropriate for an airport, that no one would come if an airport was located here or there. I am of a build it and they will come mentality.

I think the expansion plan is poorly thought out, that the effect on quality of life will be devastating, that there is no expansion solution at Logan, that there is really only one solution a new airport; regionalization will always be important; infrastructure to handle the certain increase in demand is essential. The most important aspect is to create a master plan that is more far-sighted than the end of Massport's nose; that seems to be as 340.9

futuristic as they are capable of thinking. Remember, they had 23 years to do the right thing for aviation progress and for the people.

Another day. Another rub. Governor Cellucci will announce today that Massport is taking over Worcester Airport and will create infrastructure that will make access easy. Timing wise, it seems to be politics, as usual. Is this supposed to make it appear that Massport is/has been doing the right thing all along; make us feel that progress is being made; make it appear that we can call off the watchdogs now? Cynical aren't I? It goes with the issue.

Rub number two. Three million dollars! Our money was used to fight us instead of putting it to good use; doing better research; assessing health risks; finding an honest solution. Such waste. This gives insight to the ilk of the persons involved in this project. One thing is certain, *we* could have put that money to much better use.

There will be no concessions, no compromise with regard to 14/32. Massport must bring Worcester up to par, including infrastructure, as should have been done so long ago and with no strings attached. If it will be a long and painful process, I say, grin and bear it Massport. This has been their message to us for so long, too long. It is time Massport did the right thing.

Mr. Pugsley and Mr. Silva, Logan Airside Improvements Planning Project ("Project") is not good for the people (The Human Element), please do not approve it; it is wrong.

Sincerely,

Marie J. Stamos

James N. Stamos

cc: The Patriot Ledger
The South Shore Chamber of Commerce
Bernice Mader, CAC
Senator Edward M. Kennedy
Senator John F. Kerry
Robert L. Driscoll, Sr.
Senator Michael Morrissey
Representative Bruce Ayers
Representative Joseph Sullivan
Sandra M. Kunz, CAC
Phil Lemnios, CAC
Rodney Slater, U.S. Dept. of Transportation

Letter 340
Marie and James Stamos
Private Citizens: Quincy/North Quincy

Code	Topic 1	Topic 2	Comment	Response
340.1	Alternatives	Runway 14/32	...[The current proposal] is a short term solution to...a big problem....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
340.2	Noise	Impacts	Just because a specific decibel level is determined to be tolerable or acceptable by a standard, does not mean that we are able to or should have to tolerate that level of noise. Constant noise is intolerable.	The acceptability of constant or time varying noise levels depends on its level and context as well as the state of the listener. The federal guidelines are primarily for the protection of people from noise exposures that interfere with human activity, such as speech communication.
340.3	Alternatives	Runway 14/32	...[Although] most of the takeoffs will be over the water...Where I live, airplane noise roars off the water.	Sound is reflected off the water and adds to the sound exposure of people who live on the water. However, the use of over-water departure routes at Logan Airport has been developed successfully to minimize the number of people affected by noise.
340.4	Noise	Impacts	For over a year, there has been a marked increase in the volume of that roar and in the number of flights...The noise starts at 5:35 in the morning. The continuous noise lasts until sometime around 1:00 AM. With the prediction of 40,000 more planes in the air by the year 2001, there is no improvement in the quality of life no matter how many runways are added. More plans, more noise....	The major source of aircraft noise in the Quincy area is the arrival of aircraft on Runway 4R and Runway 4L. In the future year fleet scenarios, the effective jet arrivals on these runways is significantly less with the addition of Runway 14/32 (refer to the comparison between Alternatives 1A and Alternative 4 in Table 6.2.3 in the Airside Project Draft EIS/EIR).
340.5	Air Quality	Standards	Do you have statistics on the amount of [air emissions] pollution that airplanes reintroduce (every time they take off) into the ocean...and into the neighborhoods whose residents are paying dearly with their health?	The emissions inventories for future conditions and alternatives are contained in Section 6.4 and Appendix F of the Supplemental DEIS/FEIR. These inventories show that all Alternatives, including the No Action and Preferred Alternatives, are well within acceptable criteria. In addition, dispersion modeling indicates no violation of the NAAQS for the pollutants analyzed (CO, NO and PM_{10}) under any alternative and future year.
340.6	Ground Transportation	Access to Logan	Do you have statistics on the numbers of people who have to travel from the mid and western areas of the Commonwealth to get to Logan Airport; how much pollution; how much wasted gasoline; how many lost hours to those travelers and business people, because Logan sits at the far side of the Commonwealth?	Although this specific information is not available, Massport has a long-standing relationship with the City of Worcester to aid Worcester Regional Airport in reaching its full potential, thereby improving the efficiency of the New England air transportation network. Massport assumed operational control of the Worcester Regional Airport on January 15, 2000. Refer to Section 2.10 of the Supplemental DEIS/FEIR for a discussion of Massport's efforts to promote increased utilization of Worcester Regional and other regional airports.

Code	Topic 1	Topic 2	Comment	Response
340.7	Regional Transportation	Regional Airports	A new airport and regionalization are the only solutions. Massport must bring Worcester up to par, including infrastructure, as should have been done so long ago....	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.
340.8	Environmental Review Process	Public Process	Massport did not make an attempt to present their program for expansion to the residents of the South Shore.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Code	Topic 1	Topic 2	Comment	Response
340.9	Environmental Review Process	Public Process	...there is no expansion solution at Logan...there is really only one solution a new airport; regionalization will always be important; infrastructure to handle the certain increase in demand is essential.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields.

LETTER 341

IVAN AND NANCY BLECHER
1025 WINTHROP AVE
REVERE. MASS. 02151

APRIL 22, 1999

MR. ARTHUR PUGSLEY
SECRETARY OF ENVIRONMENTAL AFFAIRS (MEPA OFFICE) EOEA NO. 10458
100 CAMBRIDGE STREET 20TH FLOOR
BOSTON, MASS 02202

DEAR MR. PUGSLEY,

I RESIDE WITH MY WIFE AT 1025 WINTHRROP AVE, REVERE, MASS (BEACHMONT). I HAVE BEEN AT THIS ADDRESS FOR 12 YEARS.

WE ARE BOTH AGAINST THE PROPOSED NEW RUNWAY AT LOGAN AIRPORT. THE NOISE LEVELS OF AIRPLANES NIGHT AND DAY ARE OVERWHELMING. I HAVE APPEALED TO MASSPORT ON MANY OCCASIONS BUT TO NO AVAIL. THE NOISE LEVELS HAVE QUARDRUPLED IN THE TWELVE YEARS, GETTING WORSE AND WORSE. 341.1

MASSPORT, ON MY REQUEST, SENT AN OUTSIDE "EXPERT" TO EXAMINE NOISE LEVELS AROUND MY HOME. OF COURSE, HE CAME WHEN THE RUNWAY EFFECTING MY HOUSE WAS NOT BEING USED (4-4R AND 4-4L). HIS REPORT TO MASSPORT AND MYSELF WAS INACCURATE. I CANNOT AFFORD TO HAVE THIS TEST PERFORMED MY AN INDEPENDENT EXPERT OR THE RESULTS WOULD HAVE BEEN ENTIRELY DIFFERENT.

THE NEW PROPOSED RUNWAY WOULD ONLY INCREASE THIS EFFECT, WHETHER IT WOULD BE ME OR SOME OTHER RESIDENTS.

THE SOOT ON WINDOWS IS ANOTHER PROBLEM THAT THIS AIRPORT IGNORES AND THE LONG-RANGE EFFECTS ON HEALTH.

I HAVE PROBABLY LOGGED OVER 5,000 NOISE COMPLAINTS TO MASSPORT, BUT NOTHING WAS EVER DONE TO EVEN ALLEVIATE THIS PROBLEM. AIRPLANES FLY OVERHEAD AS EARLY AS 5:30 A.M. AND AS LATE AS 2:30 P.M. 341.2

THANKING YOU FOR YOUR TIME. I HOPE YOU CAN HEAR ME, BECAUSE I CAN'T EVEN HEAR MY WIFE WHEN SHE TALKS TO ME WITH THE NOISE OVERHEAD!

SINCERELY,

IVAN BLECHER

Letter 341
Ivan and Nancy Blecher
Private Citizens: Revere

Code	Topic 1	Topic 2	Comment	Response
341.1	Noise	Runway 14/32	We are both against the proposed new runway at Logan Airport. The noise levels of airplanes night and day are overwhelming. The new proposed runway would only increase this effect....	The noise exposures in Revere are lower in 2010 with the Preferred Alternative than with the No Action Alternative (refer to Tables 6.2.9 and 6.2.10 in Volume 1 and Tables 1.3-1.5 in Appendix L of the Airside Project Draft EIS/EIR and compare Alternative 1A and Alternative 4).
341.2	Public Health	Effects	The soot on windows is another problem that this airport ignores and the long-range effects on health.	The soot in urban areas comprises compounds from a variety of sources, primarily roadways Monitoring of airborne soot levels in the vicinity of Logan Airport has shown that the airport is a very small (less than one percent) contributor. The air quality analysis, based on EPA/MDEP models and guidelines, performed for the Supplemental DEIS/FEIR is considered to be comprehensive and state-of-the-art. Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport.

149 Endicott Ave., Revere MA 02151
March 3, 1999

LETTER 342

Secretary of Environmental Affairs
Attention MEPA Office
Mr. Arthur Pugsley - EOEA No. 10458
100 Cambridge Street, 20th Floor
Boston, MA 2025

John C. Silva
Manager, Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Pugsley and Mr. Silva,

Please consider the following comments as you deliberate on the environmental effects of the Logan Airside Improvement Program.

Runway 14-32

Will Revere experience a growth in traffic with Runway 14/32? The numbers of operations in Appendix H indicate that by 2010

Arrivals on 22 Left will go from

- 8,661 in 1993 to 13,678 - 21,367 with no action
- to 13,285 - 20,068 with no runway
- to 8,310 - 12,474 with runway 14/32.

342.1

Departures on 4 Right will go from

- 23,092 in 1993 to 16,727 - 20,510 with no action
- 16,645 - 21,502 with no runway
- 14,717 - 17,946 with runway 14/32.

These numbers indicate that runway 14/32 won't make life any better, but without

runway 14/32, life will be a lot worse.

A word about noise: many of these future operations will occur in larger planes. Some of these new planes are quieter, but technically, heavier planes are allowed to make more noise and still be Stage 3 compliant. Is there a study somewhere in the EIS/R which predicts how many of the 2010 fleet will truly be quieter? Is this factored into the noise analysis? 342.2

The benefit of the quieter Stage 3 aircraft peaks in 1999, as is indicated on the noise charts. However, it seems that by 2010, Revere will experience as much or more noise as in the base year of 1993. Will some of that yearly average of noise include multiple flights of over 100 decibels between 7:00 and 7:30 on a summer Sunday morning as has been the case in the past? It is good to point out that even though some residents have soundproofed houses, others don't. Sometimes this is because they could not afford to bring their house up to code to qualify for the program. Secondly, porches, terraces, streets, playgrounds and beaches cannot be soundproofed. 342.3

Logan's rise in activity has an adverse environmental effect. We residents pay a high price for the benefit of business as usual. But the threat is that if we don't have 14/32, the price will be even higher.

Lowering the minimum

The EIS/R did not consider this feature to have any environmental effect, since it was not mentioned in Vol. I, Chapter VI, Draft Environmental Impact Statement. Nor is it pictured on the cover graphic. We believe it does have an impact, both from noise and from safety.

Using the information provided in Appendix D, Massport predicts 122 more hours of dwell exceedence and 194 more hours of persistence exceedence (2010 37.5M low fleet) for those affected by runway 22/4. That means more noise in Beachmont, most of it probably in summer fog. It is stated that "these small changes can be attributed to the slightly increased availability and the **resulting rise in equivalent jet operations during IFR conditions.** " (emphasis added) As was explained in the preceding comments on 14/32, traffic is predicted to continue to grow, which would put more planes over our heads -- more planes in worse weather. 342.4

We have been told verbally that Beachmont will benefit from moving the Decision Height from Belle Isle Marsh to just past Saratoga Street. We won't hear the noise of an aborted landing, although our East Boston neighbors will. It is good to point out that the 217' above sea level Decision Height is not on the airport. It is over 2000 feet from the runway end, and very close to East Boston.

As for noise, our experience is that those planes which come in with a low cloud cover are very loud because of the effect of the noise bouncing off the moisture in the air. That means more planes coming in worse weather will be noisier.

As far as safety is concerned, the study states that lowering the visibility minima will increase flexibility "by avoiding crosswind landings." It is not clear if planes are now landing with more of a crosswind than they would like, but it is implied. Does that mean that safety has been compromised for the last 20 years?

This is not meant as a rhetorical question, but it brings up the point that the issue of lowering the visibility minima for landing should not be folded into this environmental impact report. We deserve to understand more clearly why we will be safer with lowered minima. For a start, could the word "transponder" be included in the glossary? 342.5

A further criticism of this presentation is that the height of Beachmont Hill, as presented to the many readers of this study, is questionable. The top of the Mary T. Ronan, housing a beacon, is well over the height protrayed in Figure 3 of Appendix D. Given the angle of descent and the height of the hill, planes are not much more than 300' above us. We would like the pilot and copilot to see us. 342.6

In conclusion, we see that we will get less punishment with 14/32 than without it, but we will experience a constant increase in overflights as Logan's traffic expands. This will translate into noise for us. We are not getting a break.

Secondly, we are seriously concerned about the proposal to lower the cloud ceiling for landings on Runway 22 Left. It will certainly bring more noise and seems to be a possible danger. We think this matter needs to be explored more fully.

Sincerely,

Lynn Mazzaullo

Letter 342
Lynn Mazzaullo
Private Citizens: Revere

Code	Topic 1	Topic 2	Comment	Response
342.1	Alternatives	Runway 14/32	Will Revere experience a growth in traffic with Runway 14/32? ...[Air traffic projections] indicate that runway 14/32 won't make life any better, but without runway 14/32, life will be a lot worse.	Revere is nearest the flight paths of Runway 4L/R departures and Runway 22L/R arrivals. The Supplemental DEIS/FEIR indicates that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, reducing the current dependence on northeast/southwest operations. This will lead to a decreased percentage of equivalent operations over Revere. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals, cutting dwell and persistence over Revere significantly.
342.2	Noise	Hushkitted Aircraft	A word about noise: many of these future operations will occur in large planes...[which may be] quieter, but...are allowed to make more noise and still be Stage 3 compliant. Is there a study somewhere in the EIS/R which predicts how many of the 2010 fleet will truly be quieter? Is this factored into the noise analysis?	The noise characteristics of the future aircraft are factored into the noise analysis. Many new large aircraft, such as the Boeing 777 and the Airbus A330, will be much quieter than today's large Stage 3 aircraft because their engines are quieter and because, during takeoff, they climb much faster because they have two instead of four engines. FAR Part 36 permits larger (heavier) Stage 3 aircraft to generate more noise than smaller ones. However, the latest generation of Stage 3 aircraft are quieter than FAR Part 36 requires. Appendix I of the DEIS/R contains details of the individual aircraft types assumed in the future fleets. These types were used in the operations analysis as well as the noise analysis.
342.3	Noise	Impacts	...it seems that by 2010 Revere will experience as much or more noise as in the base year of 1993. Will some of that yearly average of noise include multiple flights of over 100 decibels between 7:00 and 7:30 on a summer Sunday morning as has been the case in the past...porches, terraces, streets, playgrounds and beaches cannot be soundproofed. Logan's rise in activity has an adverse environmental effect.	The noise exposures in Revere are lower in 2010 with the Preferred Alternative than with the No Action Alternative (refer to Tables 6.2.9 and 6.2.10 in Volume 1 and Tables 1.3-1.5 in Appendix L of the Airside Project Draft EIS/EIR and compare Alternative 1A and Alternative 4).
342.4	Alternatives	Reduced Approach Minima	The EIS/R did not consider ...[lowering the minimum] to have any environmental effect...We believe it does have an impact, both from noise and from safety. Massport predicts 122 more hours of dwell exceedence and 194 more hours of persistence exceedence (2010 37.5 low fleet) for those affected by runway 22/4. That means more noise in Beachmont, most of it probably in summer fog..."these small changes can be attributed to the slightly increased availability and the resulting rise in equivalent jet operations during IFR conditions"...traffic is predicted to continue to grow, which would put more planes over our heads-- more planes in worse weather...our experience is that those planes which come in with a low cloud cover are very loud because of the effect of the noise bouncing off the moisture in the air.	The preferential runway rules at Logan Airport have late night departures on Runway 16 over the harbor as the highest priority to minimize departures over highly populated neighborhoods.

Code	Topic 1	Topic 2	Comment	Response
342.5	Alternatives	Reduced Approach Minima	...lowering the visibility minima for landing should not be folded into this environmental impact report. We deserve to understand more clearly why we will be safer with lowered minima.	The agreement between the City of Boston, the FAA and Massport stipulates that any modification of the existing minimums requires completion of an EIS/EIR, even though the setting of minimums is otherwise categorically excluded from the EIS/EIR process. The reduced minimums will, in fact, enhance safety by providing precision guidance to a point closer to touchdown and reducing reliance on Runway 4R under poor weather conditions, when winds may favor use of an alternate runway.
342.6	Alternatives	Reduced Approach Minima	A further criticism of this presentation is that the height of Beachmont Hill, as presented to the many readers...is questionable. The top of the Mary T. Ronan, housing a beacon, is well over the height portrayed in Figure 3 of Appendix D. Given the angle of descent and the height of the hill, planes are not much more than 300' above us. We would like the pilot and copilot to see us.	Based on the analysis, aircraft passing over the top of Beachmont Hill would be approximately 500 ft above sea level, which is more than 300 ft above the top of Beachmot Hill.

LETTER 343

April 22, 1999

Robert Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street – Room 2000
Boston, MA 02202

Dear Mr. Durand:

I am writing to express my strong opposition to Runway 14/32. I purchased a 3-family house in Roslindale in 1991, was married in 1993 and now have 2 children. I bought the house under uncertain economic conditions, and when the prevailing wisdom was that middle-class families would continue to flee the cities for the suburbs until few, if any would be left. I have invested over $70,000 in upgrading my property, including de-leading.

I believed then and believe now more than ever that my investment made sense. The city has always had the advantages of having a rich history and culture. And it has recently made great strides in many areas including reducing crime, improving schools, and attracting economic investment in neighborhood infrastructure and business revitalization.

One nuisance, however, that I have seen grow into a significant problem over the last couple of years is the noise and pollution of air traffic that now runs directly over my home. I was resentful when recent flight pattern changes made my once quiet neighborhood far noisier. And I am very upset at the potential of the problem growing worse. 343.1

Please do what you can to help find a long-term regional and environmentally friendly solution to air traffic congestion.

Thank you for your help.

Sincerely,

Matthew S. Baronas
80 Sherwood Street
Roslindale, MA 02131

Letter 343
Matthew S. Baronas
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
343.1	Noise	Impacts	One nuisance...that I have seen grow into a significant problem over the last couple of years is the noise and pollution of air traffic that now runs directly over my home [in Roslindale]...flight pattern changes made my once quiet neighborhood far noisier...I am very upset at the potential of the problem growing worse.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 344

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

With the obvious increase in noise that a new runway will produce, I will have to consider moving from Boston altogether. I think seriously that there will be "flight" from the city because our quality of life will be seriously altered. Please do not do this to this wonderful city!!! 344.1

Name Natalie Diffloth
Address 28 Symmes St.
Roslindale, MA
Phone 325-4528

Letter 344
Natalie Diffloth
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
344.1	Alternatives	Runway 14/32	With the obvious increase in noise that a new runway will produce...our quality of life will be seriously altered.	The dispersion model portion of the LDMS is an EPA-approved model. The methodology is consistent with FAA and EPA guidelines.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 345

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

DO NOT DO THIS TO OUR NEIGHBORHOOD!!!!! BOSTON WILL BE RUINED BY THIS NOISE. THERE HAS GOT TO BE ANOTHER WAY!!! 345.1

Name Sal Lopes
Address 30 Symmes St.
Roslindale, MA
Phone 469-4654

Letter 345
Sal Lopes
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
345.1	Alternatives	Runway 14/32	Boston will be ruined by this noise.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

VIA FACSIMILE

LETTER 346

37 Prospect Avenue
Roslindale, MA 02131
April 22, 1999

Mr. Robert A. Durand - Secretary
Executive Office of Environmental Affairs
100 Cambridge Street - Room 2000
Boston, MA 02202
Attn: MEPA Office

RE: EOEA # 10458

Dear Mr. Durand:

We appreciate the opportunity to comment on MassPort's DEIS for the proposed runway 14/32 at Logan airport. We have only recently become aware of the project and have not had a chance to review the DEIS thoroughly. We have, however, spoken with neighbors, read recent news articles and pulled information off the internet to inform ourselves about MassPort's proposal. Based on this, we submit the following comments.

We bought our home in Roslindale in 1994. It has been a delight to live in our neighborhood and raise a family so near urban open spaces such as Franklin Park and Arnold Arboretum. Generally, our neighborhood is quiet, with the occasional distant sound of a passing commuter rail train. However, on certain days we notice that the air traffic increases dramatically and disrupts outdoor play, indoor conversation, and sleep. We have learned that these are the days when runway 27 is in use. Planes roar overhead at a rate of about 1 or 2 per minute. This would become the norm if MassPort's proposed expansion is implemented. 346.1

We are firmly against the proposed airport expansion for two key reasons. First, like thousands of area residents, we are alarmed by the projected increase in air traffic over the Roslindale area (including the popular oases of Franklin Park and the Arboretum) to about 45,000 flights/year. That's 120 flights per day! Our relative urban quiet will be shattered and our quality of life severely impacted. In addition, we suspect this would have a negative effect on our property value. 346.2

Second, despite the reportedly extensive public participation program MassPort has undertaken, it appears that the agency has not used a consensus building approach to achieve the wisest solution 346.3

to the airport's capacity problem. Instead, the proposal put forward in the DEIS seems to be a politically driven measure that ignores or downplays alternatives that could more elegantly resolve the short- and long-term problems, as well as enjoy a broader level of public support.

Given that there are serious questions regarding the adequacy, quality and reliability of information contained in the DEIS, we request that your Certificate declare the document inadequate and that you direct MassPort to conduct a more thorough evaluation of alternatives and engage a broad range of stakeholders in a rigorous consensus building process. Issues that need to be better addressed include: developing a regional approach to handling projected long-term growth in air traffic, building a second urban airport, and using more current studies and figures in developing and evaluating alternatives. Addressing the issue of airport capacity for the Greater Boston area will impact so many Boston area residents that achieving reasonable consensus is essential. 346.4

Respectfully,

Stephanie Moura
Kate Keeler

cc: John DeVillars - Regional Administrator, EPA - New England

Letter 346
Stephanie Moura and Kate Keeler
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
346.1	Alternatives	Runway 14/32	...on certain days [when Runway 27 is in use] we notice that the air traffic increases dramatically [over Roslindale] and disrupts outdoor play, indoor conversation, and sleep. Planes roar overhead at a rate of about 1 or 2 per minute...[which] would...be the norm if Massport's proposed expansion is implemented...we are alarmed by the projected increase in air traffic over the Roslindale area...Our relative urban quiet will be shattered and our quality of life severely impacted.	The model and methods used to develop these data were based on EPA- and DEP-approved guidelines and show that the NAAQS will not be violated. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
346.2	Open Space/ Parkland	Impacts	We are alarmed by projected air traffic increases over the popular oases of Franklin Park and the Arboretum	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.

346.3	Environmental Review Process	Public Process	...despite the reportedly extensive public participation program Massport has undertaken, it appears that the agency has not used a consensus building approach to achieve the wisest solution to the airport's capacity problem.	There was an extensive public participation and review process during the preparation of the Airside Project Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Airside Project Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
346.4	Regional Transportation	Regional Airports	...the DEIS...downplays alternatives that could more elegantly resolve the short- and long-term problems, as well as enjoy a broader level of public support...conduct a more thorough evaluation of alternatives and engage a broad range of stakeholders in a rigorous consensus building process. Issues that need to be better addressed include: developing a regional approach to handling projected long-term growth in air traffic, building a second urban airport, and using more current studies and figures in developing and evaluating alternatives.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 347

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I am against the DRAFT Airside Improvement as written - This DRAFT seeks to increase flights over my neighborhood - A neighborhood with many low flying, large aircraft that pollute the air with NOISE and FUMES. It seems as if the planes are flying lower than they have in the past and as I stated earlier, when they are taking off, the noise especially, is very disruptive. 347.1

UNTIL these AIRCRAFT can be designed quieter and/or fly higher I can in no way support the increase of pollution (both AIR and NOISE) via AIR TRAFFIC in my community.

Thank you

Mary A. Moynihan

Name MARY A. MOYNIHAN
Address 52 AUGUSTUS Ave
ROSLINDALE, MA 02131
Phone 617 469 9935

Letter 347
Mary A. Moynihan
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
347.1	Alternatives	Runway Use	It seems as if the planes are flying lower than they have in the past...noise especially is very disruptive.	There have been no significant changes to aircraft arrival flight patterns at Logan Airport in several years, and while Runway 27 departure procedures have been modified, these changes do not lead to aircraft at lower altitudes. In addition, the noise impacts of individual flights have actually declined as Stage 2 aircraft have been phased out of the fleet and replaced with quieter aircraft types.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
<brwhite@gis.net>
ject: 14/32
e: Wednesday, April 21, 1999 21:05:36 EDT
ach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 348

To: Robert A. Durand, Secretary of Environmental Affairs
Please don't allow Runway 14/32 and the Centerfield Taxiway to be built . My family lives in a wonderful Roslindale neighborhood that is already affected by jets from runway 27 interrupting sleep and conversation. I wonder how many of the business people who are supporting this expansion at Logan live in areas of the city affected by the tremendous noise. We have families out of state and are frequently flying in and out of the city. I am actually impressed with the lack of delays in scheduled arrivals and departures from Logan and would never have considered it a problem. 348.1 348.2
Thank-you for your attention.

Sheryl L. White
29 Mendum St.
Roslindale, MA 02131

Letter 348
Sheryl L. White
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
348.1	Alternatives	Runway 14/32	Please don't allow Runway 14/32 and the Centerfield Taxiway to be built. My...Roslindale neighborhood...is already affected by jets from Runway 27 interrupting sleep and conversation.	The model and methods used to develop these data were based on EPA- and DEP-approved guidelines and show that the NAAQS will not be violated. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
348.2	Purpose and Need	Delay	I am actually impressed with the lack of delays in scheduled arrivals and departures from Logan and would never have considered it a problem.	Comment noted.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Alan Wright" <awright@vnane.org>
Subject: Testimony on Environmental Impact of Massport's Runway 14/32 Pr
Date: Friday, April 16, 1999 18:20:05 EDT
Attach: attach1
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 349

SUBJECT too long. Original SUBJECT is
Testimony on Environmental Impact of Massport's Runway 14/32 Proposal

---------- Original Message Follows ----------
Dear Secretary Durand:

I testified at the public comment hearing held on Monday, April 5th, 1999. This letter is my written transcription of my oral statement with a few addendums. Thank you for accepting it and for providing the opportunity to testify.

My name is Alan Wright. I live at 57 Arborough Road in Roslindale, MA, next to the Arnold Arboretum. I am here tonight representing my family and neighbors all of whom are very concerned about Massport's proposal.

When Runway 27 is in use the direct overflight of Roslindale and the Arboretum is unrelenting and frequently deafening. Massport's proposal to build Runway 14/32 will nearly triple the overflights of Roslindale and the Arboretum to almost 45,000 per year. That means on average over 120 flights per day, year round. Of course, given variable use of the runway, many days will experience a much

349.1

This is intolerable and unreasonable. It must not be allowed as it adversely affects the environment of the Arnold Arboretum, Roslindale and surrounding communities.

349.2

When flights are overhead and I am outside playing with my child or talking with a neighbor, we frequently must stop talking as we cannot hear each other. And, we are located more than six miles from Logan Airport. Stage two aircraft, whether retrofitted or not, and large stage three aircraft are the main culprits. Their noise level is intolerable. I am frequently awakened late at night when cargo jets pass overhead -- even when my windows are closed!

349.3

Massport has not justified why the quality of life for the 35,000 residents of Roslindale, the tens of thousands of visitors to the Arnold Arboretum -- who come from all over Massachusetts, or the hundreds of thousands of residents of urban Boston and surrounding communities must decline.

Part of the problem is that the pilots seldom follow through on the Runway 27 path. Instead of staying over Franklin Park and Forest Hills Cemetery, they veer off over the Arboretum and Roslindale. Massport has promised to fix this problem but has not done so yet. The problem will only get worse if Runway 14/32 is built.

349.4

I chose to buy a house in Roslindale rather than move to the suburbs, as I am committed to the high quality of life the City of Boston offers. I greatly enjoy the parks, the downtown and the Harbor Islands. Family and friends who come to visit remark upon what a wonderful city Boston is. That quality will decline if Logan is allowed to grow more. The check on growth created by the current

prohibition on building new runways must remain in place. It is necessary to sp
ur even greater growth in outlying airports, which should include Hanscom Airfie
ld in some fashion. Obviously Logan cannot and should not be shut down, even th
ough it is badly located, but the air transportation needs of eastern Massachuse
st densely populated areas where the greatest number of people will be adversely
ffected.

349.5

Some claim that the supposed excessive number of delays experienced at Logan
will harm the greater Boston economy. Their claims are spurious and unfounded.
Our economy is based upon intense price competition. Travel is the most ineff
icient means of conducting business possible; new and growing businesses do not
seek to expand expensive travel budgets, they seek to reduce them. Video and te
le-conferencing are much more efficient means of conducting business and are gro
wing rapidly, along with other methods of electronic communication.

As Massport has indicated, the majority of Logan's growth will occur from to
urism and conventions. Tourists and conventioneers expect that their travel wil
l be delayed, whether by weather, traffic jams to and from airports or schedulin
g problems. They are not deterred from traveling to Boston because they may exp
acter of the City. The quality of their visit, particularly to the many histori
c sites in the urban core, to the revitalized downtown and the rebuilt seaport d
istrict, will be greatly diminished if Massport is allowed to increase the growt
h of Logan through building Runway 14/32. Please do not allow this!

Thank you.

Letter 349
Alan Wright
Private Citizens: Roslindale

Code	Topic 1	Topic 2	Comment	Response
349.1	Alternatives	Runway 14/32	When Runway 27 is in use the direct overflight of Roslindale and the Arboretum is unrelenting and frequently deafening. Massport's proposal to build Runway 14/32 will nearly triple the overflights.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. The Day-Night Sound Level (DNL) data from Noise Monitor No. 1 at Andrews Street in the South End show levels of 56, 55.2,and 56.9 dB for the 29M Low, 37.5M Low and 37.5M High Fleet scenarios with the Preferred Alternative. These levels are less than the1993 value of 57.9 dB and are well below the standard DNL criteria of 65 dB. 1993 is representative of historic high fleet operating conditions at Logan Airport.
349.2	Open Space/ Parkland	Impacts	This [proposal] is intolerable and unreasonable...adversely affects the environment of the Arnold Arboretum	The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. Refer to Section 6.2 and Section 6.8 of the Supplemental DEIS/FEIR, respectively, for additional information on noise impacts and environmental justice.
349.3	Noise	Runway 14/32	...[This proposal adversely affects] Roslindale and surrounding communities. When the flights are overhead and I am outside...we frequently must stop talking as we cannot hear each other. Stage 2 aircraft whether retrofitted or not, and large Stage 3 aircraft are the main culprits.	The Airside Project Draft EIS/EIR shows that the total noise impacts around Logan Airport will improve in the first decade of the 21st century, primarily from the elimination of the noisier Stage 2 aircraft, and by the gradual elimination of the hushkitted Stage 3 aircraft as they are retired.
349.4	Noise	Flight Tracks	Part of the problem is that the pilots seldom follow through on the Runway 2[7] path. Instead of staying over Franklin Park and Forest Hills Cemetery, they veer off over the Arboretum and Roslindale. The problem will only get worse if Runway 14/32 is built..	The problem of pilots not following the Runway 27 path needs to be discussed with the FAA and Massport. The FAA has pledged to do its best to achieve the new tracks that were developed in the Runway 27 EIS procedure. Also, new advances in technology, such as the Global Positioning Systems that are becoming a standard part of new aircraft flight control systems, can be used to ensure better compliance in the future.

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Code	Topic 1	Topic 2	Comment	Response
349.5	Regional Transportation	Regional Airports	The check on growth created by the current prohibition on building new runways must remain in place. It is necessary to spur even greater growth in outlying airports, which should include Hanscom Airfield in some fashion. Video and tele-conferencing are much more efficient means of conducting business [than air travel]...and are growing rapidly...the majority of Logan's growth will occur from tourism and conventions. Tourists and conventioneers...are not deterred from traveling to Boston [because of delays]...The quality of the visits, particularly to the many historical sites in the urban core...will be greatly diminished if Massport is allowed to increase the growth of Logan through building Runway 14/32.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The acceptance of videoconferencing and other means of telecommunications by businesses as a substitute for air travel are largely dependent upon the quality of the available technology and private sector decisions outside the authority of FAA and Massport. Massport encourages such initiatives from state government, Amtrak, and others. Massport forecasts in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR took account of the likely effect of such factors as videoconferencing over the forecast period. The FAA and Massport have consulted with the Massachusetts Historical Commission (MHC). The MHC has concurred with the FAA's determination that the Preferred Alternative will have no adverse effect on significant historic properties. Refer to Section 6.3 of the Supplemental DEIS/FEIR for a description of historic properties, project impacts and mitigation.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 350

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

No Justice No PEACE ! NO Justice No PEACE !

By Allowing MASSPORT to build Runway 14 32 - MASSPORT will INCREASE flights over runway 27 by 3 fold 14,000 flights to 60,000 flights. This means that Black people and other people of color will experience noise pollution and toxic fumes to levels that MASSPORT has not completely evaluated. We all know that Black people have the highest death and disease rates of all people. Roxbury residents will have another stress to their lives that will kill them in greater numbers. Black health indicators for Asthma, cardiovascular and lung disease is 30 to 300 times the white rates. Jet Planes fumes and Noise pollution will increase the aforementioned health problems. I have a child and I would like to see you concerned about their/her health like I am. Stop runway 14 32.

Name TODD C. PAYTON
Address 107 HOWLAND ST.
ROXBURY MA 02121
Phone (617) 442-6619

350.1

Letter 350
Todd L. Payton
Private Citizens: Roxbury

Code	Topic 1	Topic 2	Comment	Response
350.1	Environmental Justice	Impacts	Black people and other people of color will experience noise pollution and toxic fumes to levels that Massport has not completely evaluated.	The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL noise contour are almost identical to the No Action Alternative. The 65 dB DNL noise contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation. Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Ellen G. Band" <eband@world.std.com>
bject: Runway 14/32
te: Tuesday, April 20, 1999 18:00:45 EDT
tach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 351

Dear Mr. Pugsley,

I am a Somerville resident and property owner. I have lived in Somerville since 1986 and I have owned my home in Somerville where I reside since 1992. Since that time I have seen my neighborhood, Brickbottom Artists Building and the surrounding neighborhood along the McGrath Highway, go through tremendous transformation and upgrading. The neighborhood is cleaner, safer, and is populated with community-oriented people.

I am writing to you to express my concern about the proposed runway 14/32 which is expected to triple air traffic over Somerville and have a major impact on the quality of life in this city and of course our property values. I work in audio and know a great deal about decibel levels and noise pollution. I have recently become aware that a formal decibel study has not been conducted for our neighborhood and this is not only
cceptable it is disrespectful and dishonest. Poorer neighborhoods are 351.1
ways expected to bear the brunt of situations such as this and this is wrong. Hanscom field is very underutilized and is far better positioned to support the kind of business traffic that this new runway is supposed to address.

I would also like to cite the following issues as reasons to reject the proposed runway.
1. The study uses old data from 1993 which was the worst year to document delays at Logan
2. Delays at Logan have actually decreased over the last six years. I fly 351.2
several times a year and the only times I have been delayed have been due to inclement weather either in the Boston area or in the area where my plane is coming from.
3. Other strategies for reducing air traffic should be explored such as 351.3
Hanscom Field which is much closer to the Route 128 business area.
4. Adding a runway may actually increase traffic and so nothing will be 351.4
gained. Traffic, either by road or air, is like water - it will fill any space it is given and not necessarily reduce congestion.
5. Noise impact on surrounding communities are grossly underestimated. 351.5
SOMERVILLE HAS NOT HAD AN OFFICIAL DECIBEL STUDY OF NOISE IMPACT! Other areas have.

I urge you sir, to please give serious consideration to these matters and look for other, more fair and more functional solutions to air traffic
nagement.

ncerely,
Ellen Band

1 Fitchburg St.
Somerville, MA 02143

LEN BAND
ınd artist/Composer

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617.625.4889

Letter 351
Ellen G. Band
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
351.1	Environmental Justice	Impacts	Poorer neighborhoods are always expected to bear the brunt [noise impacts] of situations such as this...	Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
351.2	Purpose and Need	Delay	The study uses old data from 1993 which was the worst year to document delays at Logan... Delays at Logan have actually decreased over the last six years....	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. Analysis of 1981 to 90 weather with 1989-98 weather identifies no significant differences in statistical properties. The Supplemental DEIS/FEIR also contains a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays which would be directly affected by Runway 14/32 have risen steadily since 1994.

Code	Topic 1	Topic 2	Comment	Response
351.3	Alternatives	Preferred Alternatives	Other strategies ... should be explored such as Hanscom Field...	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
351.4	Purpose and Need	Airfield Capacity	Adding a runway may actually increase traffic...	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.
351.5	Alternatives	Runway 14/32	Noise impact on surrounding communities are grossly underestimated....	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: <dick.bauer@juno.com>
Date: Massport Environmental Statement - 14/32 - File # 10458 EOA
Attach: Thursday, April 22, 1999 11:16:15 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 352

I am writing to ask you to reject Massport's Environmental Impact Statement for proposed runway 14/32, File # 10458 EOA. Massport's Environmental Impact Statement is grossly inadequate for many reasons. One of the most important is its failure to seriously consider all alternatives. 352.1

Notable among the alternatives that Massport has not considered is limiting the number of small airplanes using Logan Airport. The proposed runway would be solely for such small airplanes; if the number of such planes were limited, any need for the runway would be completely 352.2
`iminated while delays could be simultaneously reduced beyond the
latively small reduction (20%) claimed by Massport for 14/32.

The FAA representative who spoke at the Somerville hearing on April 13, 1999 (John Silva) explained that Massport could limit the number of small airplanes using Logan with FAA permission. However, Massport has not only failed to request such permission, it has (as shown by Massport's Environmental Impact Statement) failed even to seriously consider requesting such permission. It is, of course, impossible to say at this time whether such permission would be granted. But for Massport to have failed even to consider seeking such permission in considering the environmental impact of runway 14/32 is a serious, indeed fatal, flaw in its Environmental Impact Statement, which should be rejected on that basis alone.

The Environmental Impact Statement has other serious flaws, as well. For example, as noted, even Massport concedes that runway 14/32 would eliminate only 20% of delays, and even that only for a few years. But Massport has failed in its Environmental Impact Statement to explain why this small reduction in delays justifies the serious environmental consequences of runway 14/32. Indeed, Massport's Environmental Impact Statement generally discounts the environmental impact on surrounding communities. It assumes that so long as it identifies some nongovernmental gains from runway 14/32, mentions some environmental consequences, and considers some alternatives, it has done all that is necessary. These assumptions directly contravene the purpose of the `ironmental Impact Statement requirement. 352.3 352.4

An Environmental Impact Statement is mandated to make sure that Massport

has adequately considered all of the environmental consequences and all of alternatives, to see if the nongovernmental gains from runway 14/32 really justify those environmental consequences. Massport's Environmental Impact Statement is grossly deficient, and should be rejected.

you have any questions about my comments, please feel free to call me.

Dick Bauer
58 Berkeley Street
Somerville MA 02143

617-628-6320

Letter 352
Dick Bauer
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
352.1	Environmental Review Process	MEPA	...Environmental Impact Statement is grossly inadequate... most important is its failure to seriously consider all alternatives.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
352.2	Alternatives	Other Non-Construction Alternatives	If the number of small planes were limited, any need for the runway would be completely eliminated while delays could be simultaneously reduced beyond the relatively small reduction (20%) claimed by Massport for 14/32.	Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. Massport has undertaken a comprehensive mitigation program, such as Logan Airport Noise Rules, for those areas that fall within its powers as proprietor of Logan Airport, which are not preempted under federal law. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport, and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
352.3	Purpose and Need	Delay	....Massport has failed ... to explain why this small reduction in delays justifies the serious environmental consequences of runway 14/32.	The FAA consistently rates Logan Airport as one of the most delay-prone airports in the United States. Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. The FAA Technical Center simulated Logan Airport operations in 1992 and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Supplemental DEIS/FEIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29 M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates with those of the Airside Project modeling. The FAA has concluded that the Airside Project delays represent "a plausible and conservative estimate". Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
352.4	Cumulative Impacts		....Environmental Impact Statement generally discounts the environmental impact on surrounding communities....	Massport is committed to a number of mitigation measures in addition to project-specific mitigation. Refer to Chapter 8 of the Supplemental DEIS/FEIR for a discussion of mitigation measures.

cc:
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Date:
Attach:
Certify:
Priority:
Defer until:
Expires:
Forwarded by:

Arthur Pugsley@MEPA@EOEA
"Ramon Bueno" <rbueno@kenan.com>
Massport, new runway 14/32 & Environmental Impact
Thursday, April 22, 1999 11:33:14 EDT
attach1
N
Normal

LETTER 353

We are writing to oppose the new airport runway at Logan, considering its overall impact on our communities to be detrimental.

We have heard and understand the arguments that the future economic health of our communities and region will benefit from the new runway, but disagree. We are not anti-growth, simply anti-irrational-growth. At best, this measure postpones a few short years a more basic decision about the long-term and sustainable growth for the area. And it does so with an unacceptable new burden on the quality of life in surrounding communities. 353.1

It is time to slow down and think deeper about the long term plan here. It seems to us that any rational plan for the future recognizes that:

* Much of the airport traffic at Logan services residents and businesses from cities and towns well outside the metropolitan area, with the associated ground traffic adding to the congestion into and out of Boston. Improved and increased service at regional airports must be part of any serious future plan. That must be planned carefully with the surrounding communities around those airports, obviously. 353.2
* Today's airport needs and those of the future cannot be based on outdated studies. Realistic data is essential. In Somerville, where we live, we understand there have been no systematic sound & noise measurements with which to evaluate current over flights, never mind the proposed and substantial increase that will result from the new runway. 353.3
* The proposed growth in flights over Somverville is unacceptably high. In addition, Somerville will be subjected to increased congestion from a new exit ramp from Route 93 at Sullivan Station--traffic congestion already is a serious problem before it even opens. The community's life will become all the more stressful with the constant increased flight traffic directly overhead. 353.4
* It makes little sense to continue the large number of takeoffs and landings from light aircraft at Logan. Many or most of those flights belong elsewhere. Consolidated routes will alleviate the load. 353.5

It makes no sense to push through a plan that has so many real
r ives, will be so divisive, and at best is a very short-term
s ution. This type of "solution" will reinforce the same inefficient and irrational trends that lead to its proposal in the first place. We

do not want to have to deal with this problem again in a few years' time, after having inflicted us with a lower quality of daily life for our families and neighborhoods.

Government and business decisions of such tremendous consequence cannot be made under the pressure of immediate needs. Sound practice demands a comprehensive long-term approach. This proposed runway will only divert from facing the problem fully.

We do not want our families and neighborhoods to pay the price of such "quick fix" solutions.

Please take our views into account and work for a healthier alternative.

Cordially,

RamÂn A. Bueno
Debra Weisberg
1 Fitchburg St., B550
Somerville, MA 02143

Letter 353
Ramon Bueno and Debra Weisberg
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
353.1	Alternatives	Preferred Alternative	...this measure postpones a few short years a more basic decision about the long-term and sustainable growth for the area. And it does so with an unacceptable new burden on the quality of life in surrounding communities.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
353.2	Regional Transportation	Regional Airports	....Improved and increased service at regional airports must be part of any serious future plan....	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
353.3	Noise	Monitoring	....In Somerville ... there have been no systematic sound and noise measurements with which to evaluate current overflights, never mind the proposed and substantial increase that will result from the new runway.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios.
353.4	Ground Transportation	Access to Logan	....Somerville will be subjected to increased [traffic] congestion from a new exit ramp from Route 93 at Sullivan Station....	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
353.5	Regional Transportation	Regional Airports	It makes little sense to continue the large number of takeoffs and landings from light aircraft at Logan. Many or most of those flights belong elsewhere. Consolidated routes would alleviate the load.	Commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to other airports, since approximately 50 percent of passengers of Logan Airport's commuter flights connect to other Logan Airport flights. Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.

April 21, 1999

Massachusetts Environmental
Protection Agency
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Arthur Pugsley

LETTER 354

Re: File #10458 EOA

Dear Mr. Pugsley:

I am writing to submit comments on MassPORT's Environmental Impact Statement (EIS) issued to obtain approval for construction of runway 14/32 and a new center field taxiway at Logan International Airport. The EIS should be returned to MassPORT as incomplete, as it does not adequately address alternatives to the construction of a new runway nor does it place any real value on the quality of lives of the hundreds of thousands of people who live near Logan Airport. The EIS uses old data from 1993, the worst year for delays in the history of the airport, to justify its position that a new runway is needed. They tell the public that shifting winds cause the delay problem at Logan, when their own numbers show that only around 1 in 5 delays is caused by the wind situation. The EIS simply overstates the problem, fails to address other solutions, and understates the negative effects of another runway on residents who already live with airplane noise as part of their daily lives. 354.1 354.2

I live in Somerville, in the Ten Hills section on the Mystic River. MassPORT continually characterizes the current noise problem in Somerville as "minimal." While I know communities like South and East Boston and Winthrop suffer much more than I do, I can tell you that plane noise is something I live with every day. I can live with it, and I understand that it is simply part of life in an urban area with an airport close by----but I cannot live with three times what I get now. I am a working person in my early 30's, and we bought our house in Somerville last year. I am the type of person that communities want to have as homeowners, yet I will have to move out of Somerville if the plane noise and air pollution is tripled in the wake of the addition of runway 14/32. 354.3

I recommend that MEPA return the EIS to MassPORT and tell them that they simply failed to adequately address all of the necessary issues that must be addressed when you ask an already-overburdened urban community to live with more noise and pollution in the interest of cutting down on a percentage of the delays that currently exist. Thank you for considering my comments.

Sincerely,

Jack Christin, Jr.
130 Ten Hills Road
Somerville, MA 02145
(617) 776-1048

Letter 354
Jack Christin, Jr.
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
354.1	Environmental Review Process	MEPA	....incomplete, as it does not adequately address alternatives to the construction of a new runway ... does [not] place any real value on the quality of lives of the hundreds of thousands of people who live near Logan Airport.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals. While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

Code	Topic 1	Topic 2	Comment	Response
354.2	Purpose and Need	Delay	EIS uses old data from 1993, the worst year for delays in the history of the airport, to justify its position that a new runway is needed....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
354.3	Alternatives	Runway 14/32	I live in Somerville, in the Ten Hills section on the Mystic River. ..... I will have to move out ... if the plane noise and air pollution is tripled in the wake of the addition of runway 14/32.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <DDyer15237@aol.com>
bject: Opposition to Logan Airports Runway14/32
te: Monday, April 19, 1999 16:35:01 EDT
tach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 355

April 19, 1999

Arthur Pugsley

MEPA Unit - Executive Office of Environmental Affairs
100 Cambridge Street, 20th floor
Boston, MA 02202
File 10458 EOA

Dear Mr. Pugsley,

I'm writing to say that I strongly oppose sports proposal to build runway 14/32. I feel that the environmental impact statement that Massport has submitted for review is inadequate and should be rejected. The number one reason Massport has given to have runway 14/32 built is because of the increase in the amounts of delays at Logan. Wail delays at Logan have actually decreased over the last six years. Massport has used old data from 1993, its worst year, to document delays at Logan. I feel that the data that was used in their environmental impact statement is outdated and should be reviewed by an independent review board. Other strategies for reducing delays at Logan are not given due consideration. Such strategies include making greater use of Hanscom Air Field in Bedford, promoting use of Worcester airport by building an access road connecting the facility to the Massachusetts Turnpike and consolidating the disproportionate number of flights of small planes in fewer flights of larger aircraft. Massport has not really addressed the increased congestion in air traffic that runway 14/32 will cause. I feel that Massport is not being honest with people of the communities that will be affected by this runway, they have never directly said that by building this runway there will be a 300% increase in air traffic directly over our communities. As a lifelong resident of Somerville, I feel that our community and surrounding communities were not given any consideration when Massport was compiling its information for its environmental impact statement. I also feel that noise impact on surrounding communities are grossly underestimated. Massport failed to use any data compiled from sound monitors in the Mystic River are between Somerville and Medford, and noise monitors in Everett. Massport has also failed to included in its statement any studies done in communities with graphics made up of hilly areas, and what impact noise would have on those communities. Somerville residence are already barraged with jets and turboprops for days on end, with virtually no letup. The flights typically

355.1

355.2

355.3

began at 6 a.m. and often continue for most or all of the day, until 11 p.m. or even later. The middle of the night flights have become increasingly common. Massport has no night time curfew and one should be implemented. I feel that we are being punished because we chose to live closer to the downtown area. Why does it always seem that the inner urban communities have fight hard to protect their surroundings, while the people in the suburbs el that they should not be affected by such an expansion to Logan airport ...d that there communities should not have to help in taking some of the burden off of the inner urban communities.

I would like to thank you for your time and consideration on this matter.

Sincerely,

Derek C. Dyer

59 Hall Avenue

Somerville, MA 02144

Letter 355
Derek C. Dyer
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
355.1	Purpose and Need	Delay	....Massport has used old data from 1993, its worst year, to document delays at Logan....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
355.2	Alternatives	Preferred Alternative	Other strategies for reducing delays at Logan are not given due consideration:...	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
355.3	Noise	Impacts	....noise impact on surrounding communities [is] grossly underestimated. Massport failed to use any data compiled from sound monitors in the Mystic River are[a] between Somerville and Medford, and noise monitors in Everett....	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR.* For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements. The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Tony Espy" <espy@openmarket.com>
ject: Logan Runway 14/32 Proposal (File 10458 EOA)
e: Wednesday, April 21, 1999 17:56:36 EDT
ach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 356

Robert Durand, Secretary
MEPA Unit
Attention: Arthur Pugsley

Dear Mr. Durand --

I am writing you to urge you to oppose the Logan runway 14/32 proposal. As a resident of Somerville who already deals with noise from both MBTA/Amtrak and the current air traffic from Logan, I cannot understand how a plan which according to Massport will increase the air traffic over Somerville by 300% or more, can be considered fair. I own a loft in the Brickbottom Artists' building and do not want to see the value of my property decline, nor do I need the added noise that will most certainly affect the quality of my life. As understand it, an official decibel study has not been performed Somerville even though noise levels considered to be nuisance levels have been recorded by Aldermen in Somerville. Please oppose this proposal.

356.1

thanks,

Anthony W. Espy
1 Fitchburg St. C201
Somerville, MA 02143
617 666-2741

Letter 356
Anthony W. Espy
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
356.1	Noise	Impacts	...added noise ... will most certainly affect the quality of my life.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.

LETTER 357

Robert Durand, Secretary
MEPA unit - Executive Office of Environmental Affairs
100 Cambridge St., 20th floor
Boston, Ma 02202

To whom it may concern,

I attended a meeting at Somerville City Hall to discuss the proposed runway expansion 14/32 at Logan airport. I learned then, that according to their own records, this expansion, in spite of obfuscating rhetoric to the contrary, will result in a 300% increase in air traffic over Somerville!

This is completely unacceptable to me as a resident and a homeowner. I was shocked to hear that Massport intends to do this. This will lower our property values and increase noise pollution here in Somerville to an unacceptable level. I was also shocked to hear that no actual decibel reading has been done in the area to determine the impact on our community. One of the Alderman at the meeting has done a recording of decibel levels on Prospect hill that were well over 65 level considered necessary to warrant an actual citywide reading (I think the reading was in the 115 range). Given this kind of data how can Massport even conceive of tripling air traffic over Somerville without considering the actual impact. The answer may be that they don't want to consider the actual impact. They want the runway despite the heavy cost surrounding communities will have to pay. It is empirically clear, even without noise data, that it would be unfair and environmentally and economically devastating to property values and the business renaissance here to triple air traffic over Somerville. Why should Somerville be singled out for such a burden for the proposed flight pattern change? 357.1

This study is flawed for a number of reasons:

1) It uses old data from 1993 - it's worst year - to document delays at Logan. I understand delays are the major rationale for runway 14/32. 357.2
2) Delays have actually decreased over the past six years. 357.3
3) Other strategies for reducing delays at Logan haven't been given due consideration. Worcester, Concord, N.H., New Bedford, Providence, RI, and Hanscom Field airports could be expanded to accommodate any flight increases. An access road could be built to connect Worcester airport to the MA pike. 357.4
4) Increased congestion in car traffic that runway 14/32 will cause is not addressed. 357.5
5) Noise impact in Somerville and surrounding communities is grossly underestimated. 357.6

In Summary this proposed change will be devastating to Somerville residents who will bear the brunt of the change. It targets Somerville for a disproportionate increase in air traffic that will certainly lower the potential for property value growth as well as the ability of it's residents to experience their right to quiet enjoyment of their property and community.

There is no environmental or human reason to find Massport 's Environmental Impact Statement anything other than grossly inadequate.

Sincerely,

Tighman Evans 1 Fitchburg St. Somerville 02143

Letter 357
Tilghman Evans
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
357.1	Alternatives	Runway 14/32	...This will lower our property values and increase noise pollution here in Somerville to an unacceptable level. ...no actual decibel reading has been done in the area to determine the impact on our community....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.
357.2	Delay	Model	It uses old data from 1993--its worst year--to document delays at Logan. I understand delays are the major rationale for runway 14/32.	In response to the request made by the EPA, as well as by EOEA in its MEPA Certificate on the Draft EIR, the Supplemental DEIS/FEIR includes delay and environmental analyses for 1998 to reflect current conditions and to provide context to the delay problem at Logan Airport. However, it should be noted that the appropriate comparison for assessing future year conditions and the effectiveness of the Airside Project, is a comparison of the Preferred Alternative to the No Action Alternative, not a comparison of the Preferred Alternative to the base year. A discussion of current and historic conditions can be found in Section 4.2 of the Supplemental DEIS/FEIR.
357.3	Purpose and Need	Delays	Delays have actually decreased over the past six years.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the U.S. This represents the worst delay ranking in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998.

Code	Topic 1	Topic 2	Comment	Response
357.4	Regional Transportation	Regional Airports	Other strategies for reducing delays at Logan haven't been given due consideration. Worcester, Concord, NH, New Bedford, Providence, RI and Hanscom Field airports could be expanded to accommodate any flight increases. An access road could be built to connect Worcester airports the Mass Pike.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Massport reports on the status of the New Bedford Airport Project in Section 2.6 of the Supplemental DEIS/FEIR. Worcester Regional Airport has existing terminal and airport infrastructure and has been targeted for increased use and future service expansion. MassHighway is in the process of beginning the preparation of the Airside Project Draft EIS/EIR for highway improvements to improve access to Worcester Regional Airport.
357.5	Ground Transportation	Access to Logan	Increased congestion in car traffic that runway 14/32 will cause is not addressed.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
357.6	Analysis Assumptions/ Methodologies	Noise Model	Noise impact in Somerville and surrounding communities is grossly underestimated.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update*). In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft – a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

LETTER 358

William Falcetano
45 Cherry St.
Somerville, MA. 02144

March 24th, 1999

Mr. Robert A. Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, Room 2000
Boston, MA 02202

Dear Mr. Durand,

I urge you to oppose Runway 14/32. As a citizen and property owner and taxpayer who has lived in Somerville for the past 15 years, I have noticed a significant increase in air traffic in the past year. The situation has gone from tolerable to absolutely intolerable, with constant air traffic at ALL HOURS OF THE DAY AND NIGHT.

I have been informed that this new runway will increase air traffic over Somerville by two to three hundred percent. This is ABOSOLUTELY UNCONSCIONABLE. How dare MASSPORT impose such a burden on the densely populated areas surrounding the Airport when noise conditions are already deplorable. 358.1

The MASSPORT Environmental Impact Statement does not take any of this into account. Nor does it contain any information concerning the expected increase in *road traffic* to accommodate this increase of air traffic. 358.2

As for their claim to decrease delays, this is actually not true. Many delays will not be decreased as a result of a new runway because they are produced by weather conditions that will affect all runways. Also some delays are caused by delays in other Airports. Finally, even if there is a reduction in the rate of delays this will only last for a short period of time. The new runway is therefore merely a BANDAID SOLUTION. 358.3

We are entitled to a REAL SOLUTION and not a cover-up for increasing the capacity at the airport. That real solution is to build another Airport or expand the use of HANSCOM FIELD, WORCESTER, etc. to accommodate the increase in air traffic. THIS AI A REGIONAL PROBLEM THAT DEMANDS A REGIONAL SOLUTION. 358.4

Besides, the claims that this runway is needed to help the Boston economy are crying wolf and pure exaggeration. Similar claims were made in past years when the Boston economy was booming as it is now.

Finally, the very suggestion that MASSPORT would be able to use its other runways (15/33) aimed as a cannon toward Somerville for non-stop flights over this city is nothing other than a bald threat. It will seriously deteriorate the quality of life here and this is a MAJOR ENVIRONMENTAL IMPACT that must be taken into account.

MASSPORT must seek a regional solution that is equitable for the entire region. In fact air traffic over the Greater Boston METRO area should be decreased as out laying airports take up the slack. That is the real solution and I urge you to oppose this plan.

Sincerely,

William Falcetano

Letter 358
William Falcetano
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
358.1	Noise	Impacts	...this new runway will increase air traffic over Somerville by two to three hundred percent...How dare Massport impose such a burden on the densely populated areas surrounding the airport when noise conditions are already deplorable.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
358.2	Ground Transportation	Access to Logan	...[EIS] does [not] contain any information concerning the expected increase in *road traffic* to accommodate this increase of air traffic.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways Refer to Section 4.2 of the Supplemental DEIS/FEIR.
358.3	Purpose and Need	Delays	...Many delays will not be decreased as a result of a new runway because they are produced by weather conditions ... [and] by delays in other airports....	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.

Code	Topic 1	Topic 2	Comment	Response
358.4	Regional Transportation	Regional Airports	....real solution is to build another airport or expand the use of Hanscom Field, Worcester, etc....	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

LETTER 359

Oratio Conta Strepitare

My name is William Falcetano. I live in Somerville and I teach philosophy at Merrimack College.

I have become involved in this dispute against my will as a result of the sudden and dramatic increase of air traffic noise I and others detected last year about this time. Along with other concerned citizens I took the initiative and started organizing meetings about this problem in December of 1998 before the organization C.A.R.E. had been formed. I shun these kinds of political battles and prefer to live a quiet life of reading, reflection, and study. Nevertheless, this problem has severely interfered with my ability to think, read, write, and pursue the other necessary activities of a college professor.

I have lived in cities all my life and have gotten used to the ambient noise of cars, trucks, pedestrians, kids playing, etc. However, persistent and loud air traffic is an altogether different matter. Since the sudden spike in air traffic over Somerville last year there has rarely been a single moment free from the sound of a jet or plane passing overhead. I hear loud, low-flying air traffic even in the wee hours of the morning – at 2, 3, 4, and 5 AM! Those rare moments of quiet last only for very short periods of time as the traffic picks up again and continues with a dismaying mechanical persistency. Noise produced by neighbors talking, passing by, or playing is usually short-lived due to the limitations of the human voice, fatigue, distraction, etc. But mechanical noise is an altogether different matter; it has a relentless and superhuman resilience that does not offer any hope of relief. This is one reason why towns and cities have noise ordinances to prevent inconsiderate neighbors from inflicting this kind of misery on innocent people who simply want to have their right to the quiet enjoyment of their homes and properties respected. We as neighbors are simply asking MASSPORT to respect our rights.

The deleterious effects of noise pollution are well-documented in medical and psychological journals. Noise pollution is a physical assault on the body. Although sound is a physical phenomenon, sound experienced as noise is not only physical but psychological as well. Therefore any attempt to measure *noise* by decibels entirely misses the point that noise is not mere sound, but sound as it is experienced by a living human being. In this case so-called anecdotal evidence cannot be dismissed as though it were irrelevant with a wave of the hand and the smug presentation of numbers that measure sound, because the issue is not about sound but about noise, that is, sound as an experienced phenomenon and not merely as a physical event.

Noise produces high blood pressure, hypertension, stress, fatigue, sleeplessness and its related disorders, such as irritability, disorientation, confusion, and incompetence due to lack of focus and inattention (as a college teacher I know a little bit about lack of focus and inattention). Recent studies have shown that undue and distracting noise also interferes with the ability of children to concentrate at school. Noise from airplane traffic prevents people from being heard in their own homes, from talking on the telephone, from listening to the radio or television, from reading, thinking, praying, playing musical instruments, or any other activity that requires mental concentration or intellectual focus. It can even distract from intimate moments of love-making and caressing.

In addition to the dramatic and unhealthful increase of noise (estimated at over 300% in some areas) there is the question of the additional air pollution that will be caused by the increasing air traffic made possible by this ill-conceived scheme. The air

359.1

quality over the Greater Boston area is not very good; and recent reports have shown that big power plants have not complied with their promises to convert to natural gas. They continue to produce excessive air pollution as a result of their slothful and irresponsible reliance on oil, a dirtier fuel. The greater traffic permitted by the new tunnels and the Big Dig will also make an adverse contribution to the deterioration of Boston's air quality. This is not to mention the increasing automobile traffic caused by happy passengers thronging to use the planes supposedly now able to fly on schedule onto and away from the new runway and along the new taxiway. The net effect of this kind of thoughtless air pollution is increasing rates of asthma, laryngitis, lung cancer, bronchitis, sinusitis, emphysema, sore throats and common colds. Besides its effects on human beings air pollution has deleterious effects plants, animals, and property. Yet MASSPORT'S EIR states very little or nothing about these effects on birds, dogs, cats, trees, shrubs, insects, and human beings. And shockingly it says absolutely nothing about the negative effects on roads and mass transportation that will be caused by this wrong-headed and heedless plan.

359.1 (cont.)

359.2

In sum MASSPORT'S EIR is completely inadequate and unsatisfactory. I urge you therefore to refuse MASSPORT'S request to go ahead with this unfair and injurious scheme to inflict even more suffering and hardship on communities that already endure a disproportionate burden of noise, air pollution, and traffic.

Thank you very much for your kind consideration.

William Falcetano
45 Cherry Street
Somerville, MA. 02144

Letter 359
William Falcetano
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
359.1	Air Quality	Impacts	In addition to the dramatic and unhealthful increase in noise (estimated at over 300% in some areas) there is the question of the additional air pollution that will be caused by the increasing air traffic....	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
359.2	Ground Transportation	Access to Logan	....[the EIR] says absolutely nothing about the negative effects on roads and mass transportation that will be caused by this wrong-headed and heedless plan.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.

Irving Fischman PhD

106 Summer Street
Somerville MA 02143
Vox 617-628-6515 Fax 617-629-2717

April 19, 1999

LETTER 360

Robert Durand, Secretary
MEPA Unit - Executive Office of Environmental Affairs
Attention: Arthur Pugsley, File #10458 EOA
100 Cambridge Street, 20th Floor
Boston MA 02202

Dear Secretary Durand:

The proposal to add runway 14-32 at Logan airport concerns me for several reasons. I am a Somerville resident and the proposal shifts more flights over my home. I am trained in the sciences to question assumptions – my Ph.D. is in Physics from MIT – and I have followed the public debate very carefully. I have also reviewed Massport's Environmental Impact Statement and feel strongly that Massport has not presented the true impact on the community and the environment.

The Massport Environmental Impact Statement clearly assumes that air traffic will increase at Logan. Massport seeks to alleviate potential increase in delays by building runway 14-32, building a new taxiway and lowering the decision height for aircraft over East Boston. The proposal addresses the issue of delays in only the narrowest terms – short term, only 25% of the wind problem – and does not provide a comprehensive solution.

As a citizen I must question Massport's proposal and compare it to what common sense suggests.

Common sense suggests sending more flights over the ocean where no people live

Massport proposes limiting runway 14-32 to one direction – over the ocean. However this claim is specious since runway 14-32 is only 5,000 feet and will be used by smaller aircraft. **These aircraft will not be heading to Europe but will rapidly turn to their mostly regional headings impacting many communities surrounding Boston.** 360.1

Common sense suggests sending the most flights over the areas with the fewest people

Massport claims that the number of people affected by the new runway is small. Their calculations follow FAA guidelines to determine the numbers of people impacted by noise. People within an area of noise "pressure" of 65 decibels or above on average are impacted. This is a level of noise where two people having a normal conversation would be unable to hear each other. The FAA declares uninhabitable areas where this noise level is introduced unless the housing in the area is "mitigated".

What is most disturbing is the fact that the model Massport uses in the noise calculations assumes that the topography of the entire region is flat. No hills in Somerville, where the planes pass very low, are included. Nor has Massport placed noise monitors in Somerville to test their model. **This misrepresentation alone is reason enough to reject the application.** 360.2

Additionaly, Massport is changing its flight patterns to "share the burden". Again, first appearance is that some neighborhoods, cities and towns will have similar numbers of overflights. **Unstated is that many individuals will experience increased overflights of 100% to 300%.**

The communities that will experience these huge increases are in fact our most populous – Somerville, Everett, Chelsea, Roxbury and Roslindale. Massport is sending additional planes over the greatest concentration of people. The more pertinent analysis requires adding up the number of overflights times the number of residents in each city and town. We discover that the total Community Burden is higher with the new runway proposal than without the runway. **Massport has increased the burden to the entire Boston community.**

Common sense suggests reducing the total number of Logan flights

Smaller craft are the most significant cause of all delays at Logan. A previous experiment in pricing structure significantly reduced delays by making it more expensive for smaller planes and they used Logan less. That successful experiment has never been implemented as a policy. **Diverting smaller aircraft or consolidating them into larger craft is an issue that must be addressed before any new runways are created.** 360.3

Common sense suggests that planning major changes requires a long term view

Massport has presented an incomplete, inaccurate and short term proposal. Logan does not operate in a vacuum. The growth in the entire region drives growth at Logan and other regional airports. Since large numbers of people will be affected, any proposal must be comprehensive. **Massport's piecemeal approach is inadequate and unworthy of a planning authority.**

The Massachusetts Port Authority's proposal for runway 14-32 will increase the burden on individuals. The proposal will increase the burden on the Boston community. The proposal fails to address regional solutions. I urge you to reject the Massport's Environmental Impact Statement as inadequate and deficient.

Very truly yours,

Irving Fischman, Ph.D.

Letter 360
Irving Fischman, Ph.D.
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
360.1	Alternatives	Unidirectional	Massport proposes limiting runway 14/32 to one direction--over the ocean. However, this claim is specious since runway 14/32 is only 5,000 feet and will be used by smaller aircraft. ...[that] will rapidly turn to their mostly regional headings impacting many communities surrounding Boston.	Massport and the FAA are committed to using Runway 14/32 in a unidirectional manner, with aircraft arriving from and departing to the southeast over Boston Harbor. See the discussion of mitigation in Chapter 8 of the Supplemental DEIS/FEIR.
360.2	Noise	Model	What is most disturbing is the fact that the model Massport uses in the noise calculations assumes that the topography of the entire region is flat. No hills in Somerville, where the planes pass very low, are included. Nor has Massport placed noise monitors in Somerville to test their model. This misrepresentation alone is reason enough to reject the application.	When this Supplemental DEIS/FEIR was initiated, there was no noise model in existence that could address topography, and even current versions of noise models greatly simplify calculations incorporating terrain adjustments. Thus, Massport used the best available technology at the time -- a noise model developed by FAA Headquarters, with modifications adapted by Massport and approved by FAA to accommodate over-water sound propagation unique to Logan Airport's noise environment. The model is described in Section 5.2 of the Supplemental DEIS/FEIR.
360.3	Alternatives	Peak Period Pricing	...A previous experiment in pricing structure significantly reduced delays. ....Diverting smaller aircraft or consolidating them into larger craft is an issue that must be addressed before any new runways are created.	Section 4.5 of the Supplemental DEIS/FEIR provides an updated discussion of PPP at Logan Airport and an analysis of the implications of an illustrative conceptual small community exemption program. PPP was included among the Airside Project alternatives to address delays caused by over-scheduling. The potential impact of PPP on the fleet mix at Logan Airport is discussed in Section 4.5.2 of the Supplemental DEIS/FEIR. Section 4.5.3 of the Supplemental DEIS/FEIR provides an analysis of a PPP Exemption program.

LETTER 361

AL FISHER
PHOTOGRAPHY

April 21, 1999

Robert Durand, Secretary
MEPA Unit - Executive Office of Environmental Affairs
Attention: Arthur Pugsley, File #10458 EOA
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Mr. Durand:

You must not support Massport's plan to build Runway 14/32.

Increasing air traffic 300% will significantly impact the quality of life for thousands of people in the Charlestown/Somerville area. 361.1

It will be impossible to enjoy the comfort of uninterrupted sleep, to sit in your yard or on your porch and engage in quiet conversation, or to have open windows winter or summer without the constant rumble and scream of jet engines.

Is not the quality of life for the people who live, work and vote here more important?

Sincerely,

Al Fisher

Letter 361
Al Fisher
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
361.1	Noise	Impacts	Increasing air traffic 300% will significantly impact the quality of life for thousands of people in the Charlestown/Somerville area.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "vitas" <sativ99@110.net>
Date: Runway 14/32
Attach: Thursday, April 22, 1999 10:56:27 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 362

I would like to express my strong objection to the construction of Runway 14/32 before alternatives have been thoroughly studied. In addition, as a resident of Somerville, I am concerned about the increase in noise that this runway will cause. This noise increase could cause a severe negative impact on the quality of life in Somerville and needs to be carefully studied. Thank you for your consideration

362.1

Tad Flynn
1 Fitchburg Street #c304
Somerville, Ma 02143

Letter 362
Tad Flynn
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
362.1	Noise	Impacts	As a resident of Somerville, I am concerned about the increase in noise that this runway will cause....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

52 Bradley Street
Winter Hill, MA 02145

April 15, 1999

LETTER 363

Mr. Arthur Puxley
EOEA #10458
100 Cambridge Street
Boston, MA 02202

Dear Mr. Puxley:

RE: Proposed Runway 14/32 at Logan Airport

I have read considerably on the above topic in an effort to understand why MASSPORT wishes to build a runway called 14/32. There are numerous inconsistencies in MASSPORT's arguments in favor of this runway. I want to highlight a few:

MASSPORT misleads the public when it claims that Logan has "notorious delays". Since 1992, delays at Logan have gone down according to data from the Federal Aviation Administration's 1998 ACE (Airport Enhancement Capacity) Report. By using exceedingly high "maximum capacity" goals, MASSPORT inflict such delays on their own customers. Located in such a densely populated area, MASSPORT's maximum capacity goals should be 90 rather than 120 planes per hour. When questioned about the reduction in delays, MASSPORT's Director of Aviation admitted **only 20% of delays are due to lack of runway space, the remaining being weather related** (Meeting of Aldermen, Somerville, 99/4/14). Thus, only 20% of delays will potentially be improved by having another runway. 363.1

Furthermore, in MASSPORT's Environmental Impact Study (EIS, one of the findings states that **any delay reduction by this proposed runway would only be effective until 2003 i.e. four years.** So, we spend all this money, increase the noise pollution, upset and disruption to local communities for such a small gain.

At the present time, according to the Director of Aviation, larger aircraft cannot taxi at the same time along the two runways and ramps they have due to long wing span. Yet, MASSPORT have promised that they will only be using the new runway for smaller aircraft arriving and taking off over the ocean thus freeing up the other two runways. **Freeing up the other two runways is irrelevant** if larger aircraft are hampered by wingspan. Can MASSPORT honestly say they will restrict themselves to smaller aircraft on the new runway?

What's extremely troubling about the EIS is its **total disregard for the noise pollution impact on people living in the surrounding communities.** There is absolutely no analysis of how the proposed runway will affect people. 363.2

What's extremely troubling about the EIS is its **total disregard for the noise pollution impact on people living in the surrounding communities.** There is absolutely no analysis of how the proposed runway will affect people.

I am astonished that MASSPORT is pursuing this option which **has very little economic benefit to the surrounding communities** and which, by MASSPORT's own admission, will **increase noise pollution considerably** in certain surrounding communities. No economic analysis was done of the loss of market value on properties in the surrounding communities. 363.3

Given the limited vision of their economic analysis, I want you as an elected official of the electorate of this area to listen to the people who live, work, pay taxes in these neighborhoods. There is a vehement cry not to build this shortsighted runway. Also, given the history of MASSPORT's broken promises, **their credibility rating is pretty much zero** so every proposal by MASSPORT should be examined critically.

MASSPORT have shown horrible ineptitude and grave, poor judgment in their analysis of Logan's problems which begs two questions: **is the MASSPORT authority capable of planning the region's air transportation** and if ineptitude is not the problem, then what or who are **the commercial interests who will benefit** from pursuing this ludicrous uneconomic option? It certainly benefits no-one in the Boston metropolitan area. MASSPORT's EIS represents the interests of airlines and airport-related businesses, all of whom stand to make big profits if Logan's overall capacity is increased by runway 14/32. None of these groups care about the impact 14/32 will have on people as few if any of them live in the affected communities and many of the companies are located in other states.

Please reject MASSPORT's EIS, support the present injunction against runway 14/32, and encourage MASSPORT to pursue alternative, responsible ways of handling projected air travel increases.

Thank you,

Angela Healy

Letter 363
Angela Healy
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
363.1	Purpose and Need	Delays	....only 20% of delays will potentially be improved by having another runway.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
363.2	Noise	Impacts	What's extremely troubling about the EIS is its total disregard for the noise pollution impact on people living in the surrounding communities....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
363.3	Alternatives	Preferred Alternative	....No economic analysis was done of the loss of market value on properties in the surrounding communities.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.

John C. Silva
Manager, Environmental Programs
Airports Division ANE 600
New England Region
12 New England Executive Park
Burlington, Massachusetts 01803

LETTER 364

Arthur Pugsley
MEPA Office
EOEA
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

RE: Logan Airport - Addition of New Runway
EOEA #10458

Dear Gentlemen:

I am opposed to the addition of a new runway at Logan Airport. My residence is located in West Somerville, Massachusetts and I work at the United States Courthouse located in the Seaport District of Boston, Massachusetts. 364.1

My residence is located on Boston Avenue in Somerville. Currently, the noise and turbulence from the flights leaving Logan Airport flying over Somerville has created an impact on all residents. For sometime, I have believed that Boston Avenue may be an additional runway for Logan Airport. Many times in the middle of the night I thought a plane was landing on my street. Many of the two or three family homes in my neighborhood are over 60 to 70 years old. We have many elderly and children. An impact of a crash or a fuel accident would destroy our neighborhood in minutes.

I work in the newly created Seaport District. When I wait for the bus at night when I leave work, I have noticed the many planes within minutes of one another circling and landing at Logan Airport. The impact of more planes landing at an additional runway seems incomprehensible.

I do not believe that Massport has shown a genuine interest in trying to create an atmosphere of cooperation or environmental concern for local residents or businesses. I understand the concerns of the Boston financial district and the hopes of tourism dollars and business dollars that would be generated by an addition runway at Logan Airport but because of the lack of good faith of officials at Massport, I do not believe that they should be granted an additional runway or an extension of a runway at Logan Airport.

Sincerely yours,

Suzan Kelly

Suzan Kelly
23 Boston Avenue
Somerville, MA 02144

Letter 364
Suzan Kelly
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
364.1	Alternatives	Runway 14/32	I am opposed to the addition of a new runway at Logan Airport.	Comment noted.

June 20, 1999

LETTER 365

Dear Mr. Quinn,

I am writing about the noise of air traffic over my community in Somerville Massachusetts. Since the noise is intolerable. The last Sunday @ 6:30 AM the planes awoke me. I can't imagine what an 8 hour night's sleep would do. At the same time there is the pollution I find particles in the air. I understand that you are in agreement with the Logan Airport as of last Friday. I don't know if this will reduce the delays they are having. Sometimes when we have called the complaint line Logan airport says they are having another runway out. The L33, Somerville, Medford, Winter Hill, so sorry the rest of the noise has to be.

so I can write, right now. I had turn the volume of my T.V. up and down to adjust to the noise. Somerville is already a populated city and during the times of such. An added burden of daily morning and late evening will increase the tension in our lives.

I have fibromyalgia. It is a muscle pain that feels as a deep disorder. I can't keep sleeping to get back to sleep with the pain gnawing our head. Without a linear a routine sleep I feel raw, irritable all the next day.

Many of the living can't will want live in the city... to be near the busy hospitals or plan ahead to an injury. I can't wait for the bus stops but they are too old and the will have to call on the phone or write about the duties they do to commute in our quality of life in Somerville. For Linora, I hope you can keep this city. Thank you.

31 Barton St. - Somerville MA 02145

Letter 365
Ms. Carol Kiley
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
365.1	Noise	Impacts	Very concerned about the noise level and air pollution now. Cannot imagine how bad it will be with new runway. (handwritten copy – couldn't read)	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "Mo Lotman" <molotman@gis.net>
bject: Runway 14/32
te: Tuesday, April 20, 1999 7:28:57 EDT
...tach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 366

Dear Mr. Pugsley,

I saw a notice in the City section of last weekend's Sunday Globe mentioning that public comments were requested by Thursday on the proposed runway 14/32 at Logan Airport.

As a resident of Somerville, I can attest that the airplane noise is already problematic. Although the intensity varies with wind direction (ostensibly), there are sporadic periods of up to a day or more with unconscionably loud aircraft flying directly overhead. At the worst of these occasions, there is actually ground vibration, and I have a few times been roused from sleep early on a Sunday morning. As the weather warms, this problem is exacerbated by open windows. There does not seem to be any night-time limit as to when these planes can fly, as I have even heard them after midnight.

- idea that the overhead traffic would increase three-fold if the runway is built (as I've read in a number of sources) is just too much. No business advantage or flight delay mitigation is worth destroying the quality of life for the residents of metropolitan Boston. How often do you suppose the average person who lives under one of these flight paths boards a plane at logan? I'd be very surprised if it were more than once a year, if that. That even a frequent business traveller might wait fifteen minutes or a half hour on the few trips he or she takes in a week hardly justifies ruining the quiet of 500,000 people, all the time, forever. I am emphatically against the construction of this new runway. Please tell MassPort to spend the money developing a jet that doesn't make any noise. Then they can build all the runways they want.

366.1

Sincerely,

Mo Lotman
48 Gorham Street
Somerville, MA 02144
617/629-4778

Letter 366
Mo Lotman
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
366.1	Noise	Impacts	As a resident of Somerville, I can attest that the airplane noise is already problematic....[and] am emphatically against the construction of this new runway	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

LETTER 367

ALICE ATWOOD MAHONEY / my name ①
ATWOOD STUDIO REALTY Trust / my studio name
ALICE ATWOOD productions Inc. / publishing name

DEAR, 4/20/1999

Att: ARTHUR PUGSLEY, File # 10450 EOA
MEPA Unit - EXECUTIVE OFFICE OF
ENVIRONMENTAL AFFAIRS
ROBERT DURAND - SECRETARY,

THE MASSPORT ENVIRONMENTAL IMPACT STATEMENT (EIR) is inadequate and should be REJECTED by MEPA.

① it used old data from 1993 - its worst year to DOCUMENT DELAYS at LOGAN. (in reverse 14 yrs.) 367.1

② DELAYS at LOGAN HAVE actually DECREASED OVER THE LAST SIX YEARS

③ OTHER STRATEGIES in reducing DELAYS AT LOGAN Have not BEEN given consideration 367.2

① making use of HANSCOM FIELD in BEDFORD, promoting use of WORCESTER Airport, by building an ACCESS ROAD connecting THE FACILITY to MASS. turnpike.

④ INCREASED congestion in TRAFFIC THAT RUNWAY 14/32 will cause is not ADDRESSED. 367.3

⑤ noise impact on surrounding communities

an underestimated. Somerville, unlike other affected areas, has not had an official DECIBEL STUDY of noise impact! noise levels officially considered to be nuisance have been recorded by an ALDERMAN.

367.4

you are not going to increase the air traffic over Somerville by 300% without having done a citywide study, with microphones, as they have in other affected communities, to study the noise impact of airplane over our area.

my studio is in the Brickbottom Artist Bld. C118B northside first floor. We have enough noise as it is now from Train & Highway. And the airplanes now in the air!

thank you Ms. A Mahony

(3)

ALICE A. MAHONEY

owns two pieces of property in the City of SOMERVILLE

(1) 4 JEROME ST. (House single family)
SOMERVILLE MA. 02143
in winter Hillcrest

(2) BRACKBOTTOM ARCHITECTS STUDIO
C11 9B
1 FAIRBURN ST.
SOMERVILLE 02143-2126

Letter 367
Alice Atwood Mahoney
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
367.1	Purpose and Need	Delay	It uses old data from 1993--its worst year--to document [delays at Logan for runway 14/32]. Delays at Logan have actually decreased over the last six years.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport. Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the U.S. This represents the worst delay ranking in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.

Code	Topic 1	Topic 2	Comment	Response
367.2	Regional Transportation	Regional Airports	Other strategies for reducing delays at Logan have not been given consideration. Making use of Hanscom Field in Bedford, promoting use of Worcester Airport, by building an access road connecting the facility to the Mass Pike.	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport. Massport supports improved ground access to Worcester Regional, T.F. Green/Providence, Manchester and Logan airports. These projects are discussed in Section 2.9 of the Supplemental DEIS/FEIR. Since passengers do not travel between New England's regional airports, (e.g., passengers do not first go to Manchester Airport before driving to Logan Airport) it is not clear why improved access between the regional airports would generate any benefit.
367.3	Ground Transportation	Access to Logan	Increased congestion in traffic that Runway 14/32 will cause is not addressed.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
367.4	Noise	Impacts	Noise impact on surrounding communities are underestimated. Somerville, unlike other affected areas, has not had an official decibel study of noise impact? Noise levels officially considered to be nuisance have been recorded by an Alderman.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update*). In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft – a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "pmanadee" <pmanadee@email.msn.com>
Date: Massport's Environmental Impact Statement
Attach: Wednesday, April 21, 1999 15:20:20 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 368

Dear Mr. Puglsley:

I am a resident of Somerville and concerned about Massport's EIR.

I would like to see more data collected before Runway 14/32 is approved. The current data we have is outdated and really inadequate. Please consider these factors before you approve Massport's EIR. 368.1

Sincerely,

Panamai Manadee

Letter 368
Panamai Manadee
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
368.1	Alternatives	Runway 14/32	I would like to see more data collected before Runway 14/32 is approved. The current data we have is outdated and really inadequate....	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <MgrMoo@aol.com>
Subject: Proposed Building of Runway 14/32 at Logan Airport
Date: Thursday, April 22, 1999 8:15:05 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 369

Dear Mr. Pugsley:

I am writing this message as a resident of Somerville in strong protest to the proposed building of Runway 14/32 at Logan Airport. The building of this runway will result in a 300% increase in air traffic volume over Somerville. The data used for justifying the building of this runway is out of date - from 1993! A close look at more recent data from Logan shows that air traffic delays have actually decreased over the last decade. 369.1

Also, no official decibel level study of the noise impact on Somerville has been conducted; something that has been done for other communities potentially affected by runway construction. Why is this the case? Is it because Somerville has population largely comprised of ethnic and racial minorities, blue collar workers and others with low income levels? Don't our votes, taxes and quality of life issues matter? 369.2

By the way, how would you like to have continuous air traffic over your house?

Sincerely,
Beth Manaster
One Fitchburg St. #B-250
Somerville, MA 02143

As a constituent, I demand better representation.

Letter 369
Beth Manaster
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
369.1	Purpose and Need	Delay	....The data used for justifying the building of this runway is out of date--from 1993! ...	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
369.2	Environmental Justice	Impacts	...no official decibel level study of the noise impact on Somerville has been conducted; ....Is it because Somerville has population largely comprised of ethnic and racial minorities, blue collar workers and others with low income levels? ...	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Sections 6.8.3 and 6.8.5 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "michael mercadante" <michael@mainstdesign.com>
bject: Logan expansion
te: Tuesday, April 20, 1999 10:04:49 EDT
tach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 370

Dear Mr. Pugsley:

I would like to voice my displeasure with the proposed additional runway at Logan International Airport. I am particularly concerned about the substantial increase in air traffic over Somerville that will take place.

As I understand it, a complete impact study has not been done for our city and we will be one of the most effected locations. 370.1

I typically fly out of Logan three to four times a month and I seldom experience non-weather related delays. The infrequent inconvenience of a delay is worth more to me than the frequent noise impact the expansion will create.

Sincerely,

hael Mercadante
1 Fitchburg Street #C518
Somerville, MA 02143

Letter 370
Michael Mercandante
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
370.1	Noise	Impacts	....I am particularly concerned about the substantial increase in air traffic over Somerville that will take place. ....The infrequent inconvenience of a delay is worth more to me than the frequent noise impact the expansion will create.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

LETTER 371

967 Broadway
Somerville, MA 02144

April 18, 1999

Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge St. (20th Floor)
Boston, MA 02202

We are writing to express our opposition to the proposed Logan Airport runway expansion. We here in Somerville are already being disturbed by an increase in air traffic, and tripling the number of flights over our homes would be intolerable.

Not only do we oppose this because of the impact on Somerville, but we think the proposed runway is a bad idea for everyone for the following reasons:

1. The plan does not accurately take into account the burdens and negative impacts on literally hundreds of thousands of people in the Boston metropolitan region. Communities outside of those that border the airport that will suffer tremendously with the increase in noise pollution. Yet Massport has not conducted proper testing of decibel levels in these communities. 371.1

2. The plan does not recognize that we are already at the point of capacity in terms of how much area residents can absorb. Quality of life is not factored into the equation. Noise pollution such as that created by frequent, low-flying aircraft reduces quality of life.

3. Massport has overstated the delay problem through its method of calculating delays.

4. The runway would be a very partial solution to the delay issue at best. Most of the delays at Logan are for reasons that cannot be addressed by a new runway. 371.2

5. The plan is short-sighted. Even according to Massport projections, any delay-alleviating effects would be swamped within a few years by increasing traffic. Merely shifting traffic from one community to another is not a long-term solution.

6. The plan is not regional in nature. There has not been adequate consideration of the region's needs and the fairness of the burdens associated with air traffic. 371.3

7. The proposal and public comment process has been tainted by the collusion between Massport and business interests. Ordinary citizens cannot afford to run a television advertising campaign to promote our interests, but Massport has allowed big corporations to step in and promote the runway expansion idea.

In summary, we are adamantly opposed to the Logan expansion proposal. We urge you to recognize the terrible toll this would take on so many residents in the Greater Boston area, and stand up for the true public interest.

Sincerely,

Elizabeth L. Merrick

Elizabeth L. Merrick

Brian Merrick

Brian J. Merrick

Letter 371
Elizabeth and Brian Merrick
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
371.1	Noise	Impacts	....Communities outside of those that border the airport that will suffer tremendously with the increase in noise pollution....	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR. The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
371.2	Purpose and Need	Delay	Massport has overstated the delay problem through its method of calculating delays.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
371.3	Regional Transportation	Regional Airports	The plan is not regional in nature....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and full use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <GRAZIM61@aol.com>
bject: Somerville objection to Runway 14/32
:e: Tuesday, April 20, 1999 10:56:24 EDT
ttach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 372

As a long time resident of Somerville and tax payer, I strongly object to the plan to build Runway 14/ 32. The Massport's Environmental Impact Statement is inadequate and should be rejected by MEPA because :

-1) it uses old data . 372.1

- 2) delays at Logan have actually decreased over the last six years . 372.2

- 3) other strategies should be given consideration, such as more use of Hanscom Field in Bedford and/or promoting Worcester Airport by building connecting road to MA turnpike.

-4) and most important: increased congestion of traffic that runway 14/32 will cause is not addressed!. 372.3

-5) - Somerville has not had an official decibel study of noise impact! 372.4

Please, make the Secretary of the MEPA unit aware of our concerns.

Respectfully, M.Grazia Marzot, 1 Fitchburg St., C-109, SOMERVILLE, MA.02143

Letter 372
M. Grazia Marzot
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
372.1	Purpose and Need	Delays	[I]t uses old data...delays at Logan have actually decreased over the last six years.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the U.S. This represents the worst delay ranking in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.

Code	Topic 1	Topic 2	Comment	Response
372.2	Regional Transportation	Regional Airports	[O]ther strategies should be given consideration, ...	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
372.3	Ground Transportation	Access to Logan	[I]ncreased congestion of traffic that runway 14/32 will cause is not addressed!	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
372.4	Noise	Studies	Somerville has not had an official decibel study of noise impact!	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.

Cecil Nickerson
90 Glenwood Road
Somerville. MA 02145
(617)623-1171
4/18/99

LETTER 373

IN REGARDS TO ENCLOSED NEWS CLIPPING, I WOULD LIKE TO ADD MY TWO CENTS WORTH. NAMELY DUE TO NOISE POLLUTION AND UNBELIEVIABLE NOISE CREATED BY PLANES THE CHURCHES OF AREA HAS HAD TC RESORT TO SIKENT PRAYERS IN THIR SERVICES! THE PASTORS, PRIESTS, AND RABBISIN SOMERVIILE AND NEIGHBORING TOWNS CANNOT HEARPRAYERS BEING SAID ALONE. AFTERNOON NAPS IS A BYGONE LEISURE.

IN MY OPINION MR.KINTON MENTIONED IN ARTIOLE IS AN OUTRIGHT LIAR. I HAVE LIVED ON WINTER HILL FOR FIFTY TWO YEARS.MY SON HAS TINNITISS, A RINGING OF EARS. WHEN OUT IN YARD HE HAS TO CARRY EAR PLUGS TO PUT ON AT THE FIRST RUMBLE OF AN APPROACHING PLANE. AS YOU MAY PERCEIVE HE DOES NOT HAVE THE PLEASURE OF ENJOYING OUR PROPERTY. COOKOUTS, LEISURE TIME SPENT IN YARD READING PAPER OUT DOORS IS AN INPOSSIBILITY! I COULD GO ON AND ON ABOUT THE DETRIMENTS AND HARDSHIPS CAUSED BY PLANES FLYING OVER HEAD. WILL NOT CONTINUE AS THE MORE COMPLAINTS I QUOTE THE MADDER I GET! I AM QUITE SURE OTHER LETTERS YOU RECEIVE WILL COVER THE GAMMITT.OF COMPLAINTS!

373.1

GOOD LUCK TO YOU AND GOODLUCK TO THE REST OF THE POPULATION OF SOMERVILLE; AND AE!

Cecil L Nickerson

CECIL L. NICKERSON

Letter 373
Cecil L. Nickerson
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
373.1	Noise	Impacts	....due to noise pollution and unbelievable noise created by planes the churches of area has had to resort to silent prayers in their services! The pastors, priests, and rabbis in Somerville and neighboring towns cannot hear prayers being said alone.	Comment noted.

Bcc: Arthur Pugsley@MEPA@EOEA
From: "lynn palmer" <drinkyll@webtv.net>
Subject: runway
Date: Tuesday, April 20, 1999 22:56:36 EDT
Reach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 374

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please don't turn somerville into another chelsea. we get enough jet noise well into the night. i'm told of a 300 percent increase over somerville so i cannot justify a new runway. 374.1

Letter 374
Lynn Palmer
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
374.1	Noise	Impacts	...a 300 percent increase over Somerville [sic]...cannot justify a new runway.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

To: ISMTPOutBound@itd.w4@servers["Pugsley-ENV, Arthur" <Arthur.Pugsl
Cc: ISMTPOutBound@itd.w4@servers[<FBERMAN@ci.cambridge.ma.us>],ISMTP
servers[<"lisa.b@erols.comlisa.b"@erols.com>],ISMTPOutBound@itd.
ield-HOU, Maggie" <Maggie.Carfield@state.ma.us>],ISMTPOutBound@i
CASSESSO@mln.lib.ma.us>],ISMTPOutBound@itd.w4@servers[<SOMMAIL11
,ISMTPOutBound@itd.w4@servers[<"ddahlbac@ix.netcom.comddahlbac"@
ISMTPOutBound@itd.w4@servers[<chris@the-ville.com>],ISMTPOutBoun
[<ceaton@mit.edu>],ISMTPOutBound@itd.w4@servers[<NESPOSITO@lnmta
SMTPOutBound@itd.w4@servers["Janine Fay" <jfay@gis.net>],ISMTPOu
rvers[<SFishman1@aol.com>],ISMTPOutBound@itd.w4@servers["Dawny G
rsh@pop.ma.ultranet.com>],ISMTPOutBound@itd.w4@servers[<lgerson@
om>],ISMTPOutBound@itd.w4@servers[<rxprod@sprynet.com>],ISMTPOut
vers[<patjehlen@hotmail.com>],ISMTPOutBound@itd.w4@servers[<ckay
],and others...
Bcc: Arthur Pugsley@MEPA@EOEA
From: <POETRYPIZA@aol.com>
Subject: STOP MASSPORT/LOGAN 14/32 RUNWAY EXPANSION
Date: Tuesday, April 20, 1999 22:38:13 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 375

DEAR MR. ARTHUR PUGSLEY:
(MASS ENVIRONMENTAL AFFAIRS UNIT DIRECTOR)

I STRONGLY REQUEST THAT YOU REFUSE TO APPROVE THE MASSPORT IRONMENTAL REPORT ON THE PROPOSED 14/32 RUNWAY EXPANSION AT LOGAN AIRPORT. BELIEVE THE MASSPORT SUBMISSION IS INCOMPLETE AND CONTAINS MANY MISLEADING HALF TRUTHS. MANY OF THE DATA SOURCES ARE QUESTIONABLE, OUT DATED AND INCORRECT.

I FEEL ANY FURTHER EXPANSION OF OPERATIONS, FLIGHTS IN AND OUT, WILL DIFFINETLY CAUSE A TREMENDOUS NEGATIVE ENVIRONMENT IMPACT ON THOSE OF US WHO LIVE, WORK AND GO TO SCHOOLS IN THE VERY DENSELY POPULATED COMMUNITIES SURROUNDING LOGAN AIRPORT. 375.1

I ASK YOU TO REMAIN OPEN AND SENSITIVE THE OUR BASIC QUALITY OF LIFE FUNDAMENTALS, "EXCESSIVE NOISE OVER OUR HEADS DAY AND NIGHT, ALONG WITH BAD AIR EMISSIONS ARE STEALING OUR BASIC RIGHTS." WE NEED YOUR HELP AND PROTECTION.

OUR PEACEFUL AND HEALTHY FUTURE IS IN YOUR HANDS.
VERY RESPECTFULLY YOURS,

LAWRENCE PAOLELLA, PE (RETIRED)
420XFORD STREET
SOMERVILLE, MA 02143-1608
(617) 628-8126

Letter 375
Lawrence Paolella
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
375.1	General Opposition		General Opposition	Comment noted.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <CRego58018@aol.com>
Subject: logan airport expansion 14/32
Date: Wednesday, April 21, 1999 19:38:34 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 376

I"m against it. I have lived in somerville all my life and the air traffic is gettting atrocious. It starts at 6:45 am, and can still be heard after 10 PM, and some days I can't even hear my T.V.

I attended a meeting at city hall when some of the Mass Port representatives presented their side. I think the delays need to be defined more throughly and there seems to be some discrepincies in the way they have created their statistics. Everyone that lives in this area knows the winters can be bad. That's just a fact of life that can't be changed by adding more runways. 376.1

When, and if, the new runway goes in, the air traffic is expected to increase by 300%, how could any one want this? And who is going to promis it will never be used a bidirectional manner when it suits the air port?

They taked about a hill effect, that hasn't even been studied, I don't live on a hill and I still hear it! There have never been any noise levels or EPA studies done here, only in near by towns.

The airport increase in flights and traffic will only increase and per Mass Port already be obsolete by 2004, about the time the expressway is completed, what will they do with all that traffic? 376.2

It's good for business is not alwayas good for the neighborhood, our town is just starting to come out of it's slumerville era and this could set us back economicaly. Our home prices will decline and we will be Chealse and East Boston. No boom for them or us. 376.3

I have worked in these area, and have heard all the comments about how long they need to wait to get their houses sound prooffed and some are still not done becasue they are on some sort of a lottery system. Of course this doesn't help you when you are in your yard or standing outside.

But of course, Somerville has already been informed renumberation will not be available to us. Sometimes you can't even carry on a conversation standing outside the house when the airplanes are going overhead, so what good would sound prooffing the house do? 376.4

There are other available sites that could be used and improve if they were to put some effort into it, such as Worcestor. since at least 50% of the people who use the airport come from outside the 495 area, they should also share in the prosperity. 376.5

There is to much concentration of power in Mass Port, what does it take to

stop them?

Find other alternatives. Carol Rego

Letter 376
Carol Rego
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
376.1	Purpose and Need	Delay	....I think the delays need to be defined more thoroughly and there seems to be some discrepancies in the way they have created their statistics....	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
376.2	Ground Transportation	Access to Logan	The airport increase in flights and traffic will only increase...	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
376.3	Alternatives	Preferred Alternative	....Our home prices will decline....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives.
376.4	Noise	Sound Insulation	....what good would soundproofing the house do?	While sound insulation does not mitigate exterior sound levels, it is a widely accepted measure considered appropriate for general mitigation of noise impacts. Sound insulation reduces noise inside the home. While the implementation of the Preferred Alternative would bring additional homes within the criteria for inclusion in the sound insulation program, the inside of these homes will have lower noise levels than they would have had without sound insulation under the No Action Alternative. Measures designed to improve PRAS (i.e., the PRAS monitoring program) are also mitigation measures. Improved achievement of PRAS goals under the Preferred Alternative will further benefit the most highly exposed areas around Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
376.5	Regional Transportation	Regional Airports	There are other available sites that could be used ... such as Worcester....	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers, that would have otherwise used Logan Airport.

LETTER 377

61 PRESTON ROAD
SOMERVILLE, MASSACHUSETTS 02143

April 22, 1999

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: Arthur Pugsley, Associate Environmentalist
File #10458 EOEA
100 Cambridge Street, Room 2000
Boston, MA 02202

Dear Mr. Durand:

This letter is in response to the proposal to construct Runway 14/32 at Logan International Airport. I oppose this project on the grounds that (a) the effect on the Somerville community has not been considered, (b) the 65dB threshold to measure the effect on residents in the flight path is not reflective of the actual consequences of the noise, vibration, and trauma of overflights on human health, (c) the full effect of changes at regional airports drawing traffic away from Logan has not been factored into the plan, (d) delays have not been appropriately measured, and (e) other means to consolidate passengers and "levelize" utilization over the daylight hours on necessary flights have not been adequately considered, such as peak pricing, incenting small non-connecting flights away from Logan through the fee structure, and incenting fuller, fewer, and larger-capacity planes in smaller connecting flights.

My heart is in the first point above. As to Social Impacts, the Draft Environmental Impact Statement/Report states on page 6-5, "Implementation of any of the improvement alternatives would occur on the airport, and therefore there will be no division or disruption of established communities or orderly planned development as a result." I do not find this statement to be true.

The community of Somerville is a remarkable place. Initially reluctant to move here because of the livability rumors prevalent fifteen years ago, I instead became captivated by a little block-long neighborhood of well-cared-for homes of quiet, respectful families, and took proud possession of a house with stained glass, oak wainscoting, coved ceilings, a fireplace, a built-in library, a front porch, and a tiny garden--the house of my dreams. I've never regretted my fiance's and my ending our search elsewhere and moving here in 1985. Somerville presents a delightful combination of elements such as convenience to transportation, diversity in its citizens, historic architecture and craftsmanship in its homes, a lively artists' presence, a considered self-reflection, heightened in its present transition to a new mayor, on such issues as schools and youth activities and concern for seniors, and a growing awareness of the importance of green space (former Mayor Capuano headed an initiative to plant hundreds of trees on the city's streets) and community gardening. Of course all this is in addition to the superb restaurants the city has long been known for! I have also been active in the community chorus and in the process learned that there are over 350 musicians living here. For all of us Somerville citizens (in the most densely populated city in Massachusetts), whether working class, middle class, or those even more well-off who have settled here and meticulously restored those grand Victorian mansions, this is

home. We appreciate each other's presence and expect to be able to continue to live together here, peacefully.

On Easter morning this year, not only did we lose an hour's sleep in the change to Daylight Savings Time, but the airplanes from Runway 33L began launching themselves over our heads starting around 6:00 a.m. The din was constant into the afternoon, with takeoffs usually two minutes apart. Unfortunately that was the morning I had planned to sleep late, being in the midst of a major project at work which entailed working late every night for several weeks. I felt tremendously powerless against the noise that morning and, knowing that there were plans afoot to send three times as many planes over Somerville as a result of new runway 14/32, I felt crushed that my wonderful home and community could be torn apart, as those with the means to leave to escape the noise would over time sell and move away, leaving Somerville again a working-class-only town. I knew I could not myself tolerate the noise, and stay.

The effect of that noise is shattering. There is the sleep-loss factor, which is thoroughly debilitating in itself. As that demanding work project has progressed, I have dreaded coming home, wanting so badly to sleep, but not knowing if it would be Somerville's turn to stay up on into the night. But there is also the true trauma of the unremitting audible assault--the physical effect of the noise and vibration of the overflights, combined with not knowing how much more of that torture one would have to endure, and when it would start again once it stopped. I used to find it a bit exciting on a sunny Saturday while doing the laundry to hear the jets cutting through Somerville's skies on their way to adventure or family reunions or faraway places. I certainly appreciate the fact that part of the proximity that I enjoy in this close-in city is the opportunity without too much inconvenience to get to the airport for an occasional business trip or vacation. But the new plan for 14/32 would transform my community in ways that have not been considered in the Draft Environmental Impact Statement/Report. Indeed, as the report notes on page 6-10, "the flight tracks for Runway 14/32 will not involve overflying any neighborhoods that are not now overflown." But a threefold increase in air traffic over Somerville would have an enormous impact on this community. It is not enough not to overfly new communities; it is imperative as well not to degrade the quality of life in those presently overflown.

377.1

I have come to understand that Runway 33L is used when demand is low since it is part of the two-runway configuration available at Logan. And demand is likely low in the early morning and late at night. I also see in the Draft Environmental Impact Statement/Report that there is a limit to the number of hours in a day that a community is expected to bear the noise of overflights. But if the community's burden is during sleeping hours(after 10:00 p.m. and before 7:00 a.m.--and that should be on weekdays; on weekends a more realistic target is 8:00 a.m.), its tally should be weighted to count <u>in multiples</u> the sleeping hours. To keep people up late at night and then wake them again in early morning to use their share of the hours is unhealthy as well as inequitable.

It was odd to see Somerville not discussed in the Draft Environmental Impact Statement/Report. It appeared as a ghostly presence in Figures 5.2-5 on page 5-30 and 6.2-3 on page 6-13, under the flight path of Runway 33L. The means of measuring the impact of the noise of takeoffs over a 24-hour day causes the repeated 110dB single-takeoff impacts in Somerville (which my neighbors have measured over their homes) to

be reduced, through the magic of math, to below 65dB, and thus below the threshold of concern of the mathematical model which draws the 65dB contours shown in the report in Section 6.2. Repeatedly the report notes, as on page 7-18, that only in the denoted 65dB areas is an increase in sound level taken into consideration. But going forward with this plan would entail increasing sound in Somerville by a delta that would transform the community, and the report has not considered this outcome.

The report openly states, as on page 7-1, that the proposed plan would provide a significant reduction in noise for the most severely impacted areas. And those areas certainly deserve to be helped by some plan, one that considers all communities in the region, and the way that they all benefit from the availability of air travel, and the contribution and sacrifice they should each reasonably make. But I believe a better plan than this can be developed, one that analyzes more closely the precise nature of the delays (e.g., putting into perspective that only 20-25% of present delays are due to runway traffic), and the actual effect of enactment on those delays. The new plan should also take into account all the benefits to a regional air traffic plan that will result over the next few years from changes such as suburbanites' migration to accessible regional airports, limitation of small non-connecting flights into Logan, and limitation of low-volume flights. Ground transportation changes too should be included in the plan, both improved access by highway and rail for regional airports such as Worcester, and improved mass transit around Logan. 377.2 377.3

In short, greater vision is needed. In the few years since investigation for the report was begun, much has changed--and those changes need to be factored into the plan.

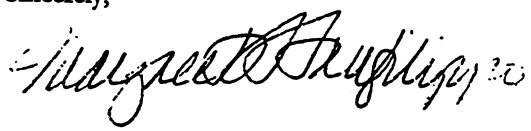
I recall an experience in business school of which the present dilemma reminds me. My study group had submitted our answer to a problem but were dismayed to learn that there was a second part to the problem which we had not discovered. Our professor permitted us to continue to work on our answer and submit our completed problem to offset our failing grade for the first effort. Similarly, this first effort is incomplete. I urge those making the decision on the Draft Environmental Impact Statement/Report to entrust consideration of the many-faceted air traffic problem in the Boston area to those with great vision, so that a better plan for all concerned emerges, one that does provide relief to those most severely impacted, but does not leave an undue burden of noise in the yards and in the windows of communities not even named in the report. We all benefit from convenient air travel in this area, and delays have affected most of us. But before another community is effectively redlined as a result of a runway plan that falls far short of solving the target problem, more effort is needed to evolve a plan that considers the effect on all communities, without artificial mathematical filtering that hides the effect on some communities.

Mr. Thomas Timkin of Massport presented the plan to a meeting on April 13 in Somerville. He told us he lives in Winchester. My manager at work lives in Winchester, and he has happily driven to Green Airport in Rhode Island to take advantage of the reduced prices for flights on Southwest Airlines. This is the type of effect I think deserves heavier consideration in preparation for the Final Environmental Impact Report. People are price-sensitive, as undoubtedly are small airlines who land at Logan as a matter of course, independent of their need to do so. There are many factors to

consider. I look forward with great anticipation to the FEIR, trusting that the neighborhood outcry that has greeted the DEIR has called attention to its incompleteness. Like my professor, I want to see a more successful and complete answer to a, here, too-vaguely-stated problem. I want a solution greater Boston can be proud of, and I believe that will be the outcome.

Thank you for this opportunity to share my thoughts.

Sincerely,



Margaret H. Sanfilippo

cc: Senator Edward M. Kennedy
Senator John F. Kerry
Representative Michael E. Capuano
Governor A. Paul Cellucci
Senate President Thomas F. Birmingham
Speaker Thomas Finneran
Representative Patricia Jehlen
Alderman Kevin Tarpley

Letter 377
Margaret Sanfilippo
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
377.1	Noise	Impacts	The effect of that noise is shattering. ....a threefold increase in air traffic over Somerville would have an enormous impact on this community....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
377.2	Purpose and Need	Delays	....I believe a better plan than this can be developed, one that analyzes more closely the precise nature of the delays...	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
377.3	Regional Transportation	Regional Airports	The new plan should also take into account all the benefits to a regional air traffic plan that will result over the next few years from changes such as suburbanites' migration to accessible regional airports, limitation of small non-connecting flights into Logan, and limitation of low-volume flights....	The Airside analysis does take into consideration the increasing attractiveness of the regional airports. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of the role of regional airports and other options to Logan Airport. Federal constitutional provisions (preemption, commerce clause, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the federal Airport Improvement Program grants which Massport receives restrict Massport's ability to control the number of aircraft operations at Logan Airport. As such, Massport can not prohibit low-volume flights from using Logan Airport airport or unjustly discriminate against small aircraft.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "David Dahlbacka/Jane Sauer" <ddahlbac@ix.netcom.com>
Date: Stop Massport/Logan Runway Expansion
Attach: Thursday, April 22, 1999 15:02:38 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 378

April 22, 1999

Mr. Arthur Puglsey
Unit Director
Massachusetts Environmental Affairs
Executive Office Building
100 Cambridge Street
Boston MA 02202

Dear Mr. Pugsley:

By means of this letter I am urging you NOT to approve the Massport environmental report on the proposed runway 14/32 at Logan Airport.

This report is not complete. Other alternatives such as the use of other ports in the area for smaller aircraft and freight planes has not been explored in this report. This research must be included, especially since even officials at Logan admit that the proposed runway is only a temporary solution. 378.1

Also this report does not take into account the quality of life for those affected by aircraft noise now and in the future. Someone living near Hanscom Field was quoted in the Boston Globe as saying in effect that people who in cities are used to noise unlike people in the suburbs. I like to hear the "noise" of my city -- the most densely populated city in New England. I like to hear the voices of children at play, greetings from one neighbor to another, the footsteps of the hundreds of people who pass by my house each week, the songs of birds. I cannot hear these city noises while airplanes roar overhead. 378.2

I cannot get to sleep at night when planes roar overhead after 11 PM. I cannot sleep through the night when planes road overhead at 1 AM, 2 AM, or 3 AM. I cannot enjoy the peace of the early morning hours when planes roar overhead starting at 6 AM or before. Outdoor activities, which should be enjoyable or relaxing, often are not because of planes roaring overhead.

I do not live in the part of Somerville most affected by aircraft noise -- yet my quality of life is seriously affected. And, we in Somerville are not as much affected as people in other communities such as East Boston, Winthrop, Roxbury, or Milton, for instance.

The environment for all of us in Massachusetts should be taken into consideration and protected. I trust you will do this.

Sincerely,

Jane Sauer
[illegible] Hancock Street
[illegible]merville MA 02144
[illegible].7) 776-0945

cc: Senator Edward Kennedy
Senator John Kerry
Representative Michael Capuano
Senator Joseph Moakley

Letter 378
Jane Sauer
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
378.1	Regional Transportation	Regional Airports	....Other alternatives such as the use of other airports in the area for smaller aircraft and freight planes has not been explored in this report....	Regarding caps on airport operations, federal constitutional provisions (preemption, commerce clauses, equal protection), federal aviation statutes and regulations, and contractual provisions related to covenants in connection with the Federal Airport Improvement Program grants which Massport receives, restrict Massport's ability to control the number of aircraft operations at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
378.2	Noise	General Opposition	...this report does not take into account the quality of life for those affected by aircraft noise now and in the future....	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

LETTER 379

Amanda Sawires
55 Columbus Avenue, #2
Somerville, MA 02143
617-628-6293

April 20, 1999

Arthur Pugsley
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

I am writing to express my opposition to MassPort's proposed Runway 14/32.

I have lived in the same address in Somerville for over seven years, and I absolutely attest to the fact that **air traffic over Somerville has increased in the past year**. My neighbors and I have been remarking to each other and lamenting to ourselves the noise from overhead flights that interferes with our sleep at night and wakes us each morning. I have been considering purchasing a house in Somerville but now hesitate to do so because, if Runway 14/32 is approved, I understand that air traffic over Somerville could triple. Somerville is a city with extremely high population density. I feel that increasing the number of flights over this large population is ill-advised and unfair. Current disturbances exceed an acceptable level. They interfere with a decent quality of ~~our~~ life in our neighborhoods. 379.1

Please do not approve Runway 14/32. I suggest that looking into a regional plan to manage air traffic, assessing the noise and burden on Somerville of air traffic, limiting the number of flights directed over Somerville and high population areas, and diverting flights to other airports in the region be considered as options. I would appreciate hearing what your position on this matter is. 379.2

Thank you in advance for your anticipated support.

Yours truly,

Amanda Sawires

Letter 379
Amanda Sawires
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
379.1	Noise	General Opposition	...air traffic over Somerville has increased in the past year...if Runway 14/32 is approved, I understand that air traffic over Somerville could triple...	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals.
379.2	Regional Transportation	Regional Airports	....I suggest that looking into a regional plan to manage air traffic, assessing the noise and burden on Somerville of air traffic, limiting the number of flights directed over Somerville and high population areas, and diverting flights to other airports in the region be considered as options.....	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "Marguerite Scott" <100303.702@compuserve.com>
Date: Runway 14/32 and environmental impact
Attach: Thursday, April 22, 1999 17:20:12 EDT
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 380

Dear Mr. Pugsley:

I am a resident of Somerville, a voter, a taxpayer, and a very concerned citizen. I oppose Massport's plans to build Runway 14/32.

Frankly, if part of environmental impact is its effect on human beings, I'm not sure we can even take Massport's proposal seriously. Somerville is one of the most densely populated cities in the state. I'm sure the surrounding communities reflect this as well - in Medford, Cambridge, etc. While Massport has hit the road telling different communities that the traffic over them will decrease, if Massport gets its way, air traffic over us will increase - by 300%. Three times the burden of noise, disruption, and pollution we now share with our urban neighbors. 380.1

How is it desirable to solve a problem already clearly intolerable (and managed) for communities like East Boston with mere shifts and squeezing the deleterious effects onto a smaller slice of the urban ring? How is it fair? How does it help?

Massport is thinking too small. The wailing and gnashing of teeth about Boston's status as a "world class city" is only showing that the wailers haven't been to very many of them. Take New York. There's a world-class city. Three airports. Each one a good forty minutes to God-knows-when away from the center of town. One is even in another state. It doesn't seem to be stopping the legions of businesspeople, tourists, and conventioneers from going to New York. London is served by two airports, to its west and south, each a train ride away from the city proper. Gatwick's train takes you through rolling hills and farmland on your way to town. It doesn't seem to keep London from offering businesspeople, tourists, and conventioneers a world-class city. But Gatwick and Heathrow in London, and Kennedy, La Guardia, and Newark in New York do relieve the impact of these busy, busy airports on an already overburdened metropolitan center.

Of course, the Boston area needs to accommodate air travel. I wouldn't want it any other way. I live here; I want it to be as thriving, successful, accessible as any other great town. I travel. I want the airport(s) to serve me well. But there are ways to share the impact of growing air traffic other than switching around the communities to harm, and hoping they won't have the power, money, or influence to have a say about it. 380.2

Regional development without a new runway could benefit everyone.

But I hear that the business community will never let it happen, and the wealthy communities surrounding Hanscom will never let it happen, and that the Governor has boxed himself into a corner and will never let it happen, and that despite what is clearly in the best interest of everyone in the area, Massport will never let regional development happen. Not when they own this runway.

Runway 14/32 will do more harm than good. Its impact will hurt the environment for many, many people who work here, raise families here, and call it home. You tell me, Mr. Pugsley: can the Office of Environmental Affairs let this go forward? Does environmental impact include its effect on people?

Very sincerely yours,

Marguerite Scott

Letter 380
Marguerite Scott
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
380.1	Noise	General Opposition	....air traffic over us will increase--by 300%. Three times the burden of noise, disruption, and pollution we now share with our urban neighbors.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
380.2	Regional Transportation	Regional Airports	Massport is thinking too small. .....Regional development [of other airports] without a new runway could benefit everyone.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Volume III_DEIS/FEIR Part 2 Responses to Comments and Responses to Private Citizens_3.doc

Bcc:
From: Arthur Pugsley@MEPA@EOEA
Subject: "Jerry Shine" <shine@pipeline.com>
Date: Runway Proposal
ttach: Thursday, April 22, 1999 15:46:38 EDT
ertify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 381

Dear Mr. Pugsley,

I am against the proposed new runway at Logan Airport for several reasons. First, I live in Somerville where air traffic is expected to increase by close to 300% if the new runway is built. How it can be considered fair, or even intelligent, to increase airplane noise to this extent over one of the most densely populated areas of the state is beyond me.

Second, I have lived in Somerville for ten years. Over the first nine and three-quaters years, airplane noise was negligible. Over the last three months, it has been, at times, unbearable. And yet Massport insists that air traffic over Somerville has not increased in the last year. This assertion is so ridiculous as to be either an outright lie or a statement of misinformation so twisted as be no better than a lie, and proves Massport to be an trustworthy organization. 381.1

Third, I spend a great deal of time in Boston's North End. Tourists go there to relax and visit historic sites. And yet, as they are walking the streets, airplanes are constantly flying overhead, completely destroying the ambiance they came to Boston for.

Fourth, the argument that Boston must have a new runway to compete with other cities around the world is ridiculous. New York City has two airports, neither of which is downtown. The same can be said for London. Washington DC's airport is not downtown. Nor is New Orleans' or Tokyo's. The list of major cities in which the airport lies an hour or so away goes on and on. 381.2

In summary, building a new runway would have an extremely negative impact on the quality of life for thousands of people in countless neighborhoods close to Boston, as well as an adverse effect on tourists visiting Boston for its historic sites. I am opposed to it.

Sincerely,

Jerry Shine
204 Powderhouse Blvd.
Somerville, MA 02144

Letter 381
Jerry Shine
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
381.1	Noise	General Opposition	....How it can be considered fair...to increase airplane noise [300%] over one of the most densely populated areas of the state is beyond me.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
381.2	Regional Transportation	Regional Airports	... the argument that Boston must have a new runway to compete with other cities around the world is ridiculous. New York City has two airports, neither of which is downtown. The same can be said for London. Washington, D.C.'s airport is not downtown. Nor is New Orleans' or Tokyo's. The list of major cities in which the airport lies an hour or say away goes on and on.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. The construction of unidirectional Runway 14/32 would prevent the significant drop in airfield capacity that now occurs during northwest wind conditions. The runway would not increase Logan Airport's normal operating capacity of approximately 120 operations per hour which is available nearly 80 percent of the year, but rather would allow this capacity to be maintained more consistently.

Bcc:
From: Arthur Pugsley@MEPA@EOEA
<Sweetuumms@aol.com>
Subject: Runway 14/32 at Logan Airport
Date: Thursday, April 22, 1999 8:21:24 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 382

Dear Mr. Pugsley:

I am writing this message as a resident of Somerville in strong protest to the proposed building of Runway 14/32 at Logan Airport. The building of this runway will result in a 300% increase in air traffic volume over Somerville. The data used for justifying the building of this runway is out of date - from 1993! A close look at more recent data from Logan shows that air traffic delays have actually decreased over the last decade. 382.1

Also, no official decibel level study of the noise impact on Somerville has been conducted; something that has been done for other communities potentially affected by runway construction. Why is this the case? Is it because Somerville has population largely comprised of ethnic and racial minorities, blue collar workers and others with low income levels? Don't our votes, taxes and quality of life issues matter? 382.2

me guess - you don't live in Somerville. Second guess, maybe a nice quite community like Arlington, Lexington, or some other suburb.

Sincerely,
Deirdre Smith
One Fitchburg St. #B-250
Somerville, MA 02143

As a constituent, I demand better representation.

Letter 382
Deirdre Smith
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
382.1	Purpose and Need	Delay	....The data used for justifying the building of this runway is out of date--from 1993! ...more recent data from Logan shows that air traffic delays have actually decreased over the last decade.	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 2000, Logan was the second most delayed airport for arrivals in the U.S. This represents the worst delay ranking in Logan's history. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur. The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
382.2	Noise	General Opposition	...no official decibel level study of the noise impact on Somerville has been conducted; ....Is it because Somerville has population largely comprised of ethnic and racial minorities, blue collar workers and others with low income levels? ...	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. There should be no new effects on the value of property or unacceptable increase in noise exposure for any of the alternatives. Future scenarios analyzed in this study have to rely on computations rather than measurements, since they occur in the future. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas. Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.

LETTER 383

14 Wyatt Street
Somerville, Massachusetts 02143

April 21, 1999

Robert A. Durand
Secretary, MEPA Unit, Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Attention: Arthur Pugsley, File No. 10458 EOA

Dear Secretary Durand:

I am writing in order to state my strenuous opposition to proposed new Runway 14/32, as outlined in the *Environmental Impact Statement (EIS)* that has been submitted to you for approval by the Massachusetts Port Authority (Massport) and the Federal Aviation Administration (FAA). I am in basic agreement with the findings presented in the *Review Comments on Draft Environmental Impact Statement/Draft Environmental Report (DEIS/DEIR) for the Logan Airside Improvements Planning Project*, prepared by the consultant team to the Community Advisory Committee (CAC) to Massport, and I am sure that many individuals who have submitted written comments to you have reiterated that document's findings with regard to the deficiencies of the EIR. Rather than reiterate those findings, my goal in this letter is to present concerns about Runway 14/32 that are specific to the City of Somerville, where I have lived continuously in the home that I own since October of 1991, and where I lived previously for two and one-half years, from 1984 to 1986. My concerns are as follows

I. Somerville has not been given due consideration, in the EIR, with regard to the actual impacts that it will sustain as a result of Runway 14/32.

Massport states that, with 14/32 in place, air traffic over Somerville will increase by approximately 300%. However, this figure would appear to be a substantial underestimate as it is based solely on historical-use data for Runway 15/33 despite the fact that other runways also generate air traffic over Somerville. Massport officials, including Chief Executive Officer Peter Blute and Director of Aviation Planning and Development Betty Desrosiers, have contended that Somerville receives air traffic from Runway 15/33 only (respective sources: a *Somerville Journal* article by Dorothy Pomerantz, published on Jan. 21, 1999, and remarks to state representatives at a meeting at the State House this past winter, as related by Fred Cabral, aide to State Representative Timothy Toomey). This assertion that Somerville receives air traffic from Runway 15/33 only is both inaccurate and disingenuous as it takes into account jets only while excluding turboprops, which represent a substantial segment of the air-traffic fleet. 383.1

According to printed copies of my calls to Massport's Noise Abatement Complaint Line (Appendix), as well as verbal, recorded (by Massport) responses of Massport staffpersons to my questions, configurations 27/22, 22L/22R, 4L/4R, and 4/9 all are frequent sources of air traffic over Somerville. For example, three times during the process of composing this letter over a 72-hour period, when I called the Noise Abatement Complaint Line to ask the source of air traffic over my neighborhood, 27/22 was cited as being the runway in use on both the first and the third occasions, and 4L/4R was cited on the second

occasion. In a phone conversation with me yesterday, Massport Spokesperson Jeremy Crockford, while admitting that turboprops may "disperse" over Somerville after takeoff from *any* runway, tried to dismiss these impacts, stating that "*Most* people are concerned with *jet* traffic." This totally ignores the fact that, for the last year, Somerville residents have been awakened by turboprops and cargo planes, *not* jets, in the middle of the night, for days and weeks on end. It also overlooks the fact that these smaller aircraft typically generate *more* noise than their larger counterparts, since they tend to fly at lower altitudes.

Moreover, visual observation of planes flying over Somerville when runways other than 15/33 are in use indicates that a number of these aircraft are not turboprops but, rather, jets that apparently have deviated from their initial flight tracks.

It also strains credibility to assume that the so-called "over-the-water" approaches that are constantly mentioned by Massport in reference to Runway 14/32 would never culminate in deviations to a westerly path after initial takeoff, similar to the deviations that occur relative to the already existing runways.

Thus, Somerville's *aggregate* air-traffic increase due to 14/32 would be approximately 300% for jet departures from 15/33 *combined* with whatever indeterminate (because not yet estimated) but substantial increases would accrue from the other runways that generate both turboprop and "off-course" jet traffic over our city. (Air traffic associated with Runway 27/22, for example, is projected by Massport to increase fourfold.)

II. Massport has failed to take into account the disproportionate amount of air traffic associated with Runway 15/33 that Logan Airport's FAA-run control tower routes over Somerville during so-called off-peak hours (nighttimes, early mornings, weekends, and holidays – the times when people are most likely to be at home trying to sleep, study, converse with family and friends, and generally relax) – and it has not addressed the corresponding air-traffic increases that would occur during those hours if Runway 14/32 is built.

383.2

Massport has stated that Runway 15/33 is the *preferred* configuration during off-peak hours. According to the report of the consultants to the CAC, nighttime jet operations at Logan "can be expected to *double* within the foreseeable future" (p. 18, D.1.b Night-time Operations). Residents of a number of Somerville neighborhoods, including my own, near Inman Square, Cambridge, that of Winter Hill, and that in the Porter Square area, already have an extremely limited (approximately six-hour) time-span during which sleep without being disturbed by aircraft is possible; this is especially true during the spring and fall, when Runway 15/33 is relied on heavily. This obviously too-brief window for sleep often is diminished even further by middle-of-the-night air traffic sufficiently loud to awaken one from a sound sleep, which has become increasingly common over the last year. I and other Somerville residents have experienced sleep deprivation on many occasions because of such disturbances. Sleep deprivation is rapidly coming to be recognized as a significant public-health problem and as a precipitating factor in many motor-vehicle accidents. My job requires me to commute to and from Needham from my home, five days a week, on two major expressways (the Massachusetts Turnpike and Route 128). Anyone who has ever traveled on these roads during rush hour can attest to the high and constant level of alertness that is needed to avoid being involved in a collision. Another adverse effect of sleep deprivation is diminished job

performance. Nowhere in its EIR do Massport and the FAA address the repercussions of sleep deprivation due to air traffic. Apparently this concern is too trivial to warrant consideration compared with the all-important issue of business travelers' feelings of frustration over flight delays at Logan. It can only be hoped that MEPA uses a more balanced and humane system of prioritization. 383.3

III. Massport has done no study of air-traffic noise impacts on Somerville. 383.4

While Massport has placed noise monitors in other communities, not only has it not done so in Somerville, it *refused* to do so, despite a request made in June 1998 by the Somerville Board of Aldermen.

In conclusion, I ask that MEPA find the EIR submitted by Massport and the FAA to be inadequate and that both Massport and the FAA be directed to do the following. (1) They should provide a true and accurate estimate of the *total* air-traffic increase that Somerville would incur as a result of Runway 14/32. This calculation should take into account *all* runway configurations that affect the city – not just 15/33 but also 27/22, 22L/22R, 4L/4R, and 4/9 – and *all* types of aircraft – not just jets but turboprops and cargo planes as well. Massport's official position that only Runway 15/33 affects us in any meaningful way is in stark contradiction to the experience of Somerville residents and is clearly self-serving in that it allows Massport to predict air-traffic increases much lower than those that will actually result if Runway 14/32 is implemented. (2) Massport and the FAA should provide a *separate* estimate of the increase in so-called off-peak air traffic that would accrue over Somerville in association with Runway 14/32 – again, with regard to *all* runways and *all* types of aircraft. Because sleep deprivation is an adverse *health* impact, it should be classified as such and weighted accordingly by MEPA. Further, Massport and the FAA should be enjoined to cease the routine disturbance of residents' nighttime sleep, either through implementation of a curfew between the hours of 10 p.m. and 7 a.m. (as is imposed by National Airport serving the Washington, D.C., area) or by an expansion of Massport's current Noise Rules, or both. (3) Massport should be required to place noise monitors in Somerville, especially (but not only) in the most elevated and densely populated areas.

As was pointed out by a participant in the Runway 14/32 meeting that Congressman Michael Capuano hosted on March 27 at Bunker Hill Community College, Boston is unique in that it has a major international airport (Logan) located in such immediate proximity to so many residential neighborhoods. Other cities that Massport has mentioned as having added new runways are not appropriate analogies to our current situation (as Massport wishes people to believe that they are) because those cities do not have 1.4 million people living directly under the flight paths as we do.

I deeply hope that your decision will be based on the welfare of those of us who make our homes, earn our livings, and pay our taxes here in the Commonwealth, rather than on dubious profit-motivated arguments and misplaced concerns about the transient aggravation that some travelers (including those of us who oppose 14/32) may experience some of the time. (It is pertinent to not here that delays at Logan have *decreased* over the past six years.) Convention-goers and other passengers from both in and out of state will not suffer egregious harm because of a 20-minute wait at a departure gate. In contrast, residents' quality of life and, perhaps just as importantly, their faith in agencies such as MEPA that are entrusted with protecting the public from injury

by powerful parties that wield disproportionate monetary and political influence, stand to be shattered irreparably if the ill-advised, environmentally disastrous runway proposal of Massport and the FAA is allowed to triumph.

Thank you for reading and considering my comments.

Sincerely,

Allison Stieber

Appendix: Copies of Complaint Calls to Massport's Noise Abatement Complaint Line Citing Various Runways as Sources of Air Traffic over Somerville

cc: Robert Bartanowicz, New England Regional Administrator, Department of Transportation, Federal Aviation Administration; John P. DeVillars, Regional Administrator, U.S. Environmental Protection Agency; Senator Edward M. Kennedy; Senator John F. Kerry; U.S. Congressman Michael E. Capuano; City of Boston Mayor Thomas Menino; Speaker of the Massachusetts House of Representatives Thomas Finneran; State Representatives Timothy Toomey, Patricia Jehlen, and Vincent Ciampa; Todd Fontanella, Director of Transportation and Commercial Development and CAC Representative for the City of Somerville; Somerville Mayoral Candidates Dorothy Kelly Gay and John Buonomo

Appendix

Copies of Complaint Calls to Massport's Noise Abatement Complaint Line

Citing Various Runways as Sources of Air Traffic over Somerville

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mrs. Allison Stieber
14 Wyatt Street
Somerville, MA 02143

Telephone:

Disturbance Date and Time: 11:30 on 06 Jan 99 to
11:30 on 06 Jan 99

Conditions:

Wind Direction:	190 deg	**Wind Speed:**	10 Knots
Ceiling:	18000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: The last two nights at 3:40 and 3:45 am a small airplane caused a disturbance over this area. I would like to know the name of the carrier.

Massport Report of Investigation: On 1/5/99 you were affected by an AEST cargo aircraft which departed from Logan's Runway 27. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Pyke Cook/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mrs. Allison Stieber
14 Wyatt Street
Somerville, MA 02143

Telephone:

Disturbance Date and Time: 20:06 on 04 Mar 99 to
20:06 on 04 Mar 99

Conditions:

Wind Direction:	260 deg	**Wind Speed:**	20 Knots
Ceiling:	4800 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You are affected by arrivals to Logan's Runway 22L, in use with strong westerly winds. A change of runway configuration occurred at midnight.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mrs. Allison Stieber
14 Wyatt Street
Somerville, MA 02143

Telephone:

Disturbance Date and Time: 07:49 on 18 Nov 98 to
07:49 on 18 Nov 98

Conditions:

Wind Direction:	320 deg	**Wind Speed:**	7 Knots
Ceiling:	900 Ft	**Visibility:**	7.0 Miles

Runways in Use:

Arrivals: 4R - 4L
Departures: 9-4R-4L

Complaint Description: I was awakened by aircraft at 5:30 am.

Massport Report of Investigation: You were affected by a B727 which arrived on Logan's Runway 4R. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Ross E. DiPietro/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

Letter 383
Allison Stieber
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
383.1	Alternatives	Runway 14/32	Massport states that, with 14/32 in place, air traffic over Somerville will increase by approximately 300%. However, this figure would appear to be a substantial underestimate as it is based solely on historical-use data for Runway 15/33 despite the fact that other runways also generate air traffic over Somerville....	The Supplemental DEIS/FEIR provides updated information for 1998—the latest year for which actual Logan Airport data are available. 1993 was adopted as the base year when the Airside Improvement studies commenced in 1994. The primary function of the Base Year analysis is to calibrate the airfield operation models and environmental impact models. The benefits and impacts of the action alternatives (Alternatives 1, 1A, 2 and 3) are assessed by comparing these not with the base year, but with Alternative 4, the No-Action Alternative. The planning scenarios for 37.5 and 45 million passengers represent a range of future activity at Logan Airport expected in the 2010 to 2020 time frame. The Supplemental DEIS/FEIR contains a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays which would be directly affected by Runway 14/32 have risen steadily since 1994. The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.
383.2	Noise	Model	Massport has failed to take into account the disproportionate amount of air traffic associated with Runway 15/33 that Logan Airport's FAA-run control tower routes over Somerville during so-called off-peak hours...and it has not addressed the corresponding air-traffic increases that would occur during those hours if Runway 14/32 is built.	If the Preferred Alternative is implemented, Somerville's overflights will increase in comparison to the No Action Alternative. However, the highest resulting noise exposure in that community is estimated to be on the order of 55 dB DNL, well beyond the 60 dB DNL contours shown in Figures 6.2-8 and 6.2-10 through 6.2-14 of the Supplemental DEIS/FEIR. Both the delay model and the noise model used in this evaluation do take into account the operations over Somerville, but the noise exposure levels resulting from those operations are relatively low compared to other communities and are not in any way considered incompatible with residential land uses in the community.

Code	Topic 1	Topic 2	Comment	Response
383.3	Noise	Impacts	....Nowhere in its EIR do Massport and the FAA address the repercussions of sleep deprivation due to air traffic....	The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.15and 6.12-16 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
383.4	Noise	Impacts	Massport has done no study of air-traffic noise impacts on Somerville.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.

LETTER 384

Robert Durand, Secretary
MEPA Unit-EOEA
Att: Arthur Pugsley, File # 10458EOA
100 Cambridge St.,20th Floor
Boston, MA 02202

April 22,1999

I am writing to register our strong objection to runway 14/32. We are already uncomfortable with the noise polution from flights over our city. A night time curfew ought to be enforced! Recent flights over Somerville seem to be getting lower! We understand there has been no citywide noise impact study with microphones done in Somerville as there have been in other affected communities! More Logan flights will make the traffic to and from the airport even more overwhelming. 384.1 384.2 384.3

It is my understanding that the data used to justify the need for a new runway is based on Logan's worst year for flight delays (1993) and that delays at Logan have actually decreased over the last 6 years. 384.4

An increase of air traffic over Somerville by **300%** or more is not acceptable.

Susan Strauss
Jane Owen

Susan Strauss
Jane Owen
20 Willoughby St.
Somerville, MA 02143

Letter 384
Susan Strauss and June Owen
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
384.1	Noise	Impacts	....We are already uncomfortable with the noise pollution from flights over our city. A nighttime curfew ought to be enforced!	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.15 and 6.2-16 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
384.2	Noise	Impacts	...there has been no citywide noise impact study with microphones done in Somerville...	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.
384.3	Ground Transportation	Access to Logan	More Logan flights will make the traffic to and from the airport even more overwhelming.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
384.4	Purpose and Need	Delays	...data used to justify the need for a new runway is based on Logan's worst year for flight delays (1993)...	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

LETTER 385

17 Boston Ave.
Somerville, MA 0211

Robert Durand, Secretary
MEPA Unit - Office of Environmental Affairs
Attn: Arthur Pugsley, File # 10458 EOA

Dear Sir:

The noise level and frequency of flights over our neighborhood is already at an entirely unacceptable level. The question should not be whether to increase the number of these flights in our or any other direction, but urgently to reduce the noise level and frequency of these flights. 385.1
At the present levels, economic damage is wreaked upon our community and this state through poor job performance and missed work days due to sleeplessness caused by this noise. The noise can be heard in the shower during a shower and 385.2
continues until 2 a.m., with jets leaving every minute on occasions lasting for over an hour. Further economic damage results from depreciated real estate values, stress 385.3
levels causing more violence and vehicle

accidents. Any consideration of authorizing any new runway at Logan Air port must be undertaken by the either extremely over-paid or extremely weak-minded. I pledge my whole-hearted spiritual, intellectual, and financial support to any efforts to resist this proposed runway.

Sincerely,

Daniel Toner

Letter 385
Daniel Toner
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
385.1	Noise	Impacts	The question should not be whether to increase the number of flights in our or any other direction, but urgently to reduce the noise level and frequency of these flights.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.
385.2	Noise	Impacts	At the present levels, economic damage is wreaked upon our community and this state through poor job performance and missed workdays due to sleeplessness caused by this noise....	Table 6.2-17 of the Supplemental DEIS/FEIR shows nighttime jet operations projected to increase from 144 in 1998, to as many as 231 under the No Action Alternative with the 2015 High Regional Jet Fleet. However, regardless of the fleet, many of the future night operations are the result of delays that will occur as demand at Logan Airport continues to increase. One of the direct benefits of the Preferred Alternative is that it will reduce these night operations by 32 to 43 flights depending on the fleet forecast, though *any* alternative to the No-Action scenario will help alleviate some of the projected delays. In addition, Massport is committed to exploring other measures to reduce nighttime noise whether or not the Preferred Alternative is implemented.
385.3	Noise	Impacts	...Further economic damage results from depreciated real estate values, stress levels causing more violence and vehicle accidents....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR respond to federal and state scoping directives and applicable FAA environmental orders and all other NEPA and MEPA requirements, and provide appropriate analytical content for assessing alternatives.

CARLA WILBUR
C407 ONE FITCHBURG ST.
SOMERVILLE, MA 02143
(617) 625-1227

LETTER 386

ROBERT DURAND, SECRETARY
MEPA UNIT - EXECUTIVE OFFICE ENVIRONMENTAL AFFAIRS
100 CAMBRIDGE ST. 20TH FLOOR
BOSTON, MA. 02202
(617) 727-1598

APRIL 22, 1999

DEAR MR. DURAND,

I AM FAXING YOU TODAY BECAUSE I HAVE LEARNED OF MASSPORT'S PLANS TO BUILD A NEW RUNWAY WHICH IS LIKELY TO HAVE A SIGNIFICANT IMPACT ON MY PROPERTY VALUE AND MY QUALITY OF LIFE. I AM A SOMERVILLE RESIDENT.

AS A CITIZEN, I DEMAND:

1. A CITYWIDE IMPACT STUDY AS HAS BEEN DONE IN OTHER EFFECTED COMMUNITIES. 386.1
2) A MODERN ENVIRONMENTAL IMPACT STATEMENT DERIVED FROM 1999 DATA - NOT 1993, THE WORST YEAR FOR DELAYS AT LOGAN. (How dare you try to slide by on this!) 386.2
3) AUTO TRAFFIC STUDIES ON HOW TO CONTEND WITH INCREASED TRAFFIC CONGESTION CAUSED BY A THE 300%! INCREASE IN AIR TRAFFIC RUNWAY 14/32 WILL CAUSE. 386.3
4) AN ERNEST INVESTIGATION OF THE POSSIBILITIES OF HANSCOM FIELD OR WORCESTER AIRPORTS AS ALTERNATIVES (Perhaps using Worcester might also generate some desirable economic by products for this struggling city.) 386.4

THANK YOU
SINCERELY,
Carla Wilbur

Letter 386
Carla Wilbur
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
386.1	Environmental Review Process	MEPA	I demand a citywide impact study as has been done in other [a]ffected communities.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. However, if you are interested in measuring current conditions in Somerville, you should contact Massport and discuss your ideas.
386.2	Analysis Assumptions/ Methodologies	Base Year	I demand a modern environmental impact statement derived from 1999 data—not 1993, the worst year for delays at Logan.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
386.3	Ground Transportation	Access to Logan	I demand auto traffic studies on how to contend with increased traffic congestion caused by the 300% increase in air traffic runway 14/32 will cause.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
386.4	Regional Transportation	Regional Airports	I demand an [earnest] investigation of the possibilities of Hanscom Field or Worcester airports as alternatives.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. Since January 2000 Massport has attracted three new airlines to Worcester Regional Airport. Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta on February 1, 2000 and will be increasing its service to three daily flights in April 2001. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. In February 2001, PanAm began daily scheduled service from Worcester to Orlando International Airport. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition to the Worcester Regional Airport, Massport has pursued a variety of initiatives to promote the use of other regional airports and travel modes with the goal of relieving traffic growth pressures at Logan Airport. For example, in November 1999, Massport and Governor Cellucci co-sponsored a Regional Transportation Summit of the New England Governors and transportation officials. The Summit focused on joint marketing among the New England commercial service airports and the joint promotion of rail and road initiatives that will foster an efficient and balanced regional transportation system. A second summit was held in Rhode Island in December 2000. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a comprehensive discussion of Massport's regional transportation planning initiatives. Massport disagrees that its record in diverting traffic to other airports is unsuccessful. Since 1996 eight out of ten new passengers in New England were directed to regional airports, which include T.F. Green/Providence, Worcester Regional, and Manchester airports. In 1999, Massport estimates that regional airports attracted 2.4 million passengers that would have otherwise used Logan Airport.

Bcc: Arthur Pugsley@MEPA@EOEA
From: <lyager@uism.bu.edu>
Subject: Logan Airport Expansion
Date: Tuesday, April 20, 1999 13:26:17 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 387

Dear Sir:

I am writing to discourage any attempt on the part of Logan Airport and Massport to expand runways and thus airplane usage. I have been a resident of Somerville for 20 years, and have definately noticed a large incresae in jets flying over the city in the last two or three years. The idea of three times the traffic is absurd and a definate infringement on my quality of life. If Massport needs more airplanes coming into the area, let them move out to Hanscom Field and expand there or some other place not as densly populated as Somerville and the greater Boston Urban area. Many cities can support more than one major airport. Boston could as well. I definately oppose any runway or flight expansion.

387.1

Thank You:

Lawrence A. Yager
Columbus Ave #2
Somerville, MA. 02143

lyager@bu.edu

Letter 387
Lawrence A. Yager
Private Citizens: Somerville

Code	Topic 1	Topic 2	Comment	Response
387.1	Regional Transportation	Regional Airports	....If Massport needs more airplanes coming into the area, let them move out to Hanscom Field and expand there or some other place not as densely populated as Somerville and the greater Boston urban area....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers. but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered. LETTER 388

All comments must be received April 22. 1999
All mail concerning the environmental impact review process including filings. comments. and all associated materials must be addressed to:

Bob Durand. Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. #10458
100 Cambridge Street - 20th Floor
Boston. MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I live in West Roxbury under the flight path of planes using Runway 27. The noise the planes make when wind conditions make the use of Runway 27 necessary, is very disturbing. It is heard from the first thing in the morning until one goes to sleep at night. It diminishes the quality of life. It interrupts television viewing, talking on the telephone and sometimes, even conversations.

I submit that it is an imposition on the communities of Southwest Boston and neighboring towns to construct Runway 14/32 which will triple the air traffic over those areas. The communities affected are densely populated, and it seems to me unfair to further burden those communities with noise and pollution. 388.1

There is an airport at Hanscom Field that is underutilized and could be developed. Fewer homes would be affected. 388.2

It is mainly small aircraft that cause congestion at Logan. I believe that you should experiment with peak time pricing to keep down the volume of air traffic and reduce delays in the short term, and develop a second regional airport as a long term solution. 388.3

Joanne McGrath
Name Joanne McGrath
Address 216 Stratford St
West Roxbury MA 02132
Phone 617-327-1479

Letter 388
Joanne McGrath
Private Citizens: West Roxbury

Code	Topic 1	Topic 2	Comment	Response
388.1	Alternatives	Runway 14/32	...Runway 14/32...will triple the air traffic over [the communities of Southwest Boston]...The communities affected are densely populated, and it seems to me unfair to further burden those communities with noise and pollution.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.
388.2	Regional Transportation	Regional Airports	There is an airport at Hanscom Field that is underutilized and could be developed. Fewer homes would be affected.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Code	Topic 1	Topic 2	Comment	Response
388.3	Alternatives	Peak Period Pricing	....you should experiment with peak time pricing to keep down the volume of air traffic and reduce delays in the short term,...	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport, and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5 of the Supplemental DEIS/FEIR.

ANDREA **TAAFFE**

Garden Design & Landscape Consultation

178 Perham Street
West Roxbury, MA 02132
617.327.9369

LETTER 389

Arthur Pugsley
Exec. Office of Environmental Affairs
Atten: M.E.P.A. file #10458
100 Cambridge St. 20th floor
Boston, Mass. 02202

4-14-99

Dear Mr. Pugsley,

I am writing to you as a resident of the West Roxbury section of the city of Boston and as an environmental educator who works with urban school children.

As a resident I oppose the proposed new runway for the following reasons which affect my, my family's and my community's quality of life.

1. Currently planes dump fuel before landing over my home eventhough this is not supposed to happen. You might ask how I know this. I work at home and often take a break by going into my yard. It is during these times that I smell airplane fuel, a smell familiar to me from my numerous trips to airports. At first I thought it could be from a truck but no trucks were in the area. I would then look up and notice that a plane had just flown over. Thus I came to this conclusion. Because of this experience I have no faith in Massport's ability to enforce regulations which affect our environment. It appears to me that the public is told whatever they need to hear and then it is business as usual. 389.1
2. I use Forest Hills Cemetery in Jamaica Plain and Franklin Park in Dorchester as outdoor classrooms for environmental education for students from the Boston Public Schools and private schools. Often the roar of planes overhead mars their experience. We must stop what we are doing and wait until the noise stops. These children live in the city where this type of education is so important. Many of them do not have access to the environment other than these experiences. The new runway would only make this problem worse. Do not these children have the right to enjoy the quiet of nature like many of their suburban counterparts? They have a right to hear birds sing and listen to the rustle of leaves. By learning about the environment these students will become the caretakers of our urban centers during the twenty first century. Please do not take away their future. 389.2

I urge you not to approve the building of the new runway. I feel that planes should be diverted to Hanscom Field. Yes, problems exist with access to this field but I believe our planners at Massport could work out a solution if the were committed to this approach. Other major cities have airports along the inner beltway in addition to the core of the city. The burden of air traffic needs to be spread out throughout Eastern Massachusetts. 389.3

Sincerely,

Andrea Taaffe

Andrea Taaffe

Letter 389
Andrea Taaffe
Private Citizens: West Roxbury

Code	Topic 1	Topic 2	Comment	Response
389.1	Air Quality	Emissions	...I oppose the proposed new runway [because]: 1. Currently planes dump fuel before landing over my home....	Fuel dumping (dropping) typically occurs only in aircraft emergencies. Air traffic control makes every effort to direct the pilot away from residential and other populated areas during this procedure. Notwithstanding the above, the Federal Aviation Administration (FAA) requirements allow fuel dumping at or above an altitude of 2,000 feet. This distance above ground allows much of the fuel to evaporate and disperse. Thus, emergency fuel dumping should have little or no impact on human health and welfare.
389.2	Noise	Impacts	...I oppose the proposed new runway [because]: 2. ....The new runway would only make...[noise over Franklin Park] worse....	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.
389.3	Regional Transportation	Regional Airports	....The burden of air traffic needs to be spread out throughout eastern Massachusetts.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

LETTER 390

Ronald A. Fama
11 St. Anne Road
E. Weymouth, MA 02189
(781) 340-0386

April 22, 1999

Secretary of Environmental Affairs
ATT; Mr. Arthur Pugsley
MEPA Office – EOEA-NO 10458
100 Cambridge Street – 20th Floor
Boston, MA 02202

Dear Mr. Pugsley:

The enclosed documentation represents an example of the abuse sustained by East Weymouth and the South Shore in general. There is no reason to believe that a new runway will not exacerbate an already intolerable condition. 390.1

I will contact your office with more complete data and information but I just wanted to give you some idea of the battering and degraded citizenship we now endure. Something must be done to alleviate the current suffering and I urge you to interfere in any way possible to stop the proposed additional runway 14-33. I will be in contact with you as soon as possible. Feel free to contact me at the above telephone number.

Thank you.

Sincerely yours,

Ronald A. Fama

Ronald A. Fama

RAF:jmf

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 03:30 on 26 Mar 99 to 03:30 on 26 Mar 99

Conditions:

Wind Direction: 290 deg
Wind Speed: 7 Knots
Ceiling: 25000 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 4R

3:30 AM

Complaint Description: Planes are flying overhead 15 minutes apart on a regular schedule.

Massport Report of Investigation: You are affected by jet arrivals on Runway 33L, in use with westerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 00:21 on 25 Mar 99 to
00:21 on 25 Mar 99

Conditions:

Wind Direction: 320 deg
Ceiling: 4400 Ft
Wind Speed: 8 Knots
Visibility: 6.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 22R - 22L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R, in use with northwesterly winds and moderate air traffic demand. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Dino/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 23:06 on 26 Mar 99 to
23:06 on 26 Mar 99

Conditions:

Wind Direction:	0 deg	**Wind Speed:**	0 Knots
Ceiling:	25000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	27 - 33L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You are affected by jet arrivals on Runway 33L, in use with moderate air traffic demand. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 00:42 on 19 Mar 99 to
00:42 on 19 Mar 99

Conditions:

Wind Direction:	250 deg	**Wind Speed:**	15 Knots
Ceiling:	10000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	22R - 22L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with strong westerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 23:57 on 18 Mar 99 to 23:57 on 18 Mar 99

Conditions:

Wind Direction:	270 deg	**Wind Speed:**	16 Knots
Ceiling:	10000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	27 - 33L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You were affected by a B757 that arrived on Runway 33L. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

important

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

3:52 AM

Disturbance Date and Time: 03:52 AM on 19 Aug 98 to
03:52 on 19 Aug 98

Conditions:

Wind Direction:	350 deg	**Wind Speed:**	8 Knots
Ceiling:	4100 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L
Departures:	15R

Complaint Description: I was blasted out of bed.

Massport Report of Investigation: You were affected by an A300 which arrived on Logan's Runway 33L, in use with northerly winds. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 01:15 on 03 Nov 98 to
01:15 on 03 Nov 98

Conditions:

Wind Direction:	290 deg	**Wind Speed:**	12 Knots
Ceiling:	4800 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	22R - 22L

Complaint Description: I heard an aircraft at 1:15 am. It woke me up. Please identify and send 5 copies.

Massport Report of Investigation: You were affected by a DC8 which departed from Logan's Runway 22R. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 00:19 on 10 Apr 99 to
00:19 on 10 Apr 99

Conditions:

Wind Direction:	0 deg	**Wind Speed:**	12 Knots
Ceiling:	3300 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals: 33L
Departures: 15R

Complaint Description: There is too much aircraft noise. Send a copy to the Selectman.

Massport Report of Investigation: You are affected by jet arrivals on Runway 33L, in use with strong northerly winds. A copy of this complaint has been sent to your Selectman as you requested.

Massport Reporter: Dino/NAO

Send Copy: No

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 18:50 on 31 Mar 99 to 18:50 on 31 Mar 99

Conditions:

Wind Direction:	300 deg	**Wind Speed:**	10 Knots
Ceiling:	35000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	27 - 33L

Complaint Description: There is too much aircraft noise. I want a log from 5 to 7 am, including the altitudes.

Massport Report of Investigation: You are affected by jet arrivals on Runway 33L, in use with northwesterly winds. The information you requested has been enclosed.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

Very services!
(do we have civil rights?)

OAG Departures

For: Boston Logan International

Date Printed: April 16, 1999 Time: 09:27:58

massport

Report Conditions

Days of Operation is like %3%
Effective Date is <= 31 Mar 99
Discontinue Date is >= 31 Mar 99
Departure Time is between 05:00:00,07:00:00

Departure Time	diagraph name	Flight Number	Model Type
05:40	DL	6913	J41
05:50	DL	561	767
05:55	TW	203	M80
06:00	CO	341	M80
06:00	DL	1965	757
06:00	DL	6350	SF3
06:00	HP	40	320
06:00	NW	719	757
06:00	US	1189	733
06:00	US	421	733
06:05	AA	1011	M80
06:05	UA	589	735
06:09	UA	787	319
06:10	CA	8103	757
06:10	CO	1737	733
06:10	DL	1200	M80
06:10	NW	1191	757
06:15	AA	1711	AB6
06:15	US	306	734
06:16	AA	2329	757
06:20	US	1104	734
06:25	CP	5937	100
06:30	AA	4936	SF3
06:30	CO	339	M80
06:30	DL	1821	72S
06:30	UA	4699	J41
06:30	US	1854	734
06:30	US	29	757
06:30	US	6171	72S
06:30	W9	501	73S

Twenty to 24 - AM!

Departure Time	diagraph name	Flight Number	Model Type
06:40	FL	343	D9S
06:40	US	267	733
06:40	YX	202	DC9
06:45	UA	1017	319
06:45	US	333	M80
06:50	FL	361	D9S
06:50	UA	199	757
06:50	UA	7159	J41
06:55	JI	3	320
06:55	US	4600	BE1
07:00	AA	1923	757
07:00	CO	343	M80
07:00	CP	2151	F28
07:00	DL	2451	73S
07:00	DL	3969	CRJ
07:00	DL	565	757
07:00	DL	6355	SF3
07:00	DL	6409	SF3
07:00	HP	821	320
07:00	NW	9355	SF3
07:00	NW	9409	SF3
07:00	UA	169	757
07:00	US	1256	757
07:00	US	1924	733
07:00	US	6161	72S

OAG Arrivals

For: Boston Logan International

Date Printed: April 16, 1999 Time: 09:27:10

massport

Report Conditions

Days of Operation is like %3%
Effective Date is <= 31 Mar 99
Discontinue Date is >= 31 Mar 99
Destination Airport is = BOS
Arrival Time is between 05:00:00,07:00:00

Arrival Time	diagraph name	Flight Number	Model Type
05:09	W0	150	D9F
05:49	5X	16	D8F
05:57	5X	14	75F
06:02	AA	138	757
06:04	HP	826	320
06:09	W0	390	D8F
06:26	UA	182	762
06:27	AA	192	757
06:27	CI	904	757
06:27	ER	449	72F
06:28	NZ	4806	757
06:28	UA	168	757
06:30	AA	6409	SF3
06:35	AA	6413	SF3
06:35	US	4600	BE1
06:40	AA	198	757
06:40	CI	912	757
06:50	9K	702	CNA
06:50	CO	4770	BE1
06:50	US	5268	BE1
07:00	1K	750	72F
07:00	US	5312	BE1

77 planes

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 01:15 on 03 Nov 98 to
01:15 on 03 Nov 98

Conditions:

Wind Direction:	290 deg	**Wind Speed:**	12 Knots
Ceiling:	4800 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	22R - 22L

Complaint Description: I heard an aircraft at 1:15 am. It woke me up. Please identify and send 5 copies.

Massport Report of Investigation: You were affected by a DC8 which departed from Logan's Runway 22R. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 00:04 on 04 Nov 98 to
00:04 on 04 Nov 98

Conditions:

Wind Direction: 290 deg **Wind Speed:** 5 Knots
Ceiling: 4400 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 22R - 22L

Complaint Description: The children are being awakened at 12:06 am. The FAA is using the wrong runway configuration at this time.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R, in use with westerly winds. A change in runway configuration occurred at 12:30 am.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

IS THIS THE U.S.A.?

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 19:30 on 30 Oct 98 to
19:30 on 30 Oct 98

Conditions:

Wind Direction:	310 deg	**Wind Speed:**	17 Knots
Ceiling:	7500 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	33L - 33R
Departures:	27 - 33L

right over our sleeping children!

Complaint Description: There was constant noise last night between midnight and 1 am.

Massport Report of Investigation: You are affected by jet arrivals to Logan's Runway 33L, in use from midnight to 5:55 am with strong northwesterly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

This is all night!

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 20:09 on 01 Apr 99 to
20:09 on 01 Apr 99

Conditions:

Wind Direction:	90 deg	**Wind Speed:**	3 Knots
Ceiling:	9000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals: 4R - 4L
Departures: 9-4R-4L

Complaint Description: They are driving us nuts.

Massport Report of Investigation: You are affected by jet departures on Runway 9 and jet arrivals to Runway 4R. A change of runway configuration occurred at midnight.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 18:50 on 31 Mar 99 to
18:50 on 31 Mar 99

Conditions:

Wind Direction: 300 deg **Wind Speed:** 10 Knots
Ceiling: 35000 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 27 - 33L

Complaint Description: There is too much aircraft noise. I want a log from 5 to 7 pm, including the altitudes.

Massport Report of Investigation: You are affected by jet arrivals on Runway 33L, in use with northwesterly winds. The information you requested has been enclosed.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

This will give you some idea of the saturation, and the burden it causes.

OAG Arrivals

For: Boston Logan International

Date Printed: April 6, 1999 Time: 14:00:16

massport

Report Conditions

Days of Operation is like %3%
Effective Date is <= 31 Mar 99
Discontinue Date is >= 31 Mar 99
Destination Airport is = BOS
Arrival Time is between 17:00:00,19:00:00
1000

Arrival Time	diagraph name	Flight Number	Model Type/Runway	FAR Stage/Tail Number
17:00	AF	322	763	Stage 3
17:00	DL	8258	763	Stage 3
17:00	US	225	D93	Stage 2
17:02	W0	1106	D9F	Stage 2
17:03	AA	984	AB6	Stage 3
17:04	EB	314	D8F	
17:04	UA	7294	J31	
17:05	UA	112	319	Stage 3
17:09	AC	386	CRJ	Stage 3
17:09	UA	3118	CRJ	Stage 3
17:10	DL	342	M80	Stage 3
17:10	FI	633	757	Stage 3
17:10	UA	7638	J41	
17:11	US	6090	72S	
17:12	AA	1356	M80	Stage 3
17:14	US	531	733	Stage 3
17:15	BA	215	747	Stage 3
17:15	CO	4856	BE1	
17:15	US	4507	BE1	
17:17	NW	20	D10	Stage 3
17:20	AA	226	757	Stage 3
17:25	CO	360	M80	Stage 3
17:25	TW	7724	J41	
17:25	US	4586	BE1	
17:25	US	774	734	Stage 3
17:26	US	1488	733	Stage 3
17:30	DL	2514	73S	Stage 2
17:30	DL	6924	J41	

Arrival Time	diagraph name	Flight Number	Model Type/Runway	FAR Stage/Tail Number
17:30	UA	4724	J41	
17:31	FL	962	73S	Stage 2
17:35	DL	1840	72S	
17:35	UA	174	762	Stage 3
17:39	US	76	757	Stage 3
17:40	US	5307	BE1	
17:45	US	1264	D93	Stage 2
17:48	HP	67	319	Stage 3
17:49	AA	1782	100	Stage 3
17:49	CP	5926	100	Stage 3
17:50	US	5422	BE1	
17:55	CO	330	M80	Stage 3
17:55	OK	4054	M80	Stage 3
17:59	KL	6802	320	Stage 3
17:59	NW	802	320	Stage 3
18:00	AC	8846	DH1	
18:00	UA	3488	DH1	
18:00	UA	518	72S	
18:00	US	5335	BE1	
18:01	US	377	M80	Stage 3
18:03	AM	5109	M80	Stage 3
18:03	DL	1094	M80	Stage 3
18:03	SR	8333	M88	Stage 3
18:05	US	4524	BE1	
18:07	CO	422	M80	Stage 3
18:08	AM	5040	767	Stage 3
18:08	DL	2040	767	Stage 3
18:10	US	4547	BE1	
18:10	YX	53	D9S	Stage 2
18:13	AA	1372	738	Stage 3
18:15	AA	6582	F28	Stage 2
18:15	CP	2152	F28	Stage 2
18:15	DL	2356	73S	Stage 2
18:17	US	6100	72S	
18:20	US	5816	CRJ	Stage 3
18:21	US	245	733	Stage 3
18:22	DL	210	763	Stage 3
18:26	KL	6038	757	Stage 3
18:26	NW	38	757	Stage 3
18:27	UA	1200	757	Stage 3
18:28	US	868	100	Stage 3
18:30	US	3847	DH8	

Arrival Time	diagraph name	Flight Number	Model Type/Runway	FAR Stage/Tail Number
18:30	US	4682	BE1	
18:30	US	5392	BE1	
18:32	FL	298	D9S	Stage 2
18:32	UA	272	72S	
18:35	5X	2016	D8F	
18:35	AC	8762	DH1	
18:35	DL	1842	72S	
18:35	UA	3498	DH1	
18:35	US	5318	BE1	
18:37	US	392	D93	Stage 2
18:41	TW	730	M80	Stage 3
18:44	AC	388	CRJ	Stage 3
18:44	UA	3062	CRJ	Stage 3
18:45	AA	1508	100	Stage 3
18:45	IB	7105	100	Stage 3
18:50	CO	4777	BE1	
18:50	DL	2502	73S	Stage 2
18:52	US	730	733	Stage 3
18:54	AA	654	M80	Stage 3
18:54	GU	2002	M80	Stage 3
18:54	TA	2002	M80	Stage 3
18:55	US	4631	BE1	
18:55	US	4645	BE1	
18:55	YX	207	D9S	Stage 2
18:59	DL	1866	M80	Stage 3
18:59	OS	8122	M80	Stage 3
18:59	SN	8122	M80	Stage 3
18:59	TP	200	M80	Stage 3
18:59	UA	520	735	Stage 3
19:00	US	987	733	Stage 3

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 01:47 on 10 Mar 99 to 01:47 on 10 Mar 99

AM

Conditions:

Wind Direction: 320 deg **Wind Speed:** 11 Knots
Ceiling: 16000 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 33L - 33R
Departures: 4R

They turn over us at all times (under power)

Complaint Description: I am requesting the aircraft logs from 10 pm on 3/9 until 7 am on 3/10.

Massport Report of Investigation: The information you requested has been attached. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

This is how we are forced to live!!

OAG Arrivals

For: Boston Logan International

Date Printed: March 11, 1999 Time: 13:54:27

massport

Report Conditions

Days of Operation is like %2%
Effective Date is <= 09 Mar 99
Discontinue Date is >= 09 Mar 99
Destination Airport is = BOS
Arrival Time is between 22:00:00,23:59:00
1000

Arrival Time	diagraph name	Flight Number	Model Type/Runway
22:00	US	1146	733
22:05	DL	2322	73S
22:05	DL	2598	73S
22:05	JI	9	320
22:06	UA	7512	J41
22:07	KL	6568	757
22:07	NW	568	757
22:09	DL	404	767
22:20	YX	208	DC9
22:24	US	695	733
22:26	DL	1850	72S
22:26	US	1506	M80
22:30	DL	2442	73S
22:31	UA	358	319
22:32	AA	988	AB6
22:35	DL	6912	J41
22:35	UA	4712	J41
22:36	HP	2824	320
22:38	FL	368	D9S
22:38	TW	152	M80
22:39	US	2672	73M
22:42	AC	810	319
22:42	UA	3240	319
22:44	US	38	757
22:45	DL	2460	73S
22:47	US	66	757
22:50	AA	592	100
22:55	US	6150	72S

Arrival Time	diagraph name	Flight Number	Model Type/Runway
22:58	AA	1078	M80
22:59	KL	6441	757
22:59	NW	441	757
23:00	CO	1900	733
23:02	US	1646	M80
23:03	DL	1898	757
23:06	UA	911	319
23:16	CO	340	M80
23:37	UA	184	757
23:41	NZ	4810	757
23:41	UA	166	757
23:46	CO	426	M80
23:48	AA	194	757
23:49	AA	148	757
23:52	UA	1018	757
23:52	US	1732	734
23:59	DL	1530	M80
23:59	DL	238	757
23:59	HP	2064	320
23:59	JM	4238	757

Number of Records = 48

+34 + planes

82

OAG Arrivals

For: Boston Logan International

Date Printed: March 11, 1999 Time: 13:48:16

massport

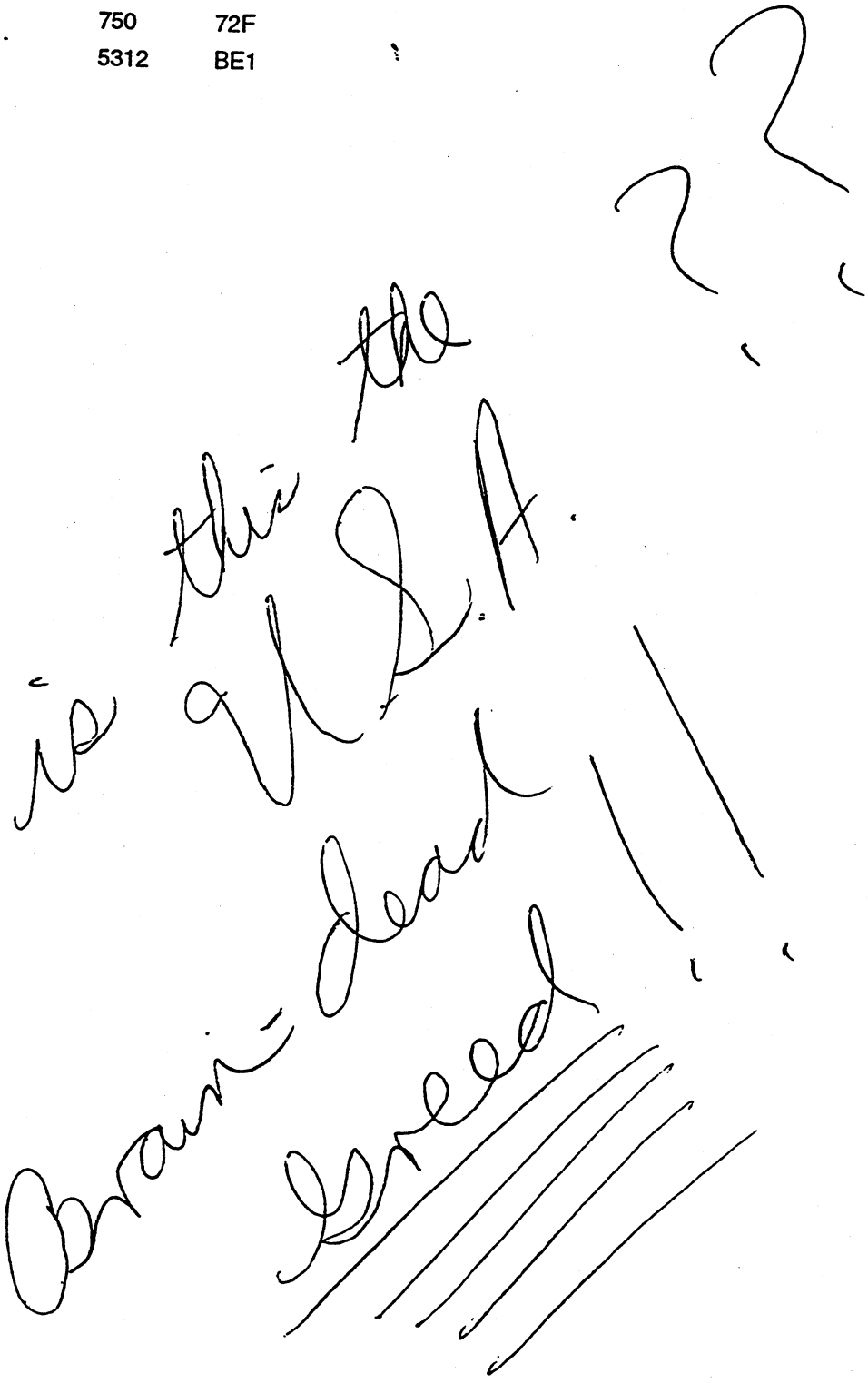
Report Conditions

Days of Operation is like %3%
Effective Date is <= 10 Mar 99
Discontinue Date is >= 10 Mar 99
Destination Airport is = BOS
Arrival Time is between 00:00:00,07:00:00
1000

Arrival Time	diagraph name	Flight Number	Model Type/Runway
00:01	AA	2352	757
00:01	CP	5365	757
00:19	UA	710	319
00:38	DL	1704	757
00:39	US	1170	734
00:45	UA	180	319
00:55	AA	1228	M80
01:04	TW	184	M80
01:13	KL	6354	757
01:13	NW	354	757
04:38	5X	18	D8F
05:09	W0	150	D9F
05:49	5X	16	D8F
05:57	5X	14	75F
06:02	AA	138	757
06:04	HP	826	320
06:09	W0	390	D8F
06:26	UA	182	762
06:27	AA	192	757
06:27	CI	904	757
06:27	ER	449	72F
06:28	NZ	4806	757
06:28	UA	168	757
06:30	AA	6409	SF3
06:30	NW	9409	SF3
06:35	AA	6413	SF3
06:35	NW	9413	SF3
06:35	US	4600	BE1

Arrival Time	diagraph name	Flight Number	Model Type/Runway
06:40	AA	198	757
06:40	CI	912	757
06:50	CO	4770	BE1
06:50	US	5268	BE1
07:00	1K	750	72F
07:00	US	5312	BE1

Number of Records = 34



MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 23:04 on 09 Mar 99 to
23:04 on 09 Mar 99

Conditions:

Wind Direction: 320 deg
Wind Speed: 12 Knots
Ceiling: 20000 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 4R - 4L
Departures: 4R - 4L

Complaint Description: The aircraft noise is excessive.

Massport Report of Investigation: You are affected by jet arrivals on Runway 4R, in use with strong northwesterly winds. A change of runway configuration occurred at 2 am.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

2 AM !

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 23:05 on 04 Mar 99 to
23:05 on 04 Mar 99

Conditions:

Wind Direction: 270 deg **Wind Speed:** 20 Knots
Ceiling: 5000 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

3 at once!

Complaint Description: The aircraft are flying at the wrong time.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with strong westerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

Criminal noise levels
70 - 90 DB!

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 22:24 on 03 Mar 99 to
22:24 on 03 Mar 99

Conditions:

Wind Direction: 130 deg
Ceiling: 1300 Ft
Wind Speed: 11 Knots
Visibility: 2.5 Miles

Runways in Use:

Arrivals: 15R-9-15L
Departures: 9-15R

Complaint Description: Too much noise from Runway 9 departures.

Massport Report of Investigation: You are affected by jet departures on Runway 9, in use with strong southeasterly winds. A change of runway configuration occurred at midnight.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

departures ! - UPS FEDEX etc.

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 21:45 on 16 Mar 99 to
21:45 on 16 Mar 99

Conditions:

Wind Direction: 230 deg
Wind Speed: 9 Knots
Ceiling: 9000 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: The aircraft noise is too loud.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with southwesterly winds. A change of runway configuration occurred at 12:05 am.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

departures!

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 00:24 on 15 Mar 99 to 00:24 on 15 Mar 99

Conditions:

Wind Direction:	80 deg	**Wind Speed:**	11 Knots
Ceiling:	1500 Ft	**Visibility:**	1.5 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	15R

Complaint Description: The aircraft flying over Weymouth are waking up the children.

Massport Report of Investigation: You are affected by jet arrivals on Runway 4R, in use with strong easterly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 23:09 on 01 Mar 99 to 23:09 on 01 Mar 99

Conditions:

Wind Direction: 230 deg
Wind Speed: 15 Knots
Ceiling: 1500 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 22L - 22R
Departures: 22R - 22L

Complaint Description: Please call the Tower. This has to stop! I am also requesting the altitude of planes flying over the coastline.

Massport Report of Investigation: Between 11 and 11:40 pm, there were four planes which departed to the south from Runway 22R. Two were at about 6000 ft, one at about 8000, and one at about 9000 feet when crossing the coastline. The FAA has been notified of your concerns, as requested.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 08:15 on 02 Mar 99 to
08:15 on 02 Mar 99

Conditions:

Wind Direction: 250 deg
Wind Speed: 12 Knots
Ceiling: 7500 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: Over the past two hours, aircraft have been crossing over the coastline at too low of an altitude. The vibrations can be felt through my double pane windows. Please advise the FAA.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with strong westerly winds. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 06:55 on 31 Mar 99 to
06:55 on 31 Mar 99

Conditions:

Wind Direction:	240 deg	**Wind Speed:**	10 Knots
Ceiling:	20000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	27 - 22L
Departures:	22R - 22L

Complaint Description: There was excessive noise between 5 and 7 am. I'd like to have a copy of the flight logs. Something landed around 2 am and woke up my family.

Massport Report of Investigation: You were affected by an MU2 that arrived on Logan's Runway 33L. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

I Got NO LOGS

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 15:14 on 01 Apr 99 to
15:14 on 01 Apr 99

Conditions:

Wind Direction:	80 deg	**Wind Speed:**	9 Knots
Ceiling:	8000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	9-4R-4L

Complaint Description: The Runway 9 departures are too low, too loud, and they are criss crossing with the 4R arrivals right over the same piece of land.

Massport Report of Investigation: The FAA has been notified of your observations and concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 21:02 on 09 Apr 99 to
21:02 on 09 Apr 99

Conditions:

Wind Direction:	120 deg	**Wind Speed:**	8 Knots
Ceiling:	8000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	9-4R-4L

Complaint Description: There is too much noise.

Massport Report of Investigation: You are affected by jet arrivals to Logan's Runway 4R, in use with southeasterly winds and high air traffic demand. A change of runway configuration occurred at 12:15 am.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 07:10 on 14 Apr 99 to
07:10 on 14 Apr 99

Conditions:

Wind Direction: 280 deg
Ceiling: 7000 Ft
Wind Speed: 10 Knots
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

3 planes out [illegible]

Complaint Description: I was disturbed by aircraft landings all night long. There has been serious noise from Runway 22 departures this morning before 7 am. Aircraft are flying too low, and below 6,000 feet. I am requesting logs and altitudes from 5:45 to 7:30.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with westerly winds and high air traffic demand. A change of runway configuration occurred at 9 am. The information you requested has been enclosed.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

OAG Departures

For: Boston Logan International

Date Printed: April 16, 1999 Time: 13:02:14

massport

Report Conditions

Days of Operation is like %3%

Effective Date is <= 14 Apr 99

Discontinue Date is >= 14 Apr 99

Departure Time is between 05:45:00,07:30:00

Departure Time	diagraph name	Flight Number	Model Type
05:50	DL	561	767
05:55	TW	203	M80
06:00	CO	341	M80
06:00	DL	1965	757
06:00	DL	6350	SF3
06:00	HP	40	320
06:00	NW	395	320
06:00	UA	1951	735
06:00	UA	501	757
06:00	US	1769	733
06:00	US	421	733
06:05	UA	1215	757
06:10	NW	434	757
06:15	AA	1813	M80
06:15	CO	493	733
06:15	DL	1200	M80
06:15	US	306	734
06:20	US	1104	734
06:25	AA	1337	757
06:25	UA	4699	J41
06:30	AA	4936	SF3
06:30	AA	881	AB6
06:30	CO	339	M80
06:30	CP	5722	SF3
06:30	DL	1821	72S
06:30	US	1854	757
06:30	US	29	757
06:30	US	6171	72S
06:30	W9	409	73S
06:35	AA	1317	100

Departure Time	diagraph name	Flight Number	Model Type
06:35	CP	5937	100
06:40	FL	343	D9S
06:40	US	267	733
06:40	YX	202	DC9
06:45	UA	1017	319
06:45	US	333	M80
06:45	W9	501	73S
06:50	UA	7159	J41
06:55	JI	3	320
07:00	AA	1019	AB6
07:00	AA	1323	757
07:00	AA	6832	F28
07:00	CO	343	M80
07:00	DL	2451	73S
07:00	DL	5643	CRJ
07:00	DL	6355	SF3
07:00	DL	6409	SF3
07:00	HP	819	320
07:00	UA	1953	319
07:00	US	1256	734
07:00	US	1924	733
07:00	US	6161	72S
07:05	UA	169	757
07:10	CO	4831	BE1
07:10	DL	565	757
07:10	US	4640	BE1
07:10	US	5269	BE1
07:10	US	5350	BE1
07:15	9K	703	CNA
07:15	AC	801	319
07:15	DL	915	M80
07:15	UA	171	762
07:15	UA	3229	319
07:15	US	1485	D93
07:20	DL	2545	73S
07:25	US	4596	BE1
07:30	5X	2015	D8F
07:30	AA	1361	100
07:30	AA	1945	M80
07:30	CO	337	M80
07:30	DL	1823	72S
07:30	DL	2439	73S

Departure Time	diagraph name	Flight Number	Model Type
07:30	US	1535	734
07:30	W0	1105	D9F

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 781-340-0386

Disturbance Date and Time: 08:20 on 31 Mar 99 to
08:20 on 31 Mar 99

Conditions:

Wind Direction: 170 deg
Wind Speed: 5 Knots
Ceiling: 20000 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: Departure flights are too low and off course. There is noise pollution well before curfew. I would like the name of the FAA supervisor on duty right now.

Massport Report of Investigation: ou are affected by jet departures on Runway 22R, in use with southerly winds. A change of runway configuration occurred at 10:15 am. The FAA has been notified of your request.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 08:53 on 15 Aug 98 to
08:53 on 15 Aug 98

Conditions:

Wind Direction:	200 deg	**Wind Speed:**	8 Knots
Ceiling:	4800 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	27 - 22L
Departures:	22R - 22L

Complaint Description: There is severe pollution and noise. The FAA is ignoring the noise abatement rules and sending aircraft directly over this area since 6:00 am. The FAA should follow procedure.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R, in use with southerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 20:56 on 14 Aug 98 to
20:56 on 14 Aug 98

Conditions:

Wind Direction:	200 deg	**Wind Speed:**	12 Knots
Ceiling:	25000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	27 - 22L
Departures:	22R - 22L

Complaint Description: There is constant aircraft noise.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R, in use with strong southerly winds. A change in runway configuration occurred at 11:15 pm.

Massport Reporter: Dino/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 00:47 on 27 Jun 98 to
00:47 on 27 Jun 98

Conditions:

Wind Direction:	220 deg	**Wind Speed:**	3 Knots
Ceiling:	9000 Ft	**Visibility:**	7.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	15R

Complaint Description: The planes flying over Weymouth woke my family up. Please send three copies.

Massport Report of Investigation: You are affected by jet arrivals to Logan's Runway 4R. A change in runway configuration occurred at 1:25 am. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

Quator til 2 AM

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:28 on 29 Jun 98 to
23:28 on 29 Jun 98

Conditions:

Wind Direction: 230 deg
Ceiling: 1500 Ft
Wind Speed: 14 Knots
Visibility: 8.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: We are experiencing aircraft noise since 10:30 pm. This is past the curfew. Please send 3 copies.

Massport Report of Investigation: You are affected by departures from Logan's Runway 22R, in use with strong southwesterly winds. A change in runway configuration occurred at 12:50 am.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

10 min til 1 AM

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:17 on 05 Nov 98 to
23:17 on 05 Nov 98

Conditions:

Wind Direction:	350 deg	**Wind Speed:**	8 Knots
Ceiling:	25000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	9-4R-4L

Complaint Description: The aircraft noise is excessive and at the wrong time.

Massport Report of Investigation: You are affected by jet arrivals to Logan's Runway 4R, in use with northerly winds. A change in runway configuration occurred at midnight.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 20:06 on 05 Nov 98 to
20:06 on 05 Nov 98

Conditions:

Wind Direction:	350 deg	**Wind Speed:**	9 Knots
Ceiling:	25000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	9-4R-4L

Complaint Description: The aircraft noise is excessive.

Massport Report of Investigation: You are affected by jet arrivals to Logan's Runway 4R, in use with northerly winds. A change in runway configuration occurred at midnight.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:45 on 17 Nov 98 to
23:45 on 17 Nov 98

Conditions:

Wind Direction:	350 deg	**Wind Speed:**	10 Knots
Ceiling:	600 Ft	**Visibility:**	9.0 Miles

Runways in Use:

Arrivals:	4R - 4L
Departures:	9-4R-4L

Complaint Description: The aircraft noise is at the wrong time.

Massport Report of Investigation: You are affected by jet arrivals on Runway 4R, in use with northerly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

PM

Disturbance Date and Time: 23:00 on 23 Jun 98 to
23:00 on 23 Jun 98

Conditions:

Wind Direction: 220 **Wind Speed:** 9
Ceiling: 1600 ovc **Visibility:** 5

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

they fly over the same place!

Complaint Description: The same group of planes have been flying over for the last month. They are too low. There is noise after 11:00 pm. This is a serious problem.

Massport Report of Investigation: You are affected by departures from Logan's Runway 22, in use with southwesterly winds and high air traffic demand. Runway 15R became the primary departure runway at the time of your call.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 06:32 on 23 Jun 98 to
06:32 on 23 Jun 98

Conditions:

Wind Direction: 210 deg **Wind Speed:** 7 Knots
Ceiling: 800 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 22L - 22R
Departures: 15R - 22L

Complaint Description: The aircraft are taking off at least 1/2 hours before the curfew. Send 3 copies. Attn: Nancy Timmerman.

Massport Report of Investigation: You are affected by departures from Logan's Runway 22L, in use with southeasterly winds. A change in runway configuration occurred at 11:00 am. Also please note that Logan Airport is open 24 hours per day.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 00:00 on 20 Jun 98 to 00:00 on 20 Jun 98

Conditions:

Wind Direction: ~~60~~ 70 **Wind Speed:** 5
Ceiling: 100 BKN **Visibility:** 2

Runways in Use:

Arrivals:
Departures:

Complaint Description: I am being awaken by you people. An aircraft flew over my home at midnight.

Massport Report of Investigation: You were affected by an arrival to Logan's Runway 4R. The FAA has been notified of you concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:21 on 30 Jun 98 to
23:21 on 30 Jun 98

Conditions:

Wind Direction:	0 deg	**Wind Speed:**	0 Knots
Ceiling:	3200 Ft	**Visibility:**	6.0 Miles

Runways in Use:

Arrivals:	22L - 22R
Departures:	22R - 22L

Complaint Description: The aircraft noise is at the wrong time.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R. A change in runway configuration occurred at midnight.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 07:52 on 27 Jun 98 to
07:52 on 27 Jun 98

Conditions:

Wind Direction: 270 deg
Ceiling: 8000 Ft
Wind Speed: 12 Knots
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 22L - 22R
Departures: 22R - 22L

Complaint Description: We have serious problems. Since 6 am, the aircraft have been flying low over my home. I was blasted out of bed every few seconds. I have not been receiving my additional copies.

Massport Report of Investigation: You are affected by jet departures from Logan's Runway 22R this morning and arrivals to Logan's Runway 4R last night. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

4 planes at once?

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:22 on 07 Jan 99 to
23:22 on 07 Jan 99

Conditions:

Wind Direction: 300 deg **Wind Speed:** 8 Knots
Ceiling: 7500 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: There is aircraft noise after the curfew again. The kids need to sleep. They have to go to school in the morning.

Massport Report of Investigation: You are affected by jet departures on Runway 22R. The airport is open 24 hours per day. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

They went all night, it is not unusual.

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 09:21 on 11 Jan 99 to
09:21 on 11 Jan 99

Conditions:

Wind Direction: 270 deg
Wind Speed: 11 Knots
Ceiling: 4100 Ft
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: I would like a log from 6 am until 9 am this morning. Runway 22R was in use before 7 am.

Massport Report of Investigation: The information you requested is attached. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Ross DiPietro/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

OAG Jet Departures

For: Boston Logan International

Date Printed: January 14, 1999 Time: 10:07:54

massport

Report Conditions

Days of Operation is like %1%
Effective Date is <= 11 Jan 99
Discontinue Date is >= 11 Jan 99
Departure Time is between 06:00:00,09:00:00
General Type is = Jet
1000

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
06:00	AM	5965	757	02 Dec 98	01 Jan 00	1234567
06:00	CO	341	M80	15 Dec 98	30 Jan 99	123456
06:00	DL	1965	757	02 Dec 98	01 Jan 00	1234567
06:00	HP	40	320	07 Jan 99	01 Jan 00	123456
06:00	UA	275	757	05 Jan 99	16 Jan 99	1234567
06:00	US	17	757	06 Jan 99	01 Jan 00	123456
06:00	US	421	733	06 Jan 99	01 Jan 00	12345
06:00	US	851	733	07 Jan 99	01 Jan 00	12345
06:05	UA	580	735	06 Jan 99	01 Jan 00	12345
06:08	AA	1011	M80	01 Jan 99	29 Jan 99	12345 7
06:08	CP	6735	M80	01 Jan 99	29 Jan 99	12345 7
06:10	CA	8014	320	01 Dec 98	01 Jan 00	1234567
06:10	CO	1737	733	07 Jan 99	01 Jan 00	123456
06:10	DL	1200	M80	10 Jan 99	01 Jan 00	1234567
06:10	NH	7101	757	04 Jan 99	01 Jan 00	1234567
06:10	NW	1191	757	05 Jan 99	30 Jan 99	1234567
06:10	UA	1497	320	06 Jan 99	01 Jan 00	123456
06:10	US	2274	D93	06 Jan 99	01 Jan 00	12345
06:10	US	29	757	06 Jan 99	01 Jan 00	12345
06:10	W9	936	73S	01 Dec 98	11 Jan 99	1234567
06:15	AA	881	AB3	01 Jan 99	29 Jan 99	12345
06:15	US	306	734	06 Jan 99	22 Jan 99	12345
06:18	AA	2329	757	15 Dec 98	29 Jan 99	12345
06:20	AA	754	M80	11 Jan 99	30 Jan 99	123456
06:20	AA	828	757	15 Dec 98	29 Jan 99	12345
06:20	CP	5937	M80	11 Jan 99	30 Jan 99	123456
06:25	AC	380	CRJ	04 Jan 99	01 Jan 00	123456
06:25	UA	3116	CRJ	04 Jan 99	01 Jan 00	123456

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
06:30	AA	650	M80	15 Dec 98	29 Jan 99	12345
06:30	BR	3102	M80	01 Dec 98	01 Jan 00	12345
06:30	CO	336	M80	26 Oct 98	01 Jan 00	12345
06:30	CO	339	M80	15 Dec 98	01 Jan 00	12345
06:30	DL	1820	72S	04 Jan 99	01 Jan 00	12345
06:30	DL	3967	CRJ	01 Dec 98	01 Jan 00	1234567
06:30	US	1510	D93	06 Jan 99	01 Jan 00	12345
06:30	US	1854	734	07 Jan 99	22 Jan 99	12345
06:30	US	2325	D93	07 Jan 99	01 Jan 00	12345
06:30	US	6170	72S	07 Jan 99	01 Jan 00	12345
06:35	US	5811	CRJ	06 Jan 99	01 Jan 00	12345
06:40	DL	3980	CRJ	01 Dec 98	01 Jan 00	1234567
06:40	DL	934	757	11 Jan 99	16 Jan 99	123456
06:40	FL	343	D9S	01 Jan 99	01 Jan 00	123456
06:40	US	1524	M80	06 Jan 99	22 Jan 99	12345 7
06:40	US	1845	757	06 Jan 99	01 Jan 00	1234567
06:40	YX	202	DC9	04 Jan 99	01 Jan 00	123456
06:45	UA	1017	319	06 Jan 99	01 Jan 00	1234567
06:45	UA	160	757	11 Jan 99	29 Jan 99	123456
06:45	US	333	734	06 Jan 99	01 Jan 00	12345
06:50	AA	6727	320	02 Jan 99	01 Jan 00	1234567
06:50	CP	204	320	02 Jan 99	01 Jan 00	1234567
06:50	FL	361	D9S	02 Nov 98	01 Jan 00	123456
06:50	W9	309	73S	01 Dec 98	11 Jan 99	1234567
06:55	US	1696	M80	06 Jan 99	01 Jan 00	12345
07:00	AA	1923	757	15 Dec 98	29 Jan 99	12345
07:00	AA	196	757	15 Dec 98	30 Jan 99	1234567
07:00	AA	6832	F28	01 Jan 99	01 Jan 00	1234567
07:00	CO	343	M80	15 Dec 98	01 Jan 00	1234567
07:00	CO	38	M80	16 Dec 98	01 Jan 00	12345
07:00	CP	2151	F28	01 Jan 99	01 Jan 00	1234567
07:00	DL	2451	73S	01 Oct 98	01 Jan 00	1234567
07:00	DL	2456	73S	01 Dec 98	01 Jan 00	1234567
07:00	DL	2510	73S	01 Oct 98	01 Jan 00	1234567
07:00	DL	3969	CRJ	01 Dec 98	01 Jan 00	123456
07:00	DL	565	757	01 Dec 98	01 Jan 00	1234567
07:00	HP	821	320	07 Jan 99	01 Jan 00	1234567
07:00	UA	169	762	05 Jan 99	01 Jan 00	1234567
07:00	US	1256	734	05 Jan 99	01 Jan 00	123456
07:00	US	1924	733	06 Jan 99	01 Jan 00	1234567
07:00	US	280	D93	06 Jan 99	01 Jan 00	12345
07:00	US	395	M80	07 Jan 99	01 Jan 00	12345

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
07:00	US	6160	72S	07 Jan 99	01 Jan 00	123456
07:00	YX	43	D9S	04 Jan 99	01 Jan 00	12345
07:01	AA	1019	AB3	01 Jan 99	30 Jan 99	1234567
07:05	AC	800	319	29 Dec 98	01 Jan 00	12345
07:05	JI	3	100	01 Sep 98	01 Jan 00	1234567
07:05	UA	3228	319	29 Dec 98	01 Jan 00	12345
07:05	US	1804	73S	07 Jan 99	01 Jan 00	12345
07:10	DL	198	757	02 Dec 98	01 Jan 00	1234567
07:10	DL	915	M80	02 Dec 98	01 Jan 00	12345 7
07:10	JI	650	100	01 Oct 98	01 Jan 00	123456
07:10	UA	170	757	05 Jan 99	01 Jan 00	1234567
07:10	UA	171	762	05 Jan 99	01 Jan 00	1234567
07:15	AC	801	319	04 Jan 99	01 Jan 00	12345
07:15	CA	8013	757	01 Dec 98	01 Jan 00	12345 7
07:15	NW	348	757	05 Jan 99	30 Jan 99	1234567
07:15	UA	3229	319	04 Jan 99	01 Jan 00	12345
07:15	US	1485	D93	06 Jan 99	01 Jan 00	12345
07:20	DL	1224	757	01 Dec 98	01 Jan 00	1234567
07:20	NW	380	72S	06 Jan 99	30 Jan 99	1234567
07:21	AA	807	100	15 Dec 98	30 Jan 99	123456
07:21	CP	5923	100	11 Jan 99	30 Jan 99	1234567
07:29	AA	769	M80	06 Jan 99	29 Jan 99	12345
07:30	AA	108	757	05 Jan 99	30 Jan 99	1234567
07:30	CO	337	M80	15 Dec 98	01 Jan 00	12345
07:30	CO	370	M80	15 Dec 98	01 Jan 00	12345
07:30	DL	1822	72S	02 Jan 99	01 Jan 00	123456
07:30	DL	2545	73S	01 Dec 98	01 Jan 00	1234567
07:30	DL	752	M80	01 Dec 98	01 Jan 00	1234567
07:30	US	1535	734	10 Nov 98	01 Jan 00	1234567
07:30	US	1698	100	06 Jan 99	01 Jan 00	123456
07:30	US	68	757	07 Jan 99	01 Jan 00	1234567
07:35	AA	596	AB3	15 Dec 98	29 Jan 99	12345
07:35	SA	7301	AB3	01 Jan 99	30 Jan 99	1234567
07:38	CO	1222	M80	07 Jan 99	29 Jan 99	12345
07:40	DL	1184	72S	01 Dec 98	01 Jan 00	1234567
07:40	DL	2439	73S	01 Oct 98	01 Jan 00	1234567
07:40	FL	360	D9S	02 Nov 98	01 Jan 00	123456
07:42	CO	233	M80	15 Dec 98	01 Jan 00	1234567
07:44	UA	504	72S	05 Jan 99	01 Jan 00	12345
07:45	AA	129	757	05 Jan 99	30 Jan 99	1234567
07:45	AA	146	757	06 Jan 99	30 Jan 99	1234567
07:45	KL	6723	757	05 Jan 99	30 Jan 99	1234567

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 20:10 on 19 Jan 99 to
20:10 on 19 Jan 99

Conditions:

Wind Direction: 260 deg
Ceiling: 4800 Ft
Wind Speed: 15 Knots
Visibility: 10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: There is too much aircraft noise.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with strong westerly winds. A change of runway configuration occurred at midnight.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
07:45	NW	723	757	05 Jan 99	30 Jan 99	1234567
07:45	UA	505	72S	06 Jan 99	01 Jan 00	1234567
07:45	UA	988	735	06 Jan 99	01 Jan 00	1234567
07:45	US	520	M80	06 Jan 99	01 Jan 00	12345
07:45	W9	385	73S	01 Dec 98	11 Jan 99	1234567
07:50	UA	1031	757	05 Jan 99	01 Jan 00	1234567
07:50	US	299	734	06 Jan 99	22 Jan 99	12345 7
07:50	YX	203	D9S	04 Jan 99	01 Jan 00	12345
07:54	TW	192	M80	02 Jan 99	01 Jan 00	1234567
07:57	CO	1818	733	07 Jan 99	01 Jan 00	12345
08:00	AA	1547	M80	15 Dec 98	30 Jan 99	1234567
08:00	AA	195	757	15 Dec 98	30 Jan 99	1234567
08:00	CI	903	757	05 Jan 99	30 Jan 99	1234567
08:00	CO	345	M80	15 Dec 98	01 Jan 00	12345
08:00	DL	2314	73S	01 Dec 98	01 Jan 00	1234567
08:00	DL	2503	73S	01 Oct 98	01 Jan 00	1234567
08:00	UA	172	757	05 Jan 99	01 Jan 00	1234567
08:00	UA	178	320	10 Jan 99	29 Jan 99	1234567
08:00	US	358	D93	06 Jan 99	01 Jan 00	1234567
08:00	US	373	100	07 Jan 99	01 Jan 00	12345
08:00	US	6001	72S	07 Jan 99	01 Jan 00	123456
08:01	LH	6589	727	05 Jan 99	01 Jan 00	1234567
08:01	UA	1762	72S	05 Jan 99	01 Jan 00	1234567
08:04	AA	1038	M80	06 Jan 99	29 Jan 99	12345
08:05	AC	381	CRJ	04 Jan 99	01 Jan 00	123456
08:05	UA	3143	CRJ	04 Jan 99	01 Jan 00	123456
08:05	UA	837	757	05 Jan 99	01 Jan 00	1234567
08:05	US	1181	733	06 Jan 99	22 Jan 99	12345 7
08:05	US	2673	73M	06 Jan 99	01 Jan 00	1234567
08:05	W9	936	73S	01 Dec 98	11 Jan 99	1234567
08:10	AS	5095	757	05 Jan 99	30 Jan 99	1234567
08:10	DL	323	757	01 Dec 98	01 Jan 00	1234567
08:10	DL	464	L10	01 Dec 98	01 Jan 00	1234567
08:10	FL	292	D9S	02 Nov 98	01 Jan 00	123456
08:10	HP	2643	320	08 Jan 99	01 Jan 00	1234567
08:10	NW	95	757	05 Jan 99	30 Jan 99	1234567
08:10	UA	1208	757	05 Jan 99	01 Jan 00	123456
08:10	US	28	757	07 Jan 99	01 Jan 00	123456
08:11	AA	1679	M80	06 Jan 99	29 Jan 99	12345
08:15	AA	11	757	05 Jan 99	30 Jan 99	1234567
08:15	DL	433	763	01 Dec 98	01 Jan 00	1234567
08:15	NW	388	D95	05 Jan 99	30 Jan 99	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
08:15	TW	751	M80	17 Dec 98	01 Jan 00	1234567
08:15	US	238	D93	06 Jan 99	01 Jan 00	1234567
08:15	US	241	733	07 Jan 99	01 Jan 00	12345 7
08:15	US	52	757	07 Jan 99	01 Jan 00	123456
08:25	W9	550	73S	01 Dec 98	11 Jan 99	1234567
08:30	CO	344	M80	15 Dec 98	01 Jan 00	123456
08:30	DL	1824	72S	01 Dec 98	01 Jan 00	1234567
08:30	HP	61	319	07 Jan 99	01 Jan 00	123456
08:30	UA	233	319	05 Jan 99	01 Jan 00	123456
08:30	US	1021	733	06 Jan 99	01 Jan 00	1234567
08:30	US	1670	D93	06 Jan 99	01 Jan 00	12345 7
08:30	US	1914	D93	06 Jan 99	01 Jan 00	1234567
08:40	DL	2433	73S	02 Dec 98	01 Jan 00	1234567
08:40	DL	350	L10	02 Dec 98	01 Jan 00	1234567
08:40	DL	3970	CRJ	01 Dec 98	01 Jan 00	1234567
08:40	TR	712	L10	01 Jan 99	01 Jan 00	1234567
08:45	AA	449	M80	15 Dec 98	30 Jan 99	1234567
08:45	AA	744	M80	15 Dec 98	29 Jan 99	12345
08:45	BA	238	777	26 Dec 98	01 Jan 00	1234567
08:45	CP	5934	M80	01 Jan 99	29 Jan 99	12345
08:45	DL	3983	CRJ	01 Dec 98	01 Jan 00	1234567
08:45	UA	506	72S	05 Jan 99	01 Jan 00	1234567
08:50	KL	6249	757	05 Jan 99	30 Jan 99	1234567
08:50	NW	249	757	05 Jan 99	30 Jan 99	1234567
08:53	US	5811	CRJ	06 Jan 99	01 Jan 00	12345
08:55	DL	3968	CRJ	01 Dec 98	01 Jan 00	1234567
09:00	AA	1259	757	01 Jan 99	30 Jan 99	1234567
09:00	AA	156	762	01 Jan 99	01 Jan 00	1234567
09:00	AA	226	757	05 Jan 99	30 Jan 99	1234567
09:00	CA	8016	757	01 Dec 98	01 Jan 00	1234567
09:00	CO	347	M80	14 Dec 98	01 Jan 00	12345 7
09:00	DL	211	757	01 Dec 98	01 Jan 00	1234567
09:00	DL	2461	73S	01 Oct 98	01 Jan 00	1234567
09:00	KP	545	72S	01 Jan 99	01 Jan 00	1234567
09:00	NW	806	D95	06 Jan 99	30 Jan 99	1234567
09:00	UA	165	762	06 Jan 99	01 Jan 00	1234567
09:00	US	370	73S	06 Jan 99	22 Jan 99	12345 7
09:00	US	409	73S	07 Jan 99	22 Jan 99	12345
09:00	US	6020	72S	01 Jan 99	01 Jan 00	1234567

Number of Records = 193

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
09:05	JI	301	100	07 Sep 98	01 Jan 00	1234567
09:10	DL	1069	757	01 Dec 98	01 Jan 00	12345 7
09:10	DL	729	757	02 Dec 98	01 Jan 00	1234567
09:15	CO	1231	M80	07 Jan 99	23 Jan 99	123456
09:15	US	1142	M80	06 Jan 99	01 Jan 00	1234567
09:15	US	216	M80	06 Jan 99	22 Jan 99	12345
09:20	AC	803	319	28 Dec 98	01 Jan 00	1234567
09:20	UA	3231	319	28 Dec 98	01 Jan 00	1234567
09:25	AA	6930	320	02 Jan 99	01 Jan 00	1234567
09:25	CP	205	320	02 Jan 99	01 Jan 00	1234567
09:26	US	31	757	05 Jan 99	01 Jan 00	1234567
09:27	AA	1358	757	01 Jan 99	30 Jan 99	1234567
09:30	AC	802	319	11 Jan 99	01 Jan 00	123456
09:30	CO	346	M80	04 Jan 99	01 Jan 00	12345 7
09:30	DL	1826	72S	02 Jan 99	01 Jan 00	1234567
09:30	UA	3230	319	11 Jan 99	01 Jan 00	123456
09:30	US	1586	D93	06 Jan 99	22 Jan 99	12345 7
09:30	US	381	100	07 Jan 99	01 Jan 00	123456
09:30	US	966	D93	02 Dec 98	01 Jan 00	123456
09:30	US	984	734	02 Dec 98	01 Jan 00	1234567
09:35	JI	25	100	06 Jan 99	01 Jan 00	123456
09:40	AC	382	CRJ	04 Jan 99	01 Jan 00	12345 7
09:40	DL	268	72S	26 Dec 98	01 Jan 00	1234567
09:40	FL	345	D9S	01 Jan 99	01 Jan 00	1234567
09:40	KL	6019	727	06 Jan 99	30 Jan 99	1234567
09:40	NW	19	72S	06 Jan 99	30 Jan 99	1234567
09:40	UA	3058	CRJ	04 Jan 99	01 Jan 00	12345 7
09:42	AA	1329	M80	15 Dec 98	30 Jan 99	1234567
09:42	GU	2003	M80	15 Dec 98	30 Jan 99	1234567
09:45	UA	508	735	05 Jan 99	01 Jan 00	12345 7
09:45	UA	895	320	06 Jan 99	01 Jan 00	1234567
09:50	HP	820	320	07 Jan 99	01 Jan 00	1234567
09:50	UA	201	320	05 Jan 99	16 Jan 99	1234567
09:56	US	728	M80	06 Jan 99	22 Jan 99	12345 7
10:00	CO	349	M80	15 Dec 98	01 Jan 00	12345
10:00	DL	1776	757	02 Dec 98	01 Jan 00	1234567
10:00	HP	2032	320	07 Jan 99	01 Jan 00	1234567
10:00	NW	807	72S	05 Jan 99	30 Jan 99	1234567
10:00	SR	8361	757	28 Nov 98	01 Jan 00	1234567
10:00	US	1242	D93	07 Jan 99	22 Jan 99	12345
10:00	US	2309	100	07 Jan 99	22 Jan 99	12345
10:00	US	6030	72S	07 Jan 99	01 Jan 00	1234567

5:31 AM.

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Departure

Aircraft Disturbance Report

of records?

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 10:15 on 12 Jan 99 to
10:15 on 12 Jan 99

Conditions:

Wind Direction:	230 deg	**Wind Speed:**	16 Knots
Ceiling:	15000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals: 27 - 22L
Departures: 22R - 22L

Complaint Description: I would like the runway logs for arrivals and departures from 5 am to 10 am. I would also like the altitudes of each operation. This is going to Senator Kerry's office.

Massport Report of Investigation: The information you requested is enclosed. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Noise Abatement Office

Send Copy: Yes

cc: FAA Boston Tower Chief

OAG Jet Departures

For: Boston Logan International

Date Printed: January 14, 1999 Time: 10:45:09

massport

Report Conditions

Days of Operation is like %2%
Effective Date is <= 12 Jan 99
Discontinue Date is >= 12 Jan 99
Departure Time is between 05:00:00,10:00:00
General Type is = Jet

5:21 AM

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
05:21	1K	750	72F	27 Oct 98	01 Jan 00	234 6
05:49	EB	14	D8F	01 Dec 98	01 Jan 00	23456
05:50	DL	561	767	02 Dec 98	01 Jan 00	1234567
05:50	TW	203	M80	02 Jan 99	01 Jan 00	1234567
05:55	1A	778	D8F	05 Jan 99	01 Jan 00	2345
06:00	AM	5965	757	02 Dec 98	01 Jan 00	1234567
06:00	CO	341	M80	15 Dec 98	30 Jan 99	123456
06:00	DL	1965	757	02 Dec 98	01 Jan 00	1234567
06:00	HP	40	320	07 Jan 99	01 Jan 00	123456
06:00	UA	275	757	05 Jan 99	16 Jan 99	1234567
06:00	US	17	757	06 Jan 99	01 Jan 00	123456
06:00	US	421	733	06 Jan 99	01 Jan 00	12345
06:00	US	851	733	07 Jan 99	01 Jan 00	12345
06:05	UA	580	735	06 Jan 99	01 Jan 00	12345
06:08	AA	1011	M80	01 Jan 99	29 Jan 99	12345 7
06:08	CP	6735	M80	01 Jan 99	29 Jan 99	12345 7
06:10	CA	8014	320	01 Dec 98	01 Jan 00	1234567
06:10	CO	1737	733	07 Jan 99	01 Jan 00	123456
06:10	DL	1200	M80	10 Jan 99	01 Jan 00	1234567
06:10	NH	7101	757	04 Jan 99	01 Jan 00	1234567
06:10	NW	1191	757	05 Jan 99	30 Jan 99	1234567
06:10	UA	1497	320	06 Jan 99	01 Jan 00	123456
06:10	US	2274	D93	06 Jan 99	01 Jan 00	12345
06:10	US	29	757	06 Jan 99	01 Jan 00	12345
06:15	AA	881	AB3	01 Jan 99	29 Jan 99	12345
06:15	US	306	734	06 Jan 99	22 Jan 99	12345
06:18	AA	2329	757	15 Dec 98	29 Jan 99	12345
06:20	AA	754	M80	11 Jan 99	30 Jan 99	123456
06:20	AA	828	757	15 Dec 98	29 Jan 99	12345

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
06:20	CP	5937	M80	11 Jan 99	30 Jan 99	123456
06:25	AC	380	CRJ	04 Jan 99	01 Jan 00	123456
06:25	UA	3116	CRJ	04 Jan 99	01 Jan 00	123456
06:30	AA	650	M80	15 Dec 98	29 Jan 99	12345
06:30	BR	3102	M80	01 Dec 98	01 Jan 00	12345
06:30	CO	336	M80	26 Oct 98	01 Jan 00	12345
06:30	CO	339	M80	15 Dec 98	01 Jan 00	12345
06:30	DL	1820	72S	04 Jan 99	01 Jan 00	12345
06:30	DL	3967	CRJ	01 Dec 98	01 Jan 00	1234567
06:30	US	1510	D93	06 Jan 99	01 Jan 00	12345
06:30	US	1854	734	07 Jan 99	22 Jan 99	12345
06:30	US	2325	D93	07 Jan 99	01 Jan 00	12345
06:30	US	6170	72S	07 Jan 99	01 Jan 00	12345
06:35	US	5811	CRJ	06 Jan 99	01 Jan 00	12345
06:40	DL	3980	CRJ	01 Dec 98	01 Jan 00	1234567
06:40	DL	934	757	11 Jan 99	16 Jan 99	123456
06:40	FL	343	D9S	01 Jan 99	01 Jan 00	123456
06:40	US	1524	M80	06 Jan 99	22 Jan 99	12345 7
06:40	US	1845	757	06 Jan 99	01 Jan 00	1234567
06:40	YX	202	DC9	04 Jan 99	01 Jan 00	123456
06:45	UA	1017	319	06 Jan 99	01 Jan 00	1234567
06:45	UA	160	757	11 Jan 99	29 Jan 99	123456
06:45	US	333	734	06 Jan 99	01 Jan 00	12345
06:50	AA	6727	320	02 Jan 99	01 Jan 00	1234567
06:50	CP	204	320	02 Jan 99	01 Jan 00	1234567
06:50	FL	361	D9S	02 Nov 98	01 Jan 00	123456
06:55	US	1696	M80	06 Jan 99	01 Jan 00	12345
07:00	AA	1923	757	15 Dec 98	29 Jan 99	12345
07:00	AA	196	757	15 Dec 98	30 Jan 99	1234567
07:00	AA	6832	F28	01 Jan 99	01 Jan 00	1234567
07:00	CO	343	M80	15 Dec 98	01 Jan 00	1234567
07:00	CO	38	M80	16 Dec 98	01 Jan 00	12345
07:00	CP	2151	F28	01 Jan 99	01 Jan 00	1234567
07:00	DL	2451	73S	01 Oct 98	01 Jan 00	1234567
07:00	DL	2510	73S	01 Oct 98	01 Jan 00	1234567
07:00	DL	3969	CRJ	01 Dec 98	01 Jan 00	123456
07:00	DL	565	757	01 Dec 98	01 Jan 00	1234567
07:00	HP	821	320	07 Jan 99	01 Jan 00	1234567
07:00	UA	169	762	05 Jan 99	01 Jan 00	1234567
07:00	US	1256	734	05 Jan 99	01 Jan 00	123456
07:00	US	1924	733	06 Jan 99	01 Jan 00	1234567
07:00	US	280	D93	06 Jan 99	01 Jan 00	12345

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
07:00	US	395	M80	07 Jan 99	01 Jan 00	12345
07:00	US	6160	72S	07 Jan 99	01 Jan 00	123456
07:00	YX	43	D9S	04 Jan 99	01 Jan 00	12345
07:01	AA	1019	AB3	01 Jan 99	30 Jan 99	1234567
07:05	AC	800	319	29 Dec 98	01 Jan 00	12345
07:05	JI	3	100	01 Sep 98	01 Jan 00	1234567
07:05	UA	3228	319	29 Dec 98	01 Jan 00	12345
07:05	US	1804	73S	07 Jan 99	01 Jan 00	12345
07:10	DL	198	757	02 Dec 98	01 Jan 00	1234567
07:10	DL	915	M80	02 Dec 98	01 Jan 00	12345 7
07:10	JI	650	100	01 Oct 98	01 Jan 00	123456
07:10	UA	170	757	05 Jan 99	01 Jan 00	1234567
07:10	UA	171	762	05 Jan 99	01 Jan 00	1234567
07:15	AC	801	319	04 Jan 99	01 Jan 00	12345
07:15	CA	8013	757	01 Dec 98	01 Jan 00	12345 7
07:15	NW	348	757	05 Jan 99	30 Jan 99	1234567
07:15	UA	3229	319	04 Jan 99	01 Jan 00	12345
07:15	US	1485	D93	06 Jan 99	01 Jan 00	12345
07:20	DL	1224	757	01 Dec 98	01 Jan 00	1234567
07:20	NW	380	72S	06 Jan 99	30 Jan 99	1234567
07:21	AA	807	100	15 Dec 98	30 Jan 99	123456
07:21	CP	5923	100	11 Jan 99	30 Jan 99	1234567
07:29	AA	769	M80	06 Jan 99	29 Jan 99	12345
07:30	5X	2015	D8F	27 Oct 98	01 Jan 00	2345
07:30	AA	108	757	05 Jan 99	30 Jan 99	1234567
07:30	CO	337	M80	15 Dec 98	01 Jan 00	12345
07:30	DL	1822	72S	02 Jan 99	01 Jan 00	123456
07:30	DL	2545	73S	01 Dec 98	01 Jan 00	1234567
07:30	DL	752	M80	01 Dec 98	01 Jan 00	1234567
07:30	SY	325	727	05 Jan 99	21 Jan 99	2 4
07:30	US	1535	734	10 Nov 98	01 Jan 00	1234567
07:30	US	1698	100	06 Jan 99	01 Jan 00	123456
07:30	US	68	757	07 Jan 99	01 Jan 00	1234567
07:30	W0	1105	D9F	27 Oct 98	01 Jan 00	234
07:35	AA	596	AB3	15 Dec 98	29 Jan 99	12345
07:35	SA	7301	AB3	01 Jan 99	30 Jan 99	1234567
07:38	CO	1222	M80	07 Jan 99	29 Jan 99	12345
07:40	DL	1184	72S	01 Dec 98	01 Jan 00	1234567
07:40	DL	2439	73S	01 Oct 98	01 Jan 00	1234567
07:40	FL	360	D9S	02 Nov 98	01 Jan 00	123456
07:42	CO	233	M80	15 Dec 98	01 Jan 00	1234567
07:44	UA	504	72S	05 Jan 99	01 Jan 00	12345

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
07:45	AA	129	757	05 Jan 99	30 Jan 99	1234567
07:45	AA	146	757	06 Jan 99	30 Jan 99	1234567
07:45	KL	6723	757	05 Jan 99	30 Jan 99	1234567
07:45	NW	723	757	05 Jan 99	30 Jan 99	1234567
07:45	UA	505	72S	06 Jan 99	01 Jan 00	1234567
07:45	UA	988	735	06 Jan 99	01 Jan 00	1234567
07:45	US	520	M80	06 Jan 99	01 Jan 00	12345
07:50	UA	1031	757	05 Jan 99	01 Jan 00	1234567
07:50	US	299	734	06 Jan 99	22 Jan 99	12345 7
07:50	YX	203	D9S	04 Jan 99	01 Jan 00	12345
07:54	TW	192	M80	02 Jan 99	01 Jan 00	1234567
07:57	CO	1818	733	07 Jan 99	01 Jan 00	12345
08:00	AA	1547	M80	15 Dec 98	30 Jan 99	1234567
08:00	AA	195	757	15 Dec 98	30 Jan 99	1234567
08:00	CI	903	757	05 Jan 99	30 Jan 99	1234567
08:00	CO	345	M80	15 Dec 98	01 Jan 00	12345
08:00	DL	2314	73S	01 Dec 98	01 Jan 00	1234567
08:00	UA	172	757	05 Jan 99	01 Jan 00	1234567
08:00	UA	178	320	10 Jan 99	29 Jan 99	1234567
08:00	US	358	D93	06 Jan 99	01 Jan 00	1234567
08:00	US	373	100	07 Jan 99	01 Jan 00	12345
08:00	US	6001	72S	07 Jan 99	01 Jan 00	123456
08:01	LH	6589	727	05 Jan 99	01 Jan 00	1234567
08:01	UA	1762	72S	05 Jan 99	01 Jan 00	1234567
08:04	AA	1038	M80	06 Jan 99	29 Jan 99	12345
08:05	AC	381	CRJ	04 Jan 99	01 Jan 00	123456
08:05	UA	3143	CRJ	04 Jan 99	01 Jan 00	123456
08:05	UA	837	757	05 Jan 99	01 Jan 00	1234567
08:05	US	1181	733	06 Jan 99	22 Jan 99	12345 7
08:05	US	2673	73M	06 Jan 99	01 Jan 00	1234567
08:10	AS	5095	757	05 Jan 99	30 Jan 99	1234567
08:10	DL	323	757	01 Dec 98	01 Jan 00	1234567
08:10	DL	464	L10	01 Dec 98	01 Jan 00	1234567
08:10	FL	292	D9S	02 Nov 98	01 Jan 00	123456
08:10	HP	2643	[illegible]	08 Jan 99	01 Jan 00	1234567
08:10	NW	95	757	05 Jan 99	30 Jan 99	1234567
08:10	UA	1208	757	05 Jan 99	01 Jan 00	123456
08:10	US	28	757	07 Jan 99	01 Jan 00	123456
08:11	AA	1679	M80	06 Jan 99	29 Jan 99	12345
08:15	AA	11	757	05 Jan 99	30 Jan 99	1234567
08:15	DL	433	763	01 Dec 98	01 Jan 00	1234567
08:15	NW	388	D95	05 Jan 99	30 Jan 99	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
08:15	TW	751	M80	17 Dec 98	01 Jan 00	1234567
08:15	US	238	D93	06 Jan 99	01 Jan 00	1234567
08:15	US	241	733	07 Jan 99	01 Jan 00	12345 7
08:15	US	52	757	07 Jan 99	01 Jan 00	123456
08:30	CO	344	M80	15 Dec 98	01 Jan 00	123456
08:30	DL	1824	72S	01 Dec 98	01 Jan 00	1234567
08:30	HP	61	319	07 Jan 99	01 Jan 00	123456
08:30	UA	233	319	05 Jan 99	01 Jan 00	123456
08:30	US	1021	733	06 Jan 99	01 Jan 00	1234567
08:30	US	1670	D93	06 Jan 99	01 Jan 00	12345 7
08:30	US	1914	D93	06 Jan 99	01 Jan 00	1234567
08:40	DL	2433	73S	02 Dec 98	01 Jan 00	1234567
08:40	DL	350	L10	02 Dec 98	01 Jan 00	1234567
08:40	DL	3970	CRJ	01 Dec 98	01 Jan 00	1234567
08:40	TR	712	L10	01 Jan 99	01 Jan 00	1234567
08:45	AA	449	M80	15 Dec 98	30 Jan 99	1234567
08:45	AA	744	M80	15 Dec 98	29 Jan 99	12345
08:45	BA	238	777	26 Dec 98	01 Jan 00	1234567
08:45	CP	5934	M80	01 Jan 99	29 Jan 99	12345
08:45	DL	3983	CRJ	01 Dec 98	01 Jan 00	1234567
08:45	UA	506	72S	05 Jan 99	01 Jan 00	1234567
08:50	KL	6249	757	05 Jan 99	30 Jan 99	1234567
08:50	NW	249	757	05 Jan 99	30 Jan 99	1234567
08:53	US	5811	CRJ	06 Jan 99	01 Jan 00	12345
08:55	DL	3968	CRJ	01 Dec 98	01 Jan 00	1234567
09:00	AA	1259	757	01 Jan 99	30 Jan 99	1234567
09:00	AA	156	762	01 Jan 99	01 Jan 00	1234567
09:00	AA	226	757	05 Jan 99	30 Jan 99	1234567
09:00	CA	8016	757	01 Dec 98	01 Jan 00	1234567
09:00	CO	347	M80	14 Dec 98	01 Jan 00	12345 7
09:00	DL	211	757	01 Dec 98	01 Jan 00	1234567
09:00	DL	2461	73S	01 Oct 98	01 Jan 00	1234567
09:00	KP	545	72S	01 Jan 99	01 Jan 00	1234567
09:00	NW	806	D95	06 Jan 99	30 Jan 99	1234567
09:00	UA	165	762	06 Jan 99	01 Jan 00	1234567
09:00	US	370	73S	06 Jan 99	22 Jan 99	12345 7
09:00	US	409	73S	07 Jan 99	22 Jan 99	12345
09:00	US	6020	72S	01 Jan 99	01 Jan 00	1234567
09:03	AA	2353	757	15 Dec 98	30 Jan 99	1234567
09:03	CP	5921	757	15 Dec 98	30 Jan 99	1234567
09:05	AA	6559	320	01 Jan 99	01 Jan 00	1234567
09:05	CP	201	320	01 Nov 98	01 Jan 00	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
09:05	JI	301	100	07 Sep 98	01 Jan 00	1234567
09:10	DL	1069	757	01 Dec 98	01 Jan 00	12345 7
09:10	DL	729	757	02 Dec 98	01 Jan 00	1234567
09:15	CO	1231	M80	07 Jan 99	23 Jan 99	123456
09:15	US	1142	M80	06 Jan 99	01 Jan 00	1234567
09:15	US	216	M80	06 Jan 99	22 Jan 99	12345
09:20	AC	803	319	28 Dec 98	01 Jan 00	1234567
09:20	UA	3231	319	28 Dec 98	01 Jan 00	1234567
09:25	AA	6930	320	02 Jan 99	01 Jan 00	1234567
09:25	CP	205	320	02 Jan 99	01 Jan 00	1234567
09:26	US	31	757	05 Jan 99	01 Jan 00	1234567
09:27	AA	1358	757	01 Jan 99	30 Jan 99	1234567
09:30	AC	802	319	11 Jan 99	01 Jan 00	123456
09:30	CO	346	M80	04 Jan 99	01 Jan 00	12345 7
09:30	DL	1826	72S	02 Jan 99	01 Jan 00	1234567
09:30	UA	3230	319	11 Jan 99	01 Jan 00	123456
09:30	US	1586	D93	06 Jan 99	22 Jan 99	12345 7
09:30	US	381	100	07 Jan 99	01 Jan 00	123456
09:30	US	966	D93	02 Dec 98	01 Jan 00	123456
09:30	US	984	734	02 Dec 98	01 Jan 00	1234567
09:35	JI	25	100	06 Jan 99	01 Jan 00	123456
09:40	AC	382	CRJ	04 Jan 99	01 Jan 00	12345 7
09:40	DL	268	72S	26 Dec 98	01 Jan 00	1234567
09:40	FL	345	D9S	01 Jan 99	01 Jan 00	1234567
09:40	KL	6019	727	06 Jan 99	30 Jan 99	1234567
09:40	NW	19	72S	06 Jan 99	30 Jan 99	1234567
09:40	UA	3058	CRJ	04 Jan 99	01 Jan 00	12345 7
09:42	AA	1329	M80	15 Dec 98	30 Jan 99	1234567
09:42	GU	2003	M80	15 Dec 98	30 Jan 99	1234567
09:45	UA	508	735	05 Jan 99	01 Jan 00	12345 7
09:45	UA	895	320	06 Jan 99	01 Jan 00	1234567
09:50	HP	820	320	07 Jan 99	01 Jan 00	1234567
09:50	UA	201	320	05 Jan 99	16 Jan 99	1234567
09:56	US	728	M80	06 Jan 99	22 Jan 99	12345 7
10:00	CO	349	M80	15 Dec 98	01 Jan 00	12345
10:00	DL	1776	757	02 Dec 98	01 Jan 00	1234567
10:00	HP	2032	320	07 Jan 99	01 Jan 00	1234567
10:00	NW	807	72S	05 Jan 99	30 Jan 99	1234567
10:00	SR	8361	757	28 Nov 98	01 Jan 00	1234567
10:00	US	1242	D93	07 Jan 99	22 Jan 99	12345
10:00	US	2309	100	07 Jan 99	22 Jan 99	12345
10:00	US	6030	72S	07 Jan 99	01 Jan 00	1234567

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 20:52 on 12 Jan 99 to 20:52 on 12 Jan 99

Conditions:

Wind Direction:	220 deg	**Wind Speed:**	8 Knots
Ceiling:	11000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	27 - 22L
Departures:	22R - 22L

Complaint Description: There is too much air traffic.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with southwesterly winds. A change of runway configuration occurred at midnight.

Massport Reporter: Arduino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 09:15 on 17 Jan 99 to
09:15 on 17 Jan 99

Conditions:

Wind Direction: 250 deg **Wind Speed:** 10 Knots
Ceiling: 16000 Ft **Visibility:** 10.0 Miles

Runways in Use:

Arrivals: 22L - 22R
Departures: 22R - 22L

Complaint Description: I would like to request a copy of the runway log from 6 am until 9 am.

Massport Report of Investigation: The information you requested is attached. The FAA has been notified of your concerns and observations by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

OAG Jet Departures

For: Boston Logan International

Date Printed: January 19, 1999 Time: 14:16:17

massport

Report Conditions

Days of Operation is like %7%
Effective Date is <= 17 Jan 99
Discontinue Date is >= 17 Jan 99
Departure Time is between 06:00:00,09:00:00
General Type is = Jet
1000

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
06:00	AM	5965	757	02 Dec 98	01 Jan 00	1234567
06:00	DL	1965	757	02 Dec 98	01 Jan 00	1234567
06:00	US	17	734	10 Jan 99	01 Jan 00	7
06:08	AA	1011	M80	01 Jan 99	29 Jan 99	12345 7
06:08	CP	6735	M80	01 Jan 99	29 Jan 99	12345 7
06:10	CA	8014	320	01 Dec 98	01 Jan 00	1234567
06:10	DL	1200	M80	10 Jan 99	01 Jan 00	1234567
06:10	NH	7101	757	04 Jan 99	01 Jan 00	1234567
06:10	NW	1191	757	05 Jan 99	30 Jan 99	1234567
06:10	UA	1497	319	10 Jan 99	01 Jan 00	7
06:15	AA	881	AB3	01 Jan 99	30 Jan 99	67
06:18	AA	2355	M80	10 Jan 99	24 Jan 99	7
06:20	AA	828	757	19 Dec 98	30 Jan 99	67
06:30	AA	650	100	20 Dec 98	24 Jan 99	7
06:30	DL	3967	CRJ	01 Dec 98	01 Jan 00	1234567
06:40	DL	3980	CRJ	01 Dec 98	01 Jan 00	1234567
06:40	DL	934	72S	17 Jan 99	17 Jan 99	7
06:40	US	1524	M80	06 Jan 99	22 Jan 99	12345 7
06:40	US	1845	757	06 Jan 99	01 Jan 00	1234567
06:45	UA	1017	319	06 Jan 99	01 Jan 00	1234567
06:50	AA	6727	320	02 Jan 99	01 Jan 00	1234567
06:50	CP	204	320	02 Jan 99	01 Jan 00	1234567
07:00	AA	1923	757	19 Dec 98	30 Jan 99	67
07:00	AA	196	757	15 Dec 98	30 Jan 99	1234567
07:00	AA	6832	F28	01 Jan 99	01 Jan 00	1234567
07:00	CO	343	M80	15 Dec 98	01 Jan 00	1234567
07:00	CP	2151	F28	01 Jan 99	01 Jan 00	1234567
07:00	DL	2451	73S	01 Oct 98	01 Jan 00	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
07:00	DL	2456	73S	01 Dec 98	01 Jan 00	1234567
07:00	DL	2510	73S	01 Oct 98	01 Jan 00	1234567
07:00	DL	565	757	01 Dec 98	01 Jan 00	1234567
07:00	HP	821	320	07 Jan 99	01 Jan 00	1234567
07:00	UA	169	762	05 Jan 99	01 Jan 00	1234567
07:00	US	1924	733	06 Jan 99	01 Jan 00	1234567
07:01	AA	1019	AB3	01 Jan 99	30 Jan 99	1234567
07:05	JI	3	100	01 Sep 98	01 Jan 00	1234567
07:10	DL	198	757	02 Dec 98	01 Jan 00	1234567
07:10	DL	915	M80	02 Dec 98	01 Jan 00	12345 7
07:10	UA	170	757	05 Jan 99	01 Jan 00	1234567
07:10	UA	171	762	05 Jan 99	01 Jan 00	1234567
07:15	CA	8013	757	01 Dec 98	01 Jan 00	12345 7
07:15	NW	348	757	05 Jan 99	30 Jan 99	1234567
07:20	DL	1224	757	01 Dec 98	01 Jan 00	1234567
07:20	NW	380	72S	06 Jan 99	30 Jan 99	1234567
07:21	AA	807	100	20 Dec 98	24 Jan 99	7
07:21	CP	5923	100	11 Jan 99	30 Jan 99	1234567
07:29	AA	769	M80	09 Jan 99	30 Jan 99	67
07:30	AA	108	757	05 Jan 99	30 Jan 99	1234567
07:30	BR	3102	M80	20 Dec 98	01 Jan 00	7
07:30	CO	370	M80	17 Jan 99	01 Jan 00	7
07:30	DL	2545	73S	01 Dec 98	01 Jan 00	1234567
07:30	DL	752	M80	01 Dec 98	01 Jan 00	1234567
07:30	US	1535	734	10 Nov 98	01 Jan 00	1234567
07:30	US	68	757	07 Jan 99	01 Jan 00	1234567
07:35	AA	596	AB3	19 Dec 98	30 Jan 99	67
07:35	SA	7301	AB3	01 Jan 99	30 Jan 99	1234567
07:40	DL	1184	72S	01 Dec 98	01 Jan 00	1234567
07:40	DL	2439	73S	01 Oct 98	01 Jan 00	1234567
07:42	CO	233	M80	15 Dec 98	01 Jan 00	1234567
07:44	UA	504	72S	10 Jan 99	01 Jan 00	7
07:45	AA	129	757	05 Jan 99	30 Jan 99	1234567
07:45	AA	146	757	06 Jan 99	30 Jan 99	1234567
07:45	KL	6723	757	05 Jan 99	30 Jan 99	1234567
07:45	NW	723	757	05 Jan 99	30 Jan 99	1234567
07:45	UA	505	72S	06 Jan 99	01 Jan 00	1234567
07:45	UA	988	735	06 Jan 99	01 Jan 00	1234567
07:50	UA	1031	757	05 Jan 99	01 Jan 00	1234567
07:50	US	299	734	06 Jan 99	22 Jan 99	12345 7
07:54	TW	192	M80	02 Jan 99	01 Jan 00	1234567
08:00	AA	1547	M80	15 Dec 98	30 Jan 99	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
08:00	AA	195	757	15 Dec 98	30 Jan 99	1234567
08:00	CI	903	757	05 Jan 99	30 Jan 99	1234567
08:00	DL	2314	73S	01 Dec 98	01 Jan 00	1234567
08:00	DL	2503	73S	01 Oct 98	01 Jan 00	1234567
08:00	UA	172	757	05 Jan 99	01 Jan 00	1234567
08:00	UA	178	320	10 Jan 99	29 Jan 99	1234567
08:00	US	358	D93	06 Jan 99	01 Jan 00	1234567
08:01	LH	6589	727	05 Jan 99	01 Jan 00	1234567
08:01	UA	1762	72S	05 Jan 99	01 Jan 00	1234567
08:05	UA	837	757	05 Jan 99	01 Jan 00	1234567
08:05	US	1181	733	06 Jan 99	22 Jan 99	12345 7
08:05	US	2673	73M	06 Jan 99	01 Jan 00	1234567
08:10	AS	5095	757	05 Jan 99	30 Jan 99	1234567
08:10	DL	323	757	01 Dec 98	01 Jan 00	1234567
08:10	DL	464	L10	01 Dec 98	01 Jan 00	1234567
08:10	FL	292	D9S	01 Nov 98	01 Jan 00	7
08:10	HP	2643	320	08 Jan 99	01 Jan 00	1234567
08:10	NW	95	757	05 Jan 99	30 Jan 99	1234567
08:10	UA	1208	757	10 Jan 99	31 Jan 99	7
08:10	US	1196	757	10 Jan 99	01 Jan 00	7
08:11	AA	1679	M80	09 Jan 99	30 Jan 99	67
08:15	AA	11	757	05 Jan 99	30 Jan 99	1234567
08:15	DL	433	763	01 Dec 98	01 Jan 00	1234567
08:15	NW	388	D95	05 Jan 99	30 Jan 99	1234567
08:15	TW	751	M80	17 Dec 98	01 Jan 00	1234567
08:15	US	1180	757	10 Jan 99	01 Jan 00	7
08:15	US	238	D93	06 Jan 99	01 Jan 00	1234567
08:15	US	241	733	07 Jan 99	01 Jan 00	12345 7
08:30	DL	1824	72S	01 Dec 98	01 Jan 00	1234567
08:30	DL	1825	72S	01 Dec 98	01 Jan 00	1234567
08:30	US	1021	733	06 Jan 99	01 Jan 00	1234567
08:30	US	1670	D93	06 Jan 99	01 Jan 00	12345 7
08:30	US	1914	D93	06 Jan 99	01 Jan 00	1234567
08:40	DL	2433	73S	02 Dec 98	01 Jan 00	1234567
08:40	DL	350	L10	02 Dec 98	01 Jan 00	1234567
08:40	DL	3970	CRJ	01 Dec 98	01 Jan 00	1234567
08:40	TR	712	L10	01 Jan 99	01 Jan 00	1234567
08:45	AA	449	M80	15 Dec 98	30 Jan 99	1234567
08:45	AA	744	100	27 Dec 98	24 Jan 99	7
08:45	BA	238	777	26 Dec 98	01 Jan 00	1234567
08:45	CP	5934	100	20 Dec 98	24 Jan 99	7
08:45	DL	3983	CRJ	01 Dec 98	01 Jan 00	1234567

Departure Time	diagraph name	Flight Number	Model Type	Effective Date	Discontinue Date	Days of Operation
08:45	UA	506	72S	05 Jan 99	01 Jan 00	1234567
08:45	UA	507	735	05 Jan 99	01 Jan 00	1234567
08:50	KL	6249	757	05 Jan 99	30 Jan 99	1234567
08:50	NW	249	757	05 Jan 99	30 Jan 99	1234567
08:55	DL	3968	CRJ	01 Dec 98	01 Jan 00	1234567
08:55	YX	705	D9S	01 Jan 99	01 Jan 00	7
09:00	AA	1259	757	01 Jan 99	30 Jan 99	1234567
09:00	AA	156	762	01 Jan 99	01 Jan 00	1234567
09:00	AA	226	757	05 Jan 99	30 Jan 99	1234567
09:00	CA	8016	757	01 Dec 98	01 Jan 00	1234567
09:00	CO	347	M80	14 Dec 98	01 Jan 00	12345 7
09:00	DL	211	757	01 Dec 98	01 Jan 00	1234567
09:00	DL	2461	73S	01 Oct 98	01 Jan 00	1234567
09:00	KP	545	72S	01 Jan 99	01 Jan 00	1234567
09:00	NW	806	D95	06 Jan 99	30 Jan 99	1234567
09:00	UA	165	762	06 Jan 99	01 Jan 00	1234567
09:00	UA	174	762	06 Jan 99	01 Jan 00	1234567
09:00	US	370	73S	06 Jan 99	22 Jan 99	12345 7
09:00	US	409	D93	10 Jan 99	17 Jan 99	7
09:00	US	6020	72S	01 Jan 99	01 Jan 00	1234567

Number of Records = 132

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 14:52 on 16 Jan 99 to
14:52 on 16 Jan 99

Conditions:

Wind Direction:	230 deg	**Wind Speed:**	15 Knots
Ceiling:	10000 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	27 - 22L
Departures:	22R - 22L

Complaint Description: The aircraft noise is excessive. Please call the Tower.

Massport Report of Investigation: You are affected by jet departures on Runway 22R, in use with strong southwesterly winds. The FAA has been notified of your concerns by copy of this complaint.

Massport Reporter: Operations Dept.

Send Copy: Yes

cc: FAA Boston Tower Chief

MASSACHUSETTS PORT AUTHORITY
Noise Abatement Office
Boston-Logan International Airport
East Boston, MA 02128-2042

Aircraft Disturbance Report

Person Reporting Disturbance:

Mr. Ron Fama
11 St Anne Road
Weymouth, MA 02189

Telephone: 340-0386

Disturbance Date and Time: 23:01 on 12 Jan 99 to
23:01 on 12 Jan 99

Conditions:

Wind Direction:	220 deg	**Wind Speed:**	7 Knots
Ceiling:	4400 Ft	**Visibility:**	10.0 Miles

Runways in Use:

Arrivals:	22L - 22R
Departures:	15R - 22L

Complaint Description: The aircraft noise is at the wrong time.

Massport Report of Investigation: You are affected by jet departures on Runway 22L, in use with southwesterly winds. A change of runway configuration occurred at midnight.

Massport Reporter: Dino Parravano/NAO

Send Copy: Yes

cc: FAA Boston Tower Chief

Letter 390
Ronald A. Fama
Private Citizens: Weymouth

Code	Topic 1	Topic 2	Comment	Response
390.1	Noise	Impacts	... There is no reason to believe that a new runway will not exacerbate intolerable [noise] condition...[in East Weymouth and on the South Shore]	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations.

To:
Cc:
Bcc: Arthur Pugsley@MEPA@EOEA
From: michele@newenglandfilm.com
Subject: RE: STOP MASSPORT/LOGAN 14/32 RUNWAY EXPANSION
Date: Wednesday, April 21, 1999 7:06:35 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 391

Dr. Mr. Pugsley,

I'm not sure why I received this email, but since I did I might as well make my opinion known. I think that Logan SHOULD be able to expand in order to accommodate more travelers, especially if it will lower airfare. I realize that air noise is a concern, but they should have thought of that before they moved in next to the airport. 391.1

Michele LaMura
Manchester, MA

-----Original Message-----
From: POETRYPIZA@aol.com [mailto:POETRYPIZA@aol.com]
Sent: Tuesday, April 20, 1999 10:38 PM
To: arthur.pugsley@state.ma.us
Subject: STOP MASSPORT/LOGAN 14/32 RUNWAY EXPANSION

DEAR MR. ARTHUR PUGSLEY:
(MASS ENVIRONMENTAL AFFAIRS UNIT DIRECTOR)
I STRONGLY REQUEST THAT YOU REFUSE TO APPROVE THE MASSPORT ENVIRONMENTAL REPORT ON THE PROPOSED 14/32 RUNWAY EXPANSION AT LOGAN AIRPORT.
I BELIEVE THE MASSPORT SUBMISSION IS INCOMPLETE AND CONTAINS MANY MISLEADING
HALF TRUTHS. MANY OF THE DATA SOURCES ARE QUESTIONABLE, OUT DATED AND INCORRECT.
I FEEL ANY FURTHER EXPANSION OF OPERATIONS, FLIGHTS IN AND OUT, WILL DIFFINETLY CAUSE A TREMENDOUS NEGATIVE ENVIRONMENT IMPACT ON THOSE OF US WHO LIVE, WORK AND GO TO SCHOOLS IN THE VERY DENSELY POPULATED COMMUNITIES SURROUNDING LOGAN AIRPORT.
I ASK YOU TO REMAIN OPEN AND SENSITIVE THE OUR BASIC QUALITY OF LIFE DAMENTALS, "EXCESSIVE NOISE OVER OUR HEADS DAY AND NIGHT, ALONG WITH BAD EMISSIONS ARE STEALING OUR BASIC RIGHTS." WE NEED YOUR HELP AND OTECTION.
OUR PEACEFUL AND HEALTHY FUTURE IS IN YOUR HANDS.

Letter 391
Michele LaMura
Private Citizens: Winchester

Code	Topic 1	Topic 2	Comment	Response
391.1	General Support		....I think that Logan SHOULD be able to expand in order to accommodate more travelers, especially if it will lower airfare....	Comment noted.

LETTER 392

April 22, 1999

Arthur Pugsley
Associate Environmentalist
Massachusetts Environmental Protection Agency
100 Cambridge Street
Boston, MA

RE: Massport's Proposed Runway 14/32 and Centerfield Taxiway

Dear Mr. Pugsley,

I recently submitted two videotapes to you. One is a tape of the Joint Committee on Transportation Hearing held at the State House on March 23. Representative Bob DeLeo of Winthrop and others have filed legislation which would forbid the construction of these two projects and which would establish a regional planning approach to the needs for airports in the next decades. I support this legislation. The second videotape is the MEPA hearing held at the Holiday Inn in East Boston on April 8th. You will notice that Mr. Silva gave an incorrect zip code. Both tapes are almost gavel-to-gavel with the exception of the few minutes it took to change tapes. There are no speakers omitted from these tapes - both meetings were taped without any "editing out." If you want additional copies, please call me at 617-846-7418. I am a volunteer producer at Winthrop Community Access Television as well as a member of Winthrop's Air Issues Resolution (AIR) Committee.

I am opposed to the construction of Runway 14/32 and the taxiway as proposed by Massport. I am concerned about the current levels of air pollution generated by the airport, and more concerned about the impacts of additional flights over our neighborhoods. Anyone can see the smog that sits over the airport on a summer day. Anyone can see the exhaust emissions of planes as they take off. Anyone can see the emissions as the planes rev their engines on the taxiway waiting to take off. This particulate matter, as you know, comes down in residential neighborhoods in and around the city of Boston. It is no mystery to me why the rates of asthma and respiratory disease in our communities are startlingly high. If a health study were conducted which proves a connection can be made between these conditions and air pollution at Logan, we should not only plan no future expansion at Logan, we should plan reduction of flights into and out of any airport in a densely populated residential area. 392.1

Massport's executives lied to the people Winthrop when Peter Blute and Betty Desrosiers referred to a Massport-sponsored health study that is being conducted by the Harvard School of Public Health. Many people with many contacts at that prestigious school have tried unsuccessfully to track down details of the alleged study. We concluded there isn't any Massport study.

I am also opposed to the runway and taxiway on the grounds of unacceptable noise levels. Noise levels of close to 65db after 10PM and before 7AM should not be tolerated by any residential community. Cargo flights should be stage III aircraft only or directed to other airports. Winthrop residents who live under existing runways now tolerate additional cargo flights at all hours of the day and throughout the night. No corporation motivated by profit and or governmental agency charged with protecting the "public good" should be allowed to violate our right to "life, liberty 392.2

and the pursuit of happiness" by polluting our air, causing disease and filling the neighborhood with noise.

I don't believe we should wait until a local study finds that students in schools under flight paths have impaired learning due to constant interruption from noise. European studies have already proven this. We don't need to wait until a local study finds higher incidences of certain cancers among residents near Logan. Studies in Seattle-Tacoma and at Cape Cod have already determined that. State Senator Steve Lynch of South Boston stated at the recent State House Rally against the Runway that the respiratory illness rate in his community is 61% higher than the state average. 392.3

The smell of jet fuel in the air over Winthrop has dramatically increased in the past few years. We should not be subjected to any jet fumes at all. The prospect of additional large aircraft flights and their jet fuel odor throughout the Logan community will absolutely lead to additional community opposition. You can be sure the recently-formed organization, Communities Against Runway Expansion (CARE), will gain in strength and visibility and will take more actions to oppose this further threat to health from jet fuel. Health studies of veterans of Operation Desert Storm/Desert Shield are being conducted which some scientists believe may find a causal relationship between exposure to jet fuel contamination and the incidence of many debilitating diseases.

I oppose this Runway and Taxiway project as a resident of Winthrop, a member of the Friends of Belle Isle Marsh, the Winthrop AIR Committee, and a community environmental activist. We need a regional planning process. I believe the impacts of an additional runway and taxiway are also a threat to the delicate balance of plants, animals, fish and other wildlife that depend on a clean and healthy environment to live. 392.4

As you recall, the MWRA was created in response to a consent decree. We now applaud the courageous actions by the executive, judicial, and legislative leaders who created and supported that agency. Consequently, the water quality in our harbor has improved and the health of the harbor's wildlife has vastly improved.

Perhaps the formation of a regional planning agency will be the final result of this "conflict" and we will ultimately applaud the actions of all the agencies involved who recognized the political problem and had the vision to solve it.

Sincerely,

Barbara Bishop
200 Washington Ave.
Winthrop, MA 02152

617-846-7418

Letter 392
Barbara Bishop
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
392.1	Air Quality	Model	....I am concerned about the current levels of air pollution generated by the airport, and more concerned about the impacts of additional flights over our neighborhoods. ....It is no mystery to me why the rates of asthma and respiratory disease in our communities are startlingly high. if there is a connection between these conditions and air pollution from Logan, we should plan no future expansion ...reduction of flights	Public health issues are discussed further in Section 6.8 of the Supplemental DEIS/FEIR. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas.
392.2	Noise	Runway 14/32	I am also opposed to the runway and taxiway on the grounds of unacceptable noise levels. Noise levels of close to 65db after 10PM and before 7AM should not be tolerated in any residential community.	Refer to response to Comment 392.1. The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Table 6.2.15 and 6.2.16 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
392.3	Public Health	Effects	....We don't need to wait until a local study finds higher incidences of certain cancers among residents near Logan. ...the respiratory illness rate in his community is 61% higher than the state average.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.
392.4	Alternatives	Runway 14/32	....an additional runway and taxiway are also a threat to the delicate balance of plants, animals, fish and other wildlife that depend on a clean and healthy environment to live.	The increase in impervious surface area will reduce habitat for several species (refer to Section 6.5 of the Supplemental DEIS/FEIR). A mitigation plan has been developed to offset impacts to the state-listed Upland Sandpiper population (refer to Section 6.5 of the Supplemental DEIS/FEIR). Runoff quality will be unchanged from current airfield conditions.

LETTER 393

April 8, 1999

Mr Rugsley

As a resident of Winthrop for 35 years I felt it was time to voice my concerns regarding the quality of life in our town. Bottom line... there is more! It's gotten progressively worse, more noticeable to me in the past two years.

The noise is so constant it's deafening. A southwest wind in my area means the absolute constant whining of planes landing - the reverse thrust of the engines you can practically feel as well as hear.

Take-offs have been very interesting also. Since October of 98 they now come just about over my house - something they haven't done in the 19 years I have owned this house... why is that I'd like to know? They are over this whole town like they've never been before. 393.1

My diesel fumes are atrocious. Fresh air is a thing of the past. You can't be outside and you can't leave the windows open... what's left?! Soot is just every- 393.2

sills, on the cars, they coat my pool the patio furniture, my kids toys in the yard! We were told years ago not to plant edibles in the soil around here because of that.

What more can we say? Winthrop is a lovely town - or was! We are being overrun by the airport. Yes, we chose to live here, or should I say our parents did, when it wasn't so bad. We grew up here, my children are growing up here, I'd like my grandchildren to grow up here if they choose, etc., etc. If we cannot come to a better living arrangement with Logan then we have to take a stand and say no to any new runways or any other expansion projects - we just can't take it any more! Please help us on these issues we are truly nice people, average folks who can co-exist with Logan - as we have for years! What we need is no added traffic and a share of this burden to other areas.

Thank you and we appreciate any help you can give us.

Cordially

Nancy J Crombie

57 Palmyra St, Winthrop

Letter 393
Nancy J. Crombie
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
393.1	Noise	Runway Use	Take-offs... [s]ince October of 98 ...now come just about over my house--something they haven't done in the 16 years...They are over this whole town like they've never been before.	PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere.
393.2	Air Quality	Impacts	The diesel fumes are atrocious....	The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. However, decreases in odorous emission concentrations will be imperceptible.

LETTER 394

Dear Mr. Pugsley, 4-5-99

I am writting to you in an attempt to appeal to your sense of human decency. Nine years ago, I had purchased a "home" in what was considered the better part of Winthrop called the Highlands. The houses in this section are not glamous nor are they larger than any others, but are simply more desirable because of their prolimity to Logan Airport. The Highlands is the furthest most point of Winthrop from Logan Airport. The main air traffic corridors do not pass direcly above but more directly over my fellow neighbors in Beachmont, approximately four blocks away. I find it somewhat amazing people consider my location more fortunate due to a distance of four small blocks.

Within the last five years, the increased numb. of flights and noise has become horific. The day time hours are consumed with take-offs and landings accompanied by the constant roar of warming jet engines on the tarmac. The night time hours only bring more of the same but seem endless due to the tossing and turning to get some sleep.

During the summer months, I look forward to the winter when my windows will be closed thus giving some relief from the noise and smell of burning jet fuel.

When winter finally arrives, no relief is to be found because my now closed windows rattle with the rumblings of airplanes. Sadly, I have found Winthrop has no peaceful neighborhoods, no quiet times when a family can go outside to enjoy themselves No community should be so dramatically impacted by an airport.

Presently the health of my family and I appears to be OK but we believe it's only due to our relatively young ages. We fear it may only be a matter of time before the impact of the airport effects our physical health.

In closing, allow me to point out Logan Airport is unlike any other major airport due to it's very close proximity to the surrounding communities. Due to this simple 394.1
fact, the health of our communities are suffering and further health studies must be initiated. Would you please ensure these studies move forward for the sake of the thousands of people who deserve a healthier quality of life.

Sincerely

Gregory DePatto

Letter 394
Gregory DePatto
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
394.1	Noise	Impacts	...Logan Airport is unlike any other major airport due to its very close proximity to the surrounding communities. Due to this simple fact, the health of our communities are suffering and further health studies must be initiated.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern.

LETTER 395

291 Winthrop Street
Winthrop, MA 02152
April 6, 1999

Mr. Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street - Room 2000
Boston MA 02202

Dear Mr. Durand:

I am writing to state my firm opposition to the construction of runway 14/32 at Boston's Logan International Airport.

There are three factors that must be taken into consideration when one thinks about any expansion of facilities at Logan, factors that weigh heavily on the quality of life of those of us who are neighbors to the airport. These factors are noise, pollution, and safety.

We all have a right to life uninterrupted and unhindered by the onslaught of excessive noise. We choose to live in a major metropolitan area and, with the turf, comes a certain amount of noise. When the level of noise becomes a health hazard, though, interrupting sleep and disrupting periods of relaxation, we have a right to recourse. The level of noise at Logan, emanating both from planes revving on the runways and from aircraft in takeoff and landing patterns is excessive. No, the soundproofing program offered to many in Winthrop and surrounding areas is not an acceptable solution to the noise problem. We are people who like to live outside of our homes during the summer months, not in a cocoon. 395.1

The pollution with which we have to contend is also unacceptable and obviously hazardous. The soot that collects on my lawn furniture clearly comes from the airplanes that fly overhead. Although the folks who run the airport would have us believe that the deleterious effects of what they put into the air are overstated, I cannot help but wonder how the black film that covers my furniture is affecting my lungs. In the absence of a study of the effects of this pollution on the neighbors of Logan, any thought of airport expansion is unconscionable. 395.2

Finally, we are concerned about safety, the ultimate environmental issue. Planes are allowed to fly, in random patterns, over my town, the most densely populated town in the Commonwealth. I shudder to think that we are statistically overdue for a plane to drop from the sky with disastrous effects, destroying life and property. It is nearly forty years since the Electra, its engine choked by starlings, landed in the narrow channel between Winthrop and the airport. We all remember the small plane that, in the early morning hours on final approach to Logan, fell onto a crowed Londsdale Street in Dorchester, destroying several houses but miraculously killing none of the inhabitants. We in Boston and environs have been fortunate. Is it only a matter of time before we are the lead story on the network news? 395.3

I just last week spent a vacation in Orlando (Florida). The airport there is fully thirty minutes from the largest tourist attraction in the area, DisneyWorld. I can tell you, from firsthand experience, that the thirty minute drive does not deter people from coming to visit the magical world of Walt Disney. Boston will be no less a first class city without the expansion of Logan International Airport. Regionalization of transportation facilities will do nothing to diminish the attractiveness of Boston as a destination for tourists and conventioneers. The airport need not be within two miles of downtown Boston in order to attract visitors. Witness Orlando, witness Denver, witness countless other sites.

Let's take a long, hard look at the alternatives to expanding Logan before we take some steps that might be irreversible and that we might regret. Let's look at these alternative NOW so that ten or twenty years from now we might not find ourselves in the same bind, running out of space and decrying the lack of time to plan for regional solutions to a regional problem. 395.4

Thank you for your consideration of my thoughts.

With very best wishes, I am

Sincerely,

Richard D. Gill

Letter 395
Richard D. Gill
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
395.1	Noise	Sound Insulation	....The level of noise at Logan, emanating both from planes revving on the runways and from aircraft in takeoff and landing patterns is excessive. No, the soundproofing program offered to many in Winthrop and surrounding areas is not an acceptable solution....	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.
395.2	Air Quality	Impacts	The [air] pollution with which we have to contend is also unacceptable and obviously hazardous. ....I cannot help but wonder how the black film that covers my furniture is affecting my lungs....	The PM_{10} in urban areas comprises compounds from a variety of sources, primarily roadways. The dispersion modeling for the Airside Project indicates there will be no violations of the NAAQS for fine particulates (PM_{10}). The modeling included Logan Airport emissions and background emissions.
395.3	Alternatives	Runway Use	...we are concerned about safety... Planes are allowed to fly, in random patterns, over my town, the most densely populated town in the Commonwealth....	Although it may not be apparent from the ground, aircraft flight paths to/from Logan Airport are anything but random. They are closely controlled to follow specific paths depending on the aircraft type, runway, weather, and other factors. Massport, the FAA, the airlines, and the communities have devoted enormous effort over the past 40 years to develop flight tracks that meet all safety standards and attempt to minimize the population exposed to overflights and noise.

Code	Topic 1	Topic 2	Comment	Response
395.4	Regional Transportation	Regional Airports	Let's take a long, hard look at alternatives to expanding Logan...so that ten or twenty years from now we might not find ourselves in the same bind, running out of space and decrying the lack of time to plan for regional solutions to a regional problem.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

LETTER 396

APRIL 19 1999

EDWARD F LOWNEY
841 SHIRLEY ST
WINTHROP, MA 02152

ROBERT DURAND
DIRECTOR MEPA
BOSTON MA

DEAR SIR

I WRITE THIS COMMENT IN THE HOPE THAT IN YOUR IMPACT REVIEW OF RUNWAY 14-32 AT LOGAN AIRPORT, YOU WILL ALSO REVIEW THE MISLEADING, DECEPTIVE AND SELF SERVING METHODS USED BY MASS. PORT TO OBTAIN THE DESIRED RESULTS OF THEIR ENVIRONMENTAL REPORTS

EXAMPLE

396.1

"PERCENTAGE OF RUNWAY USE"

RUNWAY 9-27 MASS PORT 60%
ACTUAL 90%

THANK YOU

SINCERELY YOURS
Edward F Lowney

Letter 396
Edward Lowney
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
396.1	Environmental Review Process	MEPA	[Asks MEPA to review] misleading, deceptive and self serving methods used by Mass Port to obtain the desired results of their environmental reports... Example: "Percentage of Runway Use," Runway 9/27: Massport--60%, Actual--90%	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

LETTER 397

41 Beal Street
Winthrop, MA 02152
April 8, 1999

Arthur Pugsley
Secretary of Envirnmental Affairs
100 Cambridge Street
Boston, MA 02025

Dear Mr. Pugsley and Members:

I would like to express my concern with the health issues at Logan Airport.

I think it is important to keep in mind that the airport is located in the middle of the city.

The residents have already been over burdened by the low flying planes, the smell of fumes, along with the soot and the dumping of fuel in our water. It took many years to get our harbor cleaned. 397.1

The cost of cleaning was extensive, and we would like the harbor to remain clean and free from these toxins.

We seldom get relief from the landings and take offs, and when we do then we have to contend with the sound of the motors running all hours of the day and night and the planes taxiing on the runways. This also causes pollution. 397.2

Our traffic problems in the surrounding areas are horrendous due to Logan Airport. I feel that we have taken enough of this unhealthy situation. 397.3

It is almost impossible to talk on the telephone or watch a television program when the planes are flying so close to the tops of our homes.

And last but not least, this situation causes me much stress and irritability. 397.4

I sincerely hope that you will take into consideration our health when making your decision in this important matter.

Cordially,

Eleanora Olivolo

Eleanora Olivolo

Letter 397
Eleanora Olivolo
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
397.1	Air Quality	Impacts	The residents have already been overburdened by ... the smell of fumes, along with the soot and the dumping of fuel in our water. ...	The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. However, decreases in odorous emission concentrations will be imperceptible. The PM_{10} in urban areas comprises compounds from a variety of sources, primarily roadways. The dispersion modeling for the Airside Project indicates there will be no violations of the NAAQS for fine particulates (PM_{10}). The modeling included Logan Airport emissions and background emissions. Fuel dumping (dropping) typically occurs only in aircraft emergencies. Air traffic control makes every effort to direct the pilot away from residential and other populated areas during this procedure. Notwithstanding the above, the Federal Aviation Administration (FAA) requirements allow fuel dumping at or above an altitude of 2,000 feet. This distance above ground allows much of the fuel to evaporate and disperse. Thus, emergency fuel dumping should have little or no impact on human health and welfare.
397.2	Noise	Impacts	We seldom get relief from the landings and take offs, and when we do then we have to contend with the sound of the [aircraft] motors running all hours of the day and night and the planes taxiing on the runways..	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. The purpose of the proposed Centerfield Taxiway system is to improve the flow of taxiing aircraft and to reduce aircraft ground delay. With the Centerfield Taxiway in place, neighbors in Winthrop and East Boston adjacent to the taxiways will experience small reductions in ground noise. These are different from the noise level reductions that occur in parts of East Boston, Revere, South Boston, and Dorchester with the Preferred Alternative. Improvements in those communities are derived from the added flexibility afforded by Runway 14/32. It allows the redistribution of traffic so that there are fewer landings on Runway 4L and 4R and fewer takeoffs on Runways 22L and 22R. The taxiway itself has no bearing on these flights.

Code	Topic 1	Topic 2	Comment	Response
397.3	Ground Transportation	Access to Logan	Our traffic problems in the surrounding areas are horrendous due to Logan Airport.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
397.4	Public Health	Effects	...[the current] situation causes me much stress and irritability.	Comment noted.

Martin, 4/19/99

139 Washington Avenue
Winthrop, MA 02152
(617) 539 - 3478

LETTER 398

April 19, 1999

RE LOGAN AIRSIDE IMPROVEMENT
PLANNING PROJECT

Bob Durand, Secretary
Executive Office of Environmental Affairs, Attention: MEPA Office
Attn. Arthur Pugsley, EOEA No. 10458
100 Cambridge Street – 20th Floor
Boston, MA 02202

Runway 14/32 is not the issue for Massport and the people. The true number involved is 120. Mr. Blute made clear upon questioning after his presentation in Winthrop that yes, Logan Airport is not able to attain the allowed FAA goal of 120 flights an hour at present – but could approach that goal with the construction of 14/32 , the center taxiway and related improvements.

Questions of facts as construed by Massport:

DELAYS are largely attributed by Massport to Northwest winds which limit runway use, truly a specious argument.

According to the Coastal Pilot I for Boston Harbor, northwest winds (including WNW, NW and NNW) occurr 9.6% of the time. They are most frequent in winter, which is also the time of delays because of snow, sleet and other winter conditions not only at Logan, but also throughout the northeast and midwest as well as Canada and Europe.

In winter, the mean speed of the northwesterly winds in Boston ranges from 11.4K in October to 13.9K in March. Obviously some of these winds will be above the 15K threshold requiring use of runways allowing landings and takeoffs into the wind. It is also evident that the northwest winds cannot be blamed for most of Logan's delays. 398.1

Even if northwest winds were responsible for the alleged delays, construction of a runway limited to overwater flights would be of no use in takeoffs into northwest winds when the runway heads 320, though 140 landings into the wind could be made over water.

If the delays are to be alleviated by putting smaller planes on 14/32 and freeing up 15/33, again takeoffs would be over land.

Most of us who have done extensive travel by air know that some delay is built into timetables. Family members in Bedford who travel extensively world-wide on business think nothing of a 15 – 30 minute delay out of a five or 14 hour flight. They could as easily drive to Manchester or

Pease, avoiding the nightmare traffic getting to Logan. (Assuming Hanscom is used for smaller planes such as might use 14/32.)

SIDELINE VIBRATIONS AND STABILITY:
According to the U.S. Geological Survey (C.A. Kaye, Bulletin #1476, 1976), Logan Airport is based on glacial clays dredged from the Boston Harbor, with thick mud slurry pumped into settling basins. This has caused major problems at airfields in earthquake zones in other parts of the world. Knowing that our area is a prime earthquake zone, what provisions are made ?

Surely it would be better to spread the traffic around the region so that the odds of all air transportation being severely affected by an earthquake would be sharply reduced. 398.2

My 115-year old home on the Harbor is built like Gibraltar, yet the frequency and vigor of side-line vibration have increased drastically in the last few years. According to a random batch of reports from Logan, cases affecting my home are due to arrivals or departure on 9, 22, 27 and 33, usually in light to moderate winds. The aircraft involved have been the B727, B737, B757, MD 11 and cargo planes. Progress in quiet performance is not reducing side-line vibration and may be increasing it. I never used to feel the tremble up from the floor through my feet, and to hands and the computer keyboard until recently. In the neighborhood, we all have to put breakables in closed cabinets or otherwise secure so they won't bounce off shelves. What is this doing to the structure of the house? I have earthquake insurance, but it doesn't cover Logan-quake. 398.3

OTHER EFFECTS: In addition to noise, the increased traffic will increase both air and water pollution, neither of which has been effectively monitored over the years. According to the Air Travel Journal, March taxi cab trips from Logan were 40,000 above average. The proposed new cargo warehouses along Route 1A will add many truck trips each day, not to mention the traffic effects of the proposed new hotels near Logan. Yet we are already trapped by highway gridlock. 398.4

POSSIBLE IMPACTS ON SHELLFISH: The clam flats around Logan Airport have been the most productive clam flats north of Boston for most the the past 15 years, at least. (I do not have statistics for south of Boston soft shell clams production.) 398.5

At present all clams harvested around Logan Airport must be landed in Winthrop, according to Mass. Division of Marine Fisheries procedures, from whence they are monitored to the Newburyport depuration plant for self-cleansing in clean tidal water under UV lights before being released for public sale. As the Harbor becomes cleaner, it is possible that the 'moderate contamination' rating of the flats may be lifted, allowing direct sale to users.

Last year the Winthrop Town Meeting unanimously adopted Shellfish Rules and Regulations, developed in cooperation of the Winthrop Harbor Management Committee with the Massachusetts Division of Marine Fisheries. Winthrop is preparing to take over management of its flats from the State, to improve harvesting rotation and to develop a seeding/ growth management program not now possible with the state's limited manpower. We anticipate protecting and enhancing the resource.

This valuable soft-shell clam economic resource of the Commonwealth should not be further damaged by increased aircraft emissions near the clam flats.

WILDLIFE: The area between Governor's Island flats and the former Apple Island has become a thriving bird sanctuary, right off the end of the proposed R14 and the ocean flight path. TASL ("Take A Second Look") has been monitoring shore birds in this area for at least 15 years.

At least 20 kinds of birds other than the regular seagulls, cormorants, sandpipers and such habituate Governor's Island Flats. These include the increasingly endangered Black Duck, various plovers, Brant, and occasional Great Blue Heron. Most striking in both appearance and regular use of the habitat is the American Oystercatcher. 398.6

The area off the proposed Runway 14 is the only regular habitat of the American Oystercatcher in Boston Harbor, according to TASL records. Two have occasionally been spotted at Snake Island in the September and October bird censuses; one or two are occasionally spotted during perhaps one census only each year in the Harbor Islands. (For further information contact Maury Hall, 661 East Street, South Boston 02127 or Soheil Zendah, 42 Baker Ave, Lexington 02421.)

The brilliant long red-orange bill of the Oystercatcher is often seen among the Elizabeth Islands. Though not a birder, as a boating writer and cruising guide author, I'm always interested in birds that boaters might spot. A row of Oystercatchers at Governor's Islands Flats a few years back when I was helping provide water transportation to the TASL observers was a stunning sight. I've boated extensively in Boston Harbor for 30 years or so but had never seen anything like it – till the next year, and the next.

The reasons that were valid in defeating Runway 14/32 some 25 years ago are still valid, and more reasons have been added. Massport needs a comprehensive problem-solving approach based on solid research, not an outmoded and damaging 14/32 bandaid.

Sincerely yours,

Anita L. Martin

Letter 398
Anita L. Martin
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
398.1	Purpose and Need	Delay	Delays are largely attributed by Massport to northwest winds which limit runway use, truly a specious argument. Even if northwest winds were responsible for the alleged delays, construction of [Runway 14/32] ... would be no use in takeoffs into a northwest wind.	Northwest wind conditions force the use of runway configurations with only one or two active runways. This reduces the capacity from the three-runway configurations otherwise available and results in increased delays.
398.2	Regional Transportation	Regional Airports	Surely it would be better to spread the traffic around the region so that the odds of all air transportation being severely affected by an earthquake would be sharply reduced.	Comment noted.
398.3	Noise	Impacts	...the frequency and vigor of side-line vibration have increased drastically in the last few years. ...What is this doing to the structure of the house?...	Low-frequency noise has tended to be more noticeable in recent years as higher frequency levels have been treated through new engine and nacelle technology. However, the levels are not normally high enough to cause structural damage.
398.4	Ground Transportation	Access to Logan	...the increased traffic will increase both air and water pollution....	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
398.5	Water Resources	Airport Operations	Possible impacts on shellfish: the clam flats around Logan Airport have been the most productive clam flats north of Boston for most the past 15 years, at least. ...	Neither runway nor taxiway construction will affect shellfish habitat surrounding the airport. Many of these shellfish areas have been reopened to Master Diggers over the past decade indicating that the airport is not adversely affecting these resources. The quality of airfield runoff will not be changed by the project as described in Section 6.6 of the Supplemental DEIS/FEIR.
398.6	Alternatives	Runway 14/32	...[Birds using] the area between Governor's Island flats and the former Apple Island [could be affected].... The area off the proposed Runway 14 is the only regular habitat of the American Oystercatcher in Boston Harbor,....	All construction will be confined to upland portions of the airfield. The closest construction to the tidal flats between Governors Island and the former Apple Island (Delta Taxiway extension) will be separated from the tidal flats by Runway 9/27. Stormwater runoff quality will be similar to current conditions and are not predicted to adversely affect the harbor environment. The American Oystercatcher has been observed at Logan Airport on an intertidal spit of land adjacent to the intersection of Runway 9/27 and Runway 15/33. Neither runway nor taxiway construction will affect this particular habitat.

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LETTER 399

April 19, 1999

Arthur Pugsley
Associate Environmentalist
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

RE: Massachusetts Port Authority DEIS/R
Logan Airside Improvements Planning Project

Dear Mr. Pugsley:

After reviewing the Draft Environmental Impact Statement/Report submitted by the Massachusetts Port Authority, I would like address what appear to be some of the glaring errors, deficiencies or deliberate attempts to mislead which are found throughout the report.

First is the obvious omission of any discussion regarding an alternative which would attempt to absorb or divert any projected increase in passengers or operations, especially in light of Massports ownership of Hanscom Field, a facility which is underutilized, and recent agreement to take over operations at the Worcester facility. The diversion of operations to those facilities would also have environmental impacts which should be examined, but this report remains incomplete unless that alternative is given thorough discussion and explanation as a part of the report. 399.1

A second glaring deficiency in the report deals with Massport's grossly misleading discussion of the environmental impacts of the increased ground traffic which this project will generate. It is obvious that the purpose of this project is to increase operation capacity by over 150,000 operations and to increase passenger capacity by over 15 million passengers annually. To state that this increase will not generate additional ground traffic is a farce. 399.2

It is known, and the report itself states that approximately 90 percent of the traffic at logan is origin/destination in nature. Logan, unlike Atlanta or Chicago, is not a hub. This means that the vast bulk of this 15 million passenger increase will need ground access to and from the airport. The environmental impact of these vehicles sitting for hours in clogged entrance and exit roadways and entrances to the tunnels is a crucial part of this report, and without such an examination, this report is incomplete.

Massport attempts to justify its misleading handling of this crucial part of this report by making the erroneous assumption that the passenger increase and traffic increase will occur regardless. At best, this is sheer speculation which, without substantial data to support it, should have no part in an environmental impact statement. At worst, it is a deliberate attempt to skew the process to sell the project.

Further notable deficiencies in the report are:

a. The use of a flawed model in figuring the 65 dB contours; 399.3

b. The segmentation of airside improvement impacts and groundside improvement impacts in violation of MEPA regulations under 310 CMR; 399.4

c. The use of five year old data as a baseline; 399.5

d. The overstatement of the benefits of converting to stage 3 aircraft when over 85% of the fleet is already stage 3 and all nighttime operations are stage 3; 399.6

e. The overstatement of the benefits of the soundproofing program as adequate mitigation and the deficiencies in the current scope of that program; 399.7

f. The failure to discuss and examine the negative impacts which the increased operations the project will generate will have with regards to noise and air quality; 399.8

g. The total inadequacy of the program proposed to protect the endangered species which the project will effectively wipe out; 399.9

h. The false information that Logan operates at a maximun capacity of 120 operations per hour when in actuality, investigation will show that operations are as high as 150 or more per hour in the three runway configuration. 399.10

i. Failure to discuss the increase in noise and pollutants which will be caused by the dramatic increase in operations when there are East/Southeasterly winds blowing directly towards the residential communities. 399.11

j. The miscalculation of the actual current hours of delay time along with the omission of the fact that delay time over the past five years has actually improved; and 399.12

k. Failure to point out that, even by Massport's own admission, the project's perceived net benefits will be nil within a few years after completion of construction and will only lead to the need for further action. 399.13

In short, this report is filled with erroneous calculations, misleading information and omissions, and should be rejected. It is a factually skewed sales pitch for a project which will have little benefit as a true solution to the air transportation problem facing the region and enormous negative environmental impact on the numerous communities already bearing the lion's share of the burdens created by an air transporation system which offers substantial benefits to communities well outside the Metropolitan Boston area.

Very truly yours,

Thomas J. McCarthy

Letter 399
Thomas J. McCarthy
McCarthy, Allegretto & McCarthy, Attorneys-at-Law
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
399.1	Regional Transportation	Regional Airports	...omission of any discussion regarding an alternative which would attempt to absorb or divert any projected increase in passengers or operations, especially in light of Massport's ownership of Hanscom Field, a facility which is underutilized, and recent agreement to take over operations at the Worcester facility. ...	The regional alternatives were explicitly considered in the delay reduction and environmental analyses by studying a range of future demand and activity levels. Passenger levels analyzed cover a range from 29M passengers to 45M passengers. Similarly, 510,000 to 656,000 future aircraft operation levels were analyzed. The use of variable long-term passenger and operations forecasts allow for uncertainty relating to the rate of future economic growth, the development of high-speed rail alternatives, the acceptance and usage of video-conferencing, and the role of regional airports. The delay reduction analyses indicate that the proposed airside improvements, as well as the regional alternatives, are necessary for accommodating current and future levels of demand.
399.2	Ground Transportation	Access to Logan	...grossly misleading discussion of the environmental impacts of the increased ground traffic which this project will generate. ... .The environmental impact of ...vehicles sitting for hours in clogged entrance and exit roadways and entrances to the tunnels is a crucial part of this report, and without such an examination, this report is incomplete.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
399.3	Noise	Model	The use of a flawed model in figuring the 65 dB contours;	Massport and the FAA disagree.
399.4	Environmental Process	MEPA	The segmentation of airside improvement impacts and groundside improvement impacts in violation of MEPA regulations under 310 CMR;	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
399.5	Delay	Model	The use of five-year-old data as a baseline;	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
399.6	Noise	Hushkitted Aircraft	The overstatement of the benefits of converting to stage 3 aircraft when over 85% of the fleet is already stage 3 and all nighttime operations are stage 3;	The study does not overstate the benefit of further conversion to Stage 3 aircraft on future noise levels. It uses two fleet scenarios in which almost all aircraft meet Stage 3 requirements, either as hushkitted Stage 2 aircraft or new Stage 3 aircraft, and three fleet scenarios in which all the aircraft meet Stage 3 requirements. Most of the aircraft are new high-bypass, engine-powered Stage 3 aircraft. Many of the hushkitted aircraft have been retired.
399.7	Noise	Sound Insulation	The overstatement of the benefits of the soundproofing program...	Logan Airport has one of the most comprehensive and progressive sound insulation programs of any airport in the country. It was initiated in 1980 before any airport began receiving federal funding to soundproof homes under FAR Part 150. It is the only program in the country to offer residents extra sound insulation treatment in a "room of preference" chosen by the homeowner and it is the only program in the country attempting to receive FAA approval to expand the area of eligibility by accounting for hill effects. In addition, as of the 1999–2000 construction season, FAA grants covering 80 percent of the cost of sound insulation (paid for by airline ticket taxes), combined with funds provided by Massport through Passenger Facility Charges and landing fees, had fully funded the sound insulation of all eligible dwelling units in Massport's current sound insulation program. Despite this accomplishment, Massport continues to seek means of expanding its sound insulation program exclusive of FAA's decision on this Supplemental DEIS/FEIR. If the FAA approves the Preferred Alternative, Massport is committed to expanding the program to include all additionally eligible residences.

Code	Topic 1	Topic 2	Comment	Response
399.8	Alternatives	Runway 14/32	The failure to discuss and examine the negative impacts which the increased operations the project will generate will have with regards to noise and air quality;	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
399.9	Alternatives	Runway 14/32	...inadequacy of the program proposed to protect the endangered species...	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
399.10	Purpose and Need	Airfield Capacity	The false information that Logan operates at a maximum capacity of 120 operations per hour when, in actuality, investigation will show that operations are as high as 150 or more per hour in the three runway configuration.	Airport capacity depends on fleet mix, weather conditions, runway assignments and other factors. The normal capacity configuration at Logan Airport uses Runway 4L, Runway 4R, and Runway 9 under VFR weather conditions and can handle 120 operations per hour. For short periods, the flow may be greater or less than this rate, but the sustainable capacity does not exceed 120 operations per hour.

Code	Topic 1	Topic 2	Comment	Response
399.11	Alternatives	Runway 14/32	[The report fails to discuss the]...increase in noise and pollutants which will be caused by the dramatic increase in operations when there are east/southeasterly winds blowing directly towards the residential communities.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken. The planned improvements to Logan Airport will help reduce air emissions from the airport. The air quality model, which includes actual weather data and wind conditions experienced at Logan Airport, shows pollutant concentrations west-northwest of the airport to be well within the NAAQS. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas.
399.12	Delay	Model	The miscalculation of the actual current hours of delay time...	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport.
399.13	Purpose and Need	Airfield Capacity	...the project's perceived net benefits will be nil within a few years after completion of construction...	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Cc:
Bcc:
From: Arthur Pugsley@MEPA@EOEA
<Boatwrite@aol.com>
Object: Runway
Date: Thursday, April 22, 1999 16:06:40 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 400

Mr. Arthur Pugsley
Review Officer
MEPA
RE EOEA 10458 Logan International Airport

Mr. Pugsley:

I am sending this short email to register my opposition to a MEPA approval of the Massachusetts Port Authority's plan and supporting Environmental Impact Report for a runway, entitled 14/32, and a central taxiway at Logan International Airport.

First, it must be said this proposal to build yet another runway at Logan International Airport is highly suspicious. The very design of this proposed runway as laid out in the EIR appears to show that Logan has reached its it for flight capacity. The theoretical figure of 120 operations per hour at the outside limit even with absolutely no wind. Without filling tidelands and expanding the Logan landmass into Boston Harbor waterways the current airport is as good as it gets.

I am as yet unable to understand exactly what Massport means when it refers to Runway 14/32 as a unidirectional, over-the-water facility. It seems self-evident that a runway as short as 14/32 is planned to be can be used only for aircraft operations in one direction at a time. The problem lies with the term 'over-the-water'. 400.1

Massport's EIR is less than clear in explaining this, likely due to the writers' afflicted view that laymen care to understand their jargon. If this runway is to be used solely for over the water landings and takeoffs, it is de facto evidence that Logan Airport's footprint is virtually full except for this small piece of nearly harborside land. In other words, building development west of the wished-for 14/32 precludes its full use as a runway.

I live on Grandview Avenue in Winthrop and have a front door that is as severely impacted as aircraft by northwest winds since my house faces Logn Airport across a narrow waterway and the sweep of the airport. Although without meteorological measurements, I can say with a great deal of certainty that it is not northwest winds of great magnitude that cause delays in the numbers that Massport claims. If a plane destined for Logan is held up by San Francisco clouds the delay will be counted at Logan. 400.2

Finally, Massport EIR noise impact estimates on the town of Winthrop are jocular. Using 75db as a high standard is too often a serious underestimate of what actually occurs when certain types of aircraft fly over the Point

Shirley section of the town. Even with the windows Massport supplied some years ago, some older, apparently Stage 2 planes easily drown out a television set tuned to a moderate sound output or cause a roar in the ear of a person at a distant telephone. It seems likely that real world sound levels of 85-95db are more the case when winds are off the sea as they often are during warm weather months. A permanent Massport noise monitor at the corners of Grandview and Bayview avenues should certainly record these higher levels. 400.3

Even though Masport claims its Runway 14/32 will switch aircraft operations away from Winthrop, some of what it says on p. 6-10 seems open to severe questioning. It talks about jet aircraft takeoffs from Runway 14, another example of the confusion over use of this proposed facility. If the over-the-water function is held to, this means these jets would be taking off into a south-southeast wind. Since the wind is perhaps most seldom out of this direction, it seems to this layman that the use of 14/32 for takeoff purposes is almost negligible. 400.4

In short, the EIR is confusing, laden with poorly designed standards upon which to base judgements of "information" contained in the EIR, and thus is saturated with misinformation. The decibel levels above are but one example.

The reducing of approach minimums, as convenient as those may be for airlines, seems a particularly bad safety risk. While the ILS may have given an upgrade to Logan for some flight operations on Runways 15/33, to reduce approach minimums on other runways is merely another flouting of public safety for the convenience of passengers and airlines. The safety of communities surrounding Logan is far more important than the convenience of airlines that may expens a few more bucks on fuel and passengers whose relatives may have to wait a few more minutes for their arrival.

Sincerely,

Thomas A. McNiff, Jr.
118 Grandview Avenue
Winthrop, MA 02152

Letter 400
Thomas A. McNiff, Jr.
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
400.1	Purpose and Need	Airfield Capacity	....EIR appears to show that Logan has reached its limit for flight capacity. ... .If ...runway [14/32] is to be used solely for over the water landings and takeoffs, it is de facto evidence that Logan Airport's footprint is virtually full ...building development west of ...14/32 precludes its full use as a runway.	Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas. The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
400.2	Purpose and Need	Delay	I live on Grandview Avenue in Winthrop and have a front door that is as severely impacted as aircraft by northwest winds since my house faces Logan Airport across a narrow waterway and the sweep of the airport. Although without meteorological measurements, I can say with a great deal of certainty that it is not northwest winds of great magnitude that cause delays in the numbers that Massport claims. If a plane destined for Logan is held up by San Francisco clouds the delay will be counted at Logan.	The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.

Code	Topic 1	Topic 2	Comment	Response
400.3	Noise	Impacts	...noise impact estimates on the town of Winthrop are [understated]. ....sound levels of 85-95 dB are more the case when winds are off the sea... A permanent Massport noise monitor at the corners of Grandview and Bayview avenues should certainly record these higher levels.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 ESPR* (previously GEIR)). Massport continues to investigate possible causes for remaining differences (such as from hill effects) and continues to pursue FAA approval of noise model adjustments that would permit expansion of its sound insulation program to include the effects of terrain. Massport also expects to extend eligibility lines to include boundaries that follow local streets rather than strict noise contour lines. Nevertheless, Massport continues to believe that the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. To the extent that federal regulations permit and that funding is available, the proposed sound insulation program will include: (i) not only all residences that fall within the Preferred Alternative's 65 dB Day-Night Sound Level contour when compared to the Airside Project's No Action Alternative's 65 dB Day-Night Sound Level contour, but also (ii) Massport and the FAA will continue to sound insulate and work to complete the current 2-year sound insulation program as presented in the *Logan Airport 1999 ESPR.* For the eligible residences, the FAA will fund building code upgrades, to the extent necessary, to implement sound insulation improvements.
400.4	Alternatives	Runway 14/32	...Massport ...talks about jet aircraft takeoffs from Runway 14,... If the over-the-water function is held, too, this means these jets would be taking off into a south-southeast wind. Since the wind is perhaps most seldom out of this direction, it seems ...the use of 14/32 for takeoff purposes is almost negligible.	The use of Runway 14 for departures will most often occur during weather conditions that favor the use of Runway 15R. It is true that these conditions do not occur frequently, and as a result, Runway 14 is not expected to be used extensively for departures. The modeled use never exceeds 2.3 percent of equivalent departures under any future scenario. Most of the delay reduction benefits of Runway 14/32 are associated with arrivals to Runway 32 under northwest wind conditions.

LETTER 401

May 9, 99
39 Beach Rd
Winthrop

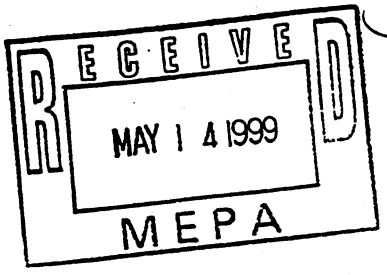
Dear [illegible]

I can't believe Mass Port got the go ahead for a runway. Have you ever visited Winthrop unannounced? We have not received fair consideration from you. 401.1

The noise is horrendous and it grows day and nite

Please! for all our sakes.

Helen Murray



Letter 401
Helen Murray
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
401.1	Noise	Impacts	The noise is horrendous and it goes on day and night.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Similarly, overflights affecting Winthrop (Runway 27 arrivals and Runway 9 departures) will decline from 88,224 in 1998 to 55,805 in approximately 2015.

LETTER 402

Alicia A. Stoddard
47 Bates Avenue
Winthrop, MA 02152

Secretary of Environmental Affairs
Attn: MEPA Office
Mr. Robert Pugsley – EOEA #10408
100 Cambridge St. 20th Floor
Boston, MA 02205

April 19, 1999

Dear Mr. Pugsley:

I am writing to express my opposition to the Logan Airport expansion proposal put forth by Massport, which includes new runway 14/32 as well as a new center taxiway. I have several strong concerns with Massport's presentations and with the Environmental Impact Study/Report (EIR/EIS) that has been prepared for this project:

- **There have been NO alternatives to runway 14/32 provided.** This is unacceptable. There are numerous airfields in the Boston area that would be capable of handling an increase in traffic. In particular, Hanscom Field and Pease Field have not been mentioned as alternative sites at any point in the proceedings. 402.1

- It has been mentioned that **consideration for a second major airport in the Boston area has been terminated** because travellers and business people do not want to have to continue travel once they've completed the fight portion of their trips. Personally speaking as a well-travelled tourist and business person, I find this preposterous. There are many, many airports for major cities located well outside their metro area. Accommodations are made by all parties involved (via buses, trams, trains, etc.), and hardly any notice is taken of the additional travel time. It is just a fact of travel.

- Another alternative that has been downplayed deals not with air travel but with **train travel.** The new, high speed trains are being introduced in the near future. Could this not be an answer to alleviate some of Logan's congestion? The trains have not received any inclusion as part of the solution to this problem. 402.2

- **No Long-term figures as to number of flights over cities and towns have been provided.** The only figures that have been released are five year estimates. Again, this is unacceptable. Apparently, Massport is attempting to effect a permanent change affecting hundreds of thousands of citizens using data that looks ahead only five years. How can a reasonable assessment of future environmental impact be determined using these figures? I find this rationalization seriously flawed, and a heinous mismanagement of resources. Any other business venture would need to have long range plans in effect in order to succeed and have the confidence of its customers behind it. 402.3

- **The EIR/EIS is obsolete; it is dated 1995.** Each year, the flights into and out of Logan have increased, as has the noise and pollution generated at the airport. Figures from this report are no longer valid. In fact, many of the studies used in preparing the report were outdated at the time of the report. In particular, I noted that the delay study utilized was from 1993, which by "coincidence" was the year with the highest delays recorded. This does not accurately reflect the scenario at Logan. Further, the delays stated have not been dissected to ascertain which are directly the result of non-use of runways alone. Delays caused by such circumstances as pilot sickness, maintenance necessities, and snow delays that eventually cause cancellation of flights have not to be removed from the equation, causing an inflation of the issue. Therefore, four years later, the report is even more inaccurate and should be redone. 402.4

- Finally, I do not believe that **adequate consideration of the quality of life impacts** to the citizens of the many cities and towns affected by this decision has been made. I have been a resident of Winthrop for nearly three years, and have lived in several different locations within the town. I have been continuously awakened out of sleep because of airplane noise in each of the locations that I have lived. Currently I do not live under a flight path, but even this does not alleviate all of the noise. I believe that the new runway will result in an <u>increase</u> of traffic in the future, not simply decrease delays, as Massport claims. In many other cities and towns the problem is much worse. I believe a more *adequate and accurate* Environmental Impact Study is needed, and I believe that alternatives to a new runway and taxiway need to be seriously considered in order to assuage the "delay" problem at Logan Airport. The runway will result in increased air, water, and noise pollution and decreased quality of life for citizens in the surrounding environs. 402.5

  In closing, I would like to reiterate my opposition to the new runway and taxiway and my support of a new, adequate EIR being undertaken.

Sincerely,

Alicia A. Stoddard

Alicia A. Stoddard

Cc: Mr. Robert Durand

Letter 402
Alicia A. Stoddard
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
402.1	Regional Transportation	Regional Airports	....unacceptable. There are numerous airfields in the Boston area that would be capable of handling an increase in traffic. ...	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Airside Project Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
402.2	Regional Transportation	Passenger Rail	....Could this [trains] not be an answer to alleviate some of Logan's congestion. The trains have not received any inclusion as part of the solution to this problem.	Over the last ten years, various agencies and transportation planning organizations have conducted a number of studies that address regional transportation issues. These studies form the basis of a comprehensive regional transportation strategy that includes the Airside Project at Logan Airport, expansion and growth of the regional airports, and the implementation of high-speed rail and other regional rail projects. All these measures are necessary for meeting the short-term and long-term inter-city travel needs of the New England region. These regional recommendations are in various stages of implementation. By the end of 2000, Boston residents had several alternatives to Logan Airport including Worcester Regional Airport, Manchester Airport, T.F. Green/Providence Airport, Pease International Tradeport, and Amtrak's high-speed Acela train service. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a complete discussion of options to Logan Airport.
402.3	Analysis Assumptions/ Methodologies	Planning Period	No long-term figures as to number of flights over cities and towns have been provided. ...	The air quality analysis includes all existing sources and future growth at Logan Airport.

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Code	Topic 1	Topic 2	Comment	Response
402.4	Delay	Model	...the delays stated have not been dissected to ascertain which are directly the result of non-use of runways alone. Delays caused by such circumstances as pilot sickness, maintenance necessities, and snow delays that eventually cause cancellation of flights have not be removed from the equation, causing an inflation of the issue. ...	The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
402.5	Delays	Impacts	...the new runway will result in an increase of [air] traffic in the future, not simply decrease delays...	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

LETTER 403

Ron Wayland

MEPA Hearing Testimony

My name is Ron Wayland. I am a resident homeowner in the Town of Winthrop. My home is located in a section of the town, which receives the maximum impact of noise and emissions. I am therefore one of those who has received what is known as " mitigation windows" from MassPort. I am also a businessman and an attorney who is interested in the economic and environmental well being of this Commonwealth.

I am here at this MassPort Hearing (pardon the oxymoron) to testify that the people of Winthrop and those who live in the communities adjacent to Logan Airport have reached, indeed have exceeded their limits of toleration as far as MassPort Expansion is concerned. MassPort may not admit to you that Logan Airport is at capacity but I am here to tell you that we are beyond capacity. The rallies, the resolutions, the writings and recitations you see and hear are the harbingers of a response not seen in these parts for many years should MassPort not come to its senses.

I mention the "mitigation windows" because I want you to know that we consider those windows as nothing more than preemptive damages for taking our outside away and for making us prisoners in our own homes. The level of our discontent should not be a surprise to you or to MassPort. My sentiments are reflected in the unanimous resolutions of the governing bodies in the cities and towns surrounding Logan. It is clearly stated by the CAC, the body whose reason for being is MassPort and Logan Airport. However, if for some reason you have not had your ear to the ground, we would be pleased to provide this Committee with a gavel to gavel videotape of the Joint Committee on Transportation

Hearing on this issue. We would be pleased to present you with a video tape record of the rally which was held on the State House steps. In addition to the recorded testimony, we would respectfully ask you to listen to the embarrassed silence of the business community on the quality of life issues surrounding this proposal.

This hearing is to consider environmental concerns.

The instruments we use are our own bodies and the standard by which we judge these things is our own health, the health of our neighbors and the quality of our lives. MassPort uses strategically placed gadgets, mechanical and electrical devises. Their standard is not the quality of life. It seems to be more aptly stated in the question "Will it kill them?"

We can tell you with certainty that the noise is not just an annoyance. It is making us irritable and ill. It takes away our sleep. It causes us to be tired. It produces stress. We can tell you that the aircraft emissions are visible in the sky, on our windows and automobiles. We can smell it and taste it. But will it kill us? 403.1 403.2

I cannot answer that question yet. I would suggest that MassPort, the airline industry and every other airport authority is making sure that they are not put in a position where they can answer that question either. The stakes are just too high especially for urban airports. When MassPort initiated their community meetings to sell 14/32 and the center strip taxiway they started in Winthrop. During their presentation and in response to a question one of the MassPort representatives revealed that the Harvard School of Public Health was conducting a health study relative to respiratory illnesses around Logan Airport. We could not

believe it when they said that Winthrop was not going to be part of that study. In an attempt to cover up this slip, Peter Blute offered to pay for Winthrop's inclusion in the study. We are still waiting for that study to come to Winthrop. I believe our Community Access Channel still has that meeting on tape and we would be pleased to make it part of the record. MassPort made earlier promises relative to health studies. I believe we have these broken promises on tape as well. We would be happy to make that part of the record too.

Mr. Chairman, our instruments (our bodies) and our standards (our health and the quality of our lives) tell us that we have a serious, very serious environmental problem which no American should have to endure and which we will not endure. I will say that again. We will not endure. We call on you to do your duty and stop expansion at Logan Airport by rejecting the findings contained in their environmental report or at least by demanding the studies they don't want to take.

We are anxious to move forward with the Governor, with Mayor Menino and with MassPort to find answers to our air transportation problems. There are better ways, ways that will economically benefit the Commonwealth of Massachusetts and improve the health and quality of life for those who live in our most populous cities and towns. A quick rejection of this proposal will release the energy and resources of our government to seek and implement these better ways.

Thank you.

Ron Wayland

A Long Term
Massachusetts Air Transportation Plan

Step 1.

We must stop MassPort's Runway Expansion Plan.
(a.) If MassPort succeeds we will defer the real long-term solutions and consequently eliminate many of the options available to us today.
(b.) There are better short-term solutions that are transitional to the long-term answers.
(c.) The twenty five to thirty million dollars available for the MassPort expansion can be used to transition to an ultimate answer.

Step 2.

(a.) Regional airports are a short-term solution. Some freight can be moved to New Bedford, Worcester and Hanscom Field. Seasonal small aircraft (Cape Air) can immediately go to Hanscom. This makes sense because the annoyance to Logan's neighbors is greatest during the summer months. Shuttle service, to New York and Washington at Hanscom, would be immediately successful. 403.3
(b.) The twenty five million dollars should be used to build an Airrail Terminal at the intersection of the MassPike and Route 495 with dedicated high-speed rail to and from South Station connecting to Logan. Trains would leave the terminal every fifteen minutes and take fifteen minutes to get to either terminal. 403.4
(c.)At the MassPike/495 Airrail Terminal there should be a connector to Worcester Airport. This would take care of the inconvenience of getting to Worcester Airport. 403.5

A system like this is already in service at Heathrow Airport. Please use the Internet to see www.heathrowexpress.co.uk. Please note, in England this system will cut automobile traffic to the airport to 50%. It would keep air travel revenue in the Commonwealth of Massachusetts.

Step 3.

A new International Airport must be built, probably in the area of Fort Devens. The Airrail terminal at the MassPike/495 would be the ticket terminal and Fort Devens would be the Departure Terminal. They would be connected by high-speed rail as at Heathrow. High Speed trains would leave the ticket terminal ever fifteen minutes and would take no more that fifteen minutes to get to the departure terminal. 403.6

May I respectfully suggest that this proposal is worthy of study. There are presently sixty airports in the world using airrail as their answer. Another one hundred and twenty is in the planning or construction stages. This is what a 21st Century air transportation systems are going to be all about. I believe that this is the answer and I think this is the time to apply this answer to our air transportation system. I hope you will agree.

Miscellaneous Items

Letter 403
Ron Wayland
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
403.1	Noise	Impacts	...the noise is not just an annoyance. It is making us irritable and ill. It takes away our sleep. It causes us to be tired. It produces stress.	The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.15 and 6.2.16 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
403.2	Air Quality	Impacts	...the aircraft emissions are visible in the sky, on our windows and automobiles. We can smell it and taste it. ...	Monitoring of airborne soot levels in the vicinity of Logan Airport has shown that the airport is a very small (less than one percent) contributor. The air quality analysis, based on EPA/MDEP models and guidelines, performed for the Supplemental DEIS/FEIR is considered to be comprehensive and state-of-the-art.

Code	Topic 1	Topic 2	Comment	Response
403.3	Regional Transportation	Regional Airports	Regional airports are a short-term solution. Some freight can be moved to New Bedford, Worcester and Hanscom Field. Seasonal small aircraft (Cape Air) can immediately go to Hanscom. This makes sense because the annoyance to Logan's neighbors is greatest during the summer months. Shuttle service, to New York and Washington at Hanscom, would be immediately successful.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Appendix B of the Supplemental DEIS/FEIR. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act..." Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. The potential diversion of cargo operations was not specifically analyzed because cargo operations account for only two percent of aircraft activity at Logan Airport and since most all-cargo aircraft operate during off-peak hours, cargo operations do not contribute to delays at Logan Airport. However, all cargo operations were included in the future fleets analyzed in the Airside Project. Additionally, some cargo is now being diverted to regional airports as indicated by the strong growth in cargo services and air cargo activity at the regional airports.
403.4	Ground Transportation	Access to Logan	The twenty five million dollars should be used to build an Airrail Terminal at the intersection of the MassPike and Route 495 with dedicated high-speed rail to and from South Station connecting to Logan. Trains would leave the terminal every fifteen minutes to get to either terminal.	Comment noted.
403.5	Ground Transportation	Access to Logan	At the MassPike/495 Airrail Terminal there should be a connector to Worcester Airport. This would take care of the inconvenience of getting to Worcester Airport.	Comment noted.

Code	Topic 1	Topic 2	Comment	Response
403.6	Regional Transportation	Regional Airports	A new International Airport must be built, probably in the area of Fort Devens. The Airrail terminal at the MassPike/495 would be the ticket terminal and Fort Devens would be the Departure Terminal.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Hanscom Field's potential service area overlaps with the service areas for several airports that already have the necessary infrastructure for commercial service. These airports are the Hanscom Field, T.F. Green/Providence, and Worcester Regional, all which have had or are undergoing major improvements to their terminal buildings, other landside facilities and airfields. Refer to response to Comment 403.5.

LETTER 404

Secretary of Environmental Affairs,
Mass. Environmental Protection Agency
Mr. Arthur Pugsley, EOEA member 10458
100 Cambridge St., 20th floor
Boston, MA 02202

Dear Mr. Pugsley:

I am writing to express my distress over the potential Logan Airport expansion, with the construction of Runway 14/32. I live in Winthrop which is adjacent to the airport.

The state of the impact of Logan Airport as it exists now is intolerable. Some greatly distressing areas are as follows:

1. The brief night of sleep, as planes are still landing at 1 or 2 A.M.; then planes start revving their engines and taxiing to idling areas at 6:00 A.M.. A total of four hours sleep is not healthy for any living being, and this occurs night after night in an unrelenting situation. 404.1

2. The jet fuel smell permeates the air constantly and since the average person keeps the windows open from April to October, we have six months of this odor. The other prevailing smell is that of tire rubber burning from plane takeoffs and landings. This cannot be healthy for citizens living next to the airport. Multiply these first two areas by all of the activity per day at the airport and our health is at stake. 404.2

3. The next concern is the constant, prevailing black soot and oil that coat the inside of our window sills, our cars, railings, etc. We must be inhaling this if it is in the air in Winthrop.

4. The next area is noise pollution. Soundproofing of our homes is not the answer. What about the six months per year when our windows are open or during the entire year when we are outside the house. The major landing times are between 7 and 8:30 A.M. and 7 and 9 P.M. when there is a plane landing or taking off every 3 to 5 minutes - and unbelievable DIN OF NOISE. The Decibel level is INTOLERABLE NOW! Along with this barrage during these hours we have constant air traffic over head. WE HAVE PLANES TAKING OFF OVER OUR HOUSES CONSTANTLY. I am sure our hearing acuity has been affected by this over these years! Again, the DECIBEL LEVEL IS INTOLERABLE NOW! 404.3

Each of the above concerns is great in itself and together these require citizens to implore

the Office of Environmental Affairs to help us in the pursuit of a NIGHT CURFEW at the airport, an ENVIRONMENTAL HEALTH STUDY on the effects of POLLUTION, NOISE LEVELS, and SAFETY CONCERNS WITH OVERFLIGHTS in the town of WINTHROP and other surrounding towns. 404.4

EVERY CITIZEN of Massachusetts, Winthrop included, deserves quality of life, liberty from the constant invasion of our living space, and a full measure of happiness. Yes, the airport was here when we purchased our home, but its impact on our existence has become intolerable. We look to you and your agency to provide solutions.

Sincerely,

John & Barbara Fiorenza
62 Faun Bar Ave.
Winthrop, Ma. 02152

Letter 404
Judith and John Silck, Carmen S. Domenico, and John and Barbara Domenico
Private Citizens: Winthrop

Code	Topic 1	Topic 2	Comment	Response
404.1	Noise	Impacts	The brief night of sleep, as planes are still landing at 1:00 or 2:00 AM; then planes start revving their engines and taxiing to idling areas at 6:00 AM....	The Night Equivalent Sound Level (LeqN) was calculated at 23 selected locations for all fleets and scenarios. Tables 6.2.15 and 6.2.16 of the Supplemental DEIS/FEIR report these data for the 29M Low and 37.5M High Fleet scenarios of the Supplemental DEIS/FEIR. The results show that, at most locations, the LeqN for the future fleets is lower than for the 1993 case. Where there is an increase in LeqN, the reason was the increase in flights for the No Action Alternative, which generally was mitigated by the Preferred Alternative. These results indicate that there will be less sleep disturbance in the future than that currently experienced. Refer to Section 7.4.1 of the Supplemental DEIS/FEIR for a discussion of cumulative noise impacts.
404.2	Air Quality	Odor	The jet fuel smell permeates the air constantly... The other prevailing smell is that of tire rubber burning from plane takeoffs and landings. ... [and] prevailing black soot and oil....	Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas.
404.3	Noise	Sound Insulation	...noise pollution. Soundproofing of our homes is not the answer....	Massport's FAA-approved sound insulation program is only one element of the noise abatement program. For a discussion of the noise abatement program, refer to the discussion in the *Logan Airport 1994/1995 GEIR* and the *Logan Airport 1998 Annual Update*. Massport has existing actions initiatives underway that reduce noise impacts on nearby communities, including: Noise abatement and runway use restrictions; Exploring means of extending the Logan Airport sound insulation program through innovative investigation of hill effects on sound propagation; Encouraging growth at Worcester Regional Airport and other alternative airports; and Monitoring and improving achievement of PRAS goals.
404.4	Environmental Review Process	MEPA	[Asks for help] in the pursuit of a night curfew at the airport, an environmental health study, on the effects of pollution, noise levels and safety concerns with overflights in the town of Winthrop and other surrounding towns.	A curfew is considered an airport access restriction. According to the Noise Act, airport access restrictions are subject to FAA review and require completion of a FAR Part 161 Study. Since the Noise Act was enacted, the FAA has not approved any Part 161 access restrictions proposed by airport operators.

Cc:
Bcc:
From: Arthur Pugsley@MEPA@EOEA
To: "Sharon L. Fisher" <zachtig@juno.com>
Subject: ... no subject ...
Date: Monday, April 26, 1999 23:38:38 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

LETTER 405

Please stop 14/32 and the Centerfield Taxiway now. This plan is not a good idea. You will be adding so much more noise and air pollution over local communities. If you want people to continue to live in Boston neighborhoods and get involved and bring back community living, then why do this. I was at Franklin Park zoo this past week-end and I can't tell you what a thrill it was to see so many people there. Two years ago you could go there on a nice week-end and hardly see anybody there. Why bring the noise and pollution to the neighbor hood. The humans and now those animals will be affected. There is danger to increased air flights, you are disturbing the piping snadplover habitat, and most of all this will not improve congestion or delays. Why not use Hanscom Field;ed, or Worcester airport. Do you realize how many people now go to Nashua and F idence. You will only be forcing more people to go there. I live next .he Arnold arboretum and can tell you that this will impact the community greatly. Please stop 14/32 and the Centerfield Taxiway NOW!!!

405.1
405.2
405.3

Letter 405
Sharon Fisher

Code	Topic 1	Topic 2	Comment	Response
405.1	Alternatives	Runway 14/32	....You will be adding so much more noise and air pollution over local communities....	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.
405.2	Open Space/ Parkland	Impacts	...are disturbing the piping sandplover habitat, ...	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. In the event that such a program at Camp Edwards is not available, an appropriate alternative program acceptable to the NHESP will be developed and implemented. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
405.3	Regional Transportation	Regional Airports	Why not use Hanscom Field or Worcester Airport. Do you realize how many people now go to Nashua and Providence? ...	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Draft EIS/EIR for these improvements.

LETTER 406

To: ISMTPOutBound@itd.w4@servers["Office-GOV, Governors" <Governors.us>]
Cc: ISMTPOutBound@itd.w4@servers["Pugsley-ENV, Arthur" <Arthur.Pugsl
Bcc: Arthur Pugsley@MEPA@EOEA
From: "Heather Hughes" <heatherdyan@yahoo.com>
Subject: I OPPOSE 14/32
Date: Wednesday, April 28, 1999 10:49:58 EDT
Attach:
Certify: N
Priority: Normal
Defer until:
Expires:
Forwarded by:

406.1

Letter 406
Heather Hughes

Code	Topic 1	Topic 2	Comment	Response
406.1	General Opposition		I oppose 14/32.	Comment noted.

LETTER 407

April 5, 1999

John C. Silva, Manager
Federal Aviation Administration
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Silva,

We are opposed to the Runway 14/32 for the following reasons: 407.1

- Increased traffic and resulting noise 407.2
- Fear of catastrophic air collisions
- Time is now to look for another area for an airport, while the land is still available and within reach financially 407.3

Thank you for your consideration.

Sincerely,

Letter 407
Kimberly _____, Unknown Resident to MEPA

Code	Topic 1	Topic 2	Comment	Response
407.1	Alternatives	Runway 14/32	...Increased traffic and resulting noise	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts. Total departures from Runway 33L and arrivals to Runway 15R (over East Boston and Chelsea) would increase, but most of these are non-jets. These runway operations are currently running well below the PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach, but still remain below the annual goals for these operations. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals. Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway would substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays would represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in current and future passenger and aircraft activity at Logan Airport.
407.2	Alternatives	Runway 14/32	...Fear of catastrophic air collisions	There is no reason to link the construction of Runway 14/32 with an increased risk of catastrophic air collisions. Runway 14/32 and all of the airside improvements are designed to reduce delay, increase the airport's efficiency, improve airfield safety, and reduce negative environmental impacts.

Code	Topic 1	Topic 2	Comment	Response
407.3	Regional Transportation	Regional Airports	...Time is now to look for another area for an airport, while the land is still available and within reach financially	Because the development of a second major airport would require ten to 15 years for site selection and environmental review, in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester Airport, T.F. Green/Providence Airport and Worcester Regional Airport, preclude the need for a second major airport. All of the other alternatives are addressed in the Supplemental DEIS/FEIR. Refer to Chapter 2 for a discussion of the emerging role of regional airports. Refer to Chapter 4 for a discussion of PPP. Refer to Chapters 4 and 8 for proposed noise mitigation and extension of the nighttime overwater routing preference (currently from 12:00am to 6:00am) to 11:00pm to 6:00am.

LETTER 408

To Whom It May Concern:

Before giving the green light to Massports proposed runway 14/32, please check the accuracy of statements and graphics presented by their representatives on Tuesday 4/13.

In Hull, we were able to find many mistakes in the graphics presented as fact- 408.1

How can we trust Massport while, during the meeting, 2 planes were heard flying over the Municipal Building - no flight pattern available for these planes. Their answer, - Pilot's choice!

Letter 408
Unknown Hull Resident to MEPA

Code	Topic 1	Topic 2	Comment	Response
408.1	Noise	Studies	[There were] many mistakes in the graphics presented as fact.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.

Comments to: Draft Logan Airside Improvements EOEA #10458

COMMENT PROCEDURE for: Draft Logan Airside Improvements (a.k.a. Runway 14/32) **EOEA #10458**

All comments on EIRs (environmental impact report) must refer to the EOEA file number. There may be other identifying numbers, but the EOEA file number is the one which must be used.

Comments not referring to the EOEA file number may not be considered.

LETTER 409

All comments must be received April 22, 1999
All mail concerning the environmental impact review process including filings, comments, and all associated materials must be addressed to:

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Arthur Pugsley EOEA No. **#10458**
100 Cambridge Street - 20th Floor
Boston, MA 02202

Failure to address mail in this manner may result in delay of action on comments or no action on comments at all.

Dear Mr. Durand,

My comments to the EIR-Logan Airside Improvements Plan EOEA #10458 are as follows:

I AM AGAINST MASSPORTS PROJECT TO BUILD RUNWAY 14/32:

THE ABUTH TO UTILIZE OTHER AIRPORTS, HANSCOM, WORCHEST PROVIDENCE, MANCHESTER, IS NOT ONLY IMPORTANT PLANNING FOR THE FUTURE GROWTH OF OUR COMMUNITIES TO THE NORTH WEST & SOUTH OF THE GREATER BOSTON AREA BUT, ALSO LOGAN AND IT'S IMMEDIATE COMMUNITIES ARE SATURATED WITH ALL THE DIFFERENT KINDS OF POLLUTIONS IE. NOISE, ENVIRONMENTAL OF ALL KINDS — AS WE APROACH THE YEAR 2000 IT WOULD BE ENCOURAGING TO THINK THAT THE QUALITY OF OUR LIVES WERE MORE IMPORTANT THAN IT SEEMS TO BE AT THIS TIME — REGARDING THIS ISSUE

409.1

409.2

Name
Address
Phone

Letter 409
Unknown Commentor

Code	Topic 1	Topic 2	Comment	Response
409.1	Regional Transportation	Regional Airports	The ability to utilize other airports, Hanscom, Worcester, Providence, Manchester is not only important planning for the future growth of our communities to the north, west and south of the greater Boston...	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of regional alternatives to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
409.2	Public Health	Effects	Logan and its immediate communities are saturated with all the different kinds of pollution (i.e., noise environmental) of all kinds.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.

Arguments for + Against Runway 14/32

For	Against
Saves big Business Big Bucks	More than doubles VOC (Volatile Organic Compound) in closest Neighborhood
LETTER 410	
410.1	Increased NOX gas
410.2	Puts smallest + quietest planes out over water making room for larger noisier planes on existing runways.
410.3	Removes incentives for Worcester Roads + Airlines to run flights from Worcester.
410.4	Gridlocks already crowded streets + roads around logan
410.5	So close to Harbor runoff would pollute Jeffries Cove which acts as a catch basin Pollutes Harbor Island Park

Letter 410
Handwritten Comments by Unknown Resident

Code	Topic 1	Topic 2	Comment	Response
410.1	Preferred Alternatives	Runway 14/32	More than doubles VOC (volatile organic compound) in closest neighborhood. Increased NOx gas.	Furthermore, the NAAQS are not violated. Appendix A (*Ozone Modeling Support Document for the New England Domain*) of DEP's Attainment Submittal of April 1998, indicated that on-road mobile sources are a greater concern for NO_x and area sources a greater concern for VOCs than Logan Airport.
410.2	Alternatives	Runway 14/32	Puts smallest and quietest planes out over water, making room for larger, noisier planes on existing runways.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.
410.3	Regional Transportation	Regional Airports	Removes incentives for Worcester roads and airlines to run flights from Worcester.	Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999. They have begun the preparation of a Draft EIS/EIR for these improvements.

Code	Topic 1	Topic 2	Comment	Response
410.4	Ground Transportation	Access to Logan	Gridlocks already crowded streets and roads around Logan.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways. Refer to Section 4.2 of the Supplemental DEIS/FEIR.
410.5	Water Quality	Stormwater	So close to Harbor runoff would pollute Jeffries Cove which acts as a catch basin. Pollutes Harbor Island Park	No runoff from the Centerfield Taxiway or Runway 14/32 will be directly discharged to Jeffries Cove, rather it will be discharged through a series of existing outfalls along the Harbor channel. Also note that the drainage for the Maverick Street outfall will not be affected by this construction. No adverse impacts to water quality that could affect the Boston Harbor Islands are expected, as described in Section 6.6 of the Supplemental DEIS/FEIR.

4 Clarendon Street
Boston Massachusetts
02116 6117

LETTER 411

17 March 1999

Robert A. Durand
Secretary of the Executive Office of Environmental Affairs
100 Cambridge Street – Room 2000
Boston, MA 02202

Dear Mr. Secretary:

The elected officials, community activists and citizens of Winthrop have united with Boston neighborhoods and other communities in strong opposition to the new runway/taxiway proposal being made by Massport. We are extremely upset that the Governor, who has ignored our requests to meet, has changed his original position and is now officially endorsing the proposal. Our community leaders and citizens have been actively meeting with our state and federal government legislators to discuss our concerns regarding this specific proposal, as well as the core problem of dealing with the projections for significant increases in air traffic demand for the region. In fact, you met two of our town citizens who presented you with a letter voicing our concerns and seeking your attention on January 28th at the conference in the Seaport Hotel.

Massport has pitched the Runway 14/32 proposal as providing some relief to Winthrop at the expense of Boston and other communities. Even if true, and we have serious doubts, it would only be short-term relief. We are concerned about the entire Boston area as much as our own town. Regardless of a new runway, and according to Massport's own projections, demand for passengers and aircraft to come to the area is expected to grow significantly, and flight delays are expected to soar. As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in **extreme danger!** 411.1 411.2

Please know that we support economic growth for Boston, the Commonwealth and New England. We are working closely with Senator Travaglini, Congressman Markey, Representative DeLeo and others in support of potential solutions to the regional air transportation problem, such as secondary airports, etc. There are answers to the problem which could bring economic benefit outside of Boston, but trying to increase capacity at Logan is not the answer. Such a course would be severely detrimental to those of us who call the Boston area home and, ironically, to those visitors expected to fly here as well. Our health and safety are already at great risk. Our burden has increased each year. We cannot accept more! 411.3

Sir, we need your attention to this issue. We ask that you meet with a group of our town officials and community leaders **before** you review the Environmental Impact Report to hear our concerns. Your Department has previously criticized past Massport studies. There are **serious** questions regarding the adequacy, quality and reliability of information supplied by Massport. Winthrop has been ignored in requests for needed health studies. We ask you to understand that the health and quality of life of Boston area residents is threatened. We hope you agree that full input from Winthrop and the other communities is **essential** before your office reaches any decisions that will impact so many Boston area residents. 411.4

Respectfully,

Ellen Winkler

Letter 411
Ellen Winkler, Brock Philips, David Prusky, L. Gertrude Honan, Barbara Bishop, George McLaughlin, Rebecca Swope, and Henry Carson

Code	Topic 1	Topic 2	Comment	Response
411.1	Alternatives	Runway 14/32	Massport has pitched the Runway 14/32 proposal as providing some relief to Winthrop at the expense of Boston and other communities. Even if true, and we have serious doubts [about that], it would only be short-term relief.	PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere. The EOEA May 7, 1999 Certificate on the Airside Draft EIS/EIR requested that Massport undertake a feasibility study of implementing measures to reduce NOx emissions at Logan Airport. This study is currently underway and will be presented to MEPA by the end of March 2001. Appendix A (*Ozone Modeling Support Document for the New England Domain*) of DEP's Attainment Submittal of April 1998, indicated that on-road mobile sources are a greater concern for NO_x and area sources a greater concern for VOCs than Logan Airport.
411.2	Alternatives	Preferred Alternatives	...As a physically small inner-city airport, Logan has exceeded reasonable capacity and cannot handle the dramatic projected demand without putting Boston, the Harbor and surrounding communities in extreme danger!	Anticipated future passenger and operations levels can be accommodated by Logan Airport without any airside improvements but not without delays and resulting adverse environmental impacts. The goals of the Airside Project are to reduce delays, increase the airport's efficiency and improve airfield safety in an environmentally responsible manner. Long-term aviation growth is a recognized worldwide condition, based on economic and demographic factors, and is not under Massport's control. Massport estimates that up to 7.3 million Logan Airport air passengers may be diverted to other modes/airports or eliminated through advances in telecommunications.
411.3	Regional Transportation	Regional Airports	We ... support ... potential solutions to the regional air transportation problem, such as secondary airports, etc.... There are answers to the [regional transportation] problem which could bring economic benefit outside of Boston, but trying to increase capacity at Logan is not the answer.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for improvements to be implemented under the Preferred Alternative at Logan Airport.

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Code	Topic 1	Topic 2	Comment	Response
411.4	Public Health	Effects	Requests for needed health studies [have been ignored]...health and quality of life of Boston area residents is threatened...	Noise was identified as the only off-airport impact associated with the Preferred Alternative (refer to Section 6.2 of the Supplemental DEIS/FEIR for a discussion on noise impacts). The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. A review of the available public health information did not indicate any causal relationship based on proximity to the airport.

LETTER 412

Marriott
HOTELS · RESORTS · SUITES

Boston Marriott Cambridge

Two Cambridge Center
Corner of Broadway and Third Street
Cambridge, Massachusetts 02142

April 8, 1999

Jeff Miller
General Manager
617/494-6600
617/494-6565 Fax

Mr. John C. Silva, Manager
Environmental Programs
Airports Division, ANE-600
New England Region
12 New England Executive Park
Burlington, MA 01803

Dear Mr. Silva:

The hotel industry is one that relies heavily on air transportation. In fact one of the deciding factors meeting planners must consider after hotel accommodations and convention space is reliability and capacity of incoming and departing flights. With the future development of the new convention center and Seaport District, Logan's role becomes even more critical to our industry. 412.1

While we can appreciate the credibility of exploring alternate regional airports for increased use, Logan will be just minutes away from the new convention center and offers a tremendous advantage over other competing cities who do not have this type of close proximity. Moreover, we need to show convention travelers that Logan is serious about improving from its current position of the sixth worst delay plagued airport in the country. 412.2

I urge you to please support and work towards the development of runway 14/32 for Logan. Only with improved capacity and a more efficient Logan Airport can we truly realize the full potential of our new convention center and hospitality industry. 412.3

Sincerely,

Jeff Miller
General Manager

/lmk

Letter 412
Jeff Miller, Boston Marriott Long Wharf, Bill Skoglund, General Manager, Boston Marriott Newton, Paul V. Puzzanghero, General Manager, Peabody Marriott, Terry Wordon, General Manager, and Boston Marriott Copley Place, Bill Munck, General Manager

Code	Topic 1	Topic 2	Comment	Response
412.1	Purpose and Need	Airfield Capacity	With future development of the new convention center and the Seaport District, Logan's role becomes even more vital to the hotel industry.	Comment noted.
412.2	Alternatives	Regional Airports	While...[we] can appreciate the prospect of exploring alternate regional airports for increased use, Logan will be near [the new Convention Center and offers a tremendous advantage over] other competing cities who do not have this type of close proximity [to the Convention Center].	Comment noted.
412.3	Purpose and Need	Airfield Capacity	I urge you to support the development of runway 14/32 at Logan. We need to reduce the number of flight delays our visitors endure. Only with a more ...[efficient] Logan Airport can we truly realize the potential of our [Convention Center] and hospitality industry.	Comment noted.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/ FEIR	Supplemental Draft Environmental Impact Statement/Final Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

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MASSPORT/FAA PUBLIC HEARING

HELD AT:

TRANSPORTATION BUILDING
BOSTON, MASSACHUSETTS

WEDNESDAY, APRIL 7, 1999
6:35 P.M.

Christopher Poreda, Moderator
John Silva, FAA
Jay Wickersham, MEPA
Arthur Pugsley, MEPA
Deborah Meehan, President, SH&E
David W. Hollander, Vice President, SH&E
Betty Desrosiers, Massport
Flavio Leo, Massport

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PROCEEDINGS

THE MODERATOR: I officially declare this hearing opening. It's now 6:30. Good evening, ladies and gentlemen. My name is Chris Poreda. I'm a senior attorney with the Federal Aviation Administration's office and the regional counsel of the New England region. I will act as the hearing officer or moderator for this evening's meeting.

This meeting is jointly sponsored by FAA and Massport. I'd like to thank the commonwealth of Massachusetts for allowing us to use these facilities, and I welcome those individuals who are here this evening to listen and make public comment. I also want to welcome members of the media, though I would ask that you remain as unobtrusive as possible while performing your valuable function to cover this event.

This meeting is being transcribed so each of us who speaks needs to remember to speak clearly, use the microphones, and identify yourself, spelling your last name, if possible.

Before I introduce those individuals who will make presentations tonight and the rest of the people at the front of the room, I must briefly outline the purpose of the meeting for the record. After those public presentations, then I'll open the meeting for public comment.

The purpose of this meeting is to receive public comment on proposed airport developments at Logan International Airport. Those proposed developments are detailed in a document jointly with the Federal Aviation Administration and Massport entitled Logan Air Side Improvements Plan Project dated February 1999. This joint document serves as both a draft environmental impact statement to meet the procedural requirements of the National Environmental Policy Act, or NEPA, and other federal requirements, and is a draft environmental impact report to meet the requirements of the Massachusetts Environmental Policy Act, or MEPA, and other state requirements.

The FAA is the lead agency for

purposes of airport layout plan approval and any funding approval which are federal actions subject to NEPA. Massport is the project proponent for the proposed developments which fall within its purview as the proprietor of Logan International Airport.

The draft EIS/EIR was sent to several elected officials, community leaders, and federal, state, and local government offices. In addition, copies of the document were sent to public libraries in Boston, Brookline, Chelsea, Charlestown, Milton, Quincy, Revere, Somerville, and Winthrop. A notice seeking comment from that document was published in the Federal Register on February the 26th, 1999, and appears on Page 9508 of Volume 64 of the Federal Register.

Here this evening from the Federal Aviation Administration to my right and to the left of me as you look at me is John Silva, environmental programs manager in the airport's division of the Federal Aviation Administration's New England region. On my

left, your right, from the Massachusetts Environmental Policy Act office are Jay Wickersham and Arthur Pugsley. From Massport we have Flavio Leo, director of aviation planning, Betty Desrosiers, director of planning and development, Deborah Meehan, project manager from SH&E, a consultant to Massport on this project, and David Hollander, a planner from SH&E.

At this point, we will have short statements by John Silva and the representative from the Massachusetts Environmental Policy Act office. Following those statements, Betty Desrosiers from Massport will make a brief 15-minute presentation. At that point, we'll take a short break, and then I will open the floor to public comment. John.

MR. SILVA: Good evening. My name is John Silva, and I'm manager of environmental programs with airports division, New England region, Federal Aviation Administration. I'm FAA's project manager for the environmental impact

statement. This hearing is being conducted to be our public input requirements under the Council on Environmental Quality regulations, and the Airport and Airway Improvement Act as amended and recodified. The hearing will be conducted this evening and tomorrow evening at 6:30 p.m. at the Holiday Inn, McLellan Highway, East Boston. That's adjacent to Suffolk Downs.

In addition to the opportunity to provide comments this evening, a written comment period on the draft EIS/EIR will remain open until April the 23rd, 1999. Comments may be mailed to me, John Silva, S-I-L-V-A. My address is Airports Division, FAA, New England Region, 12 New England Executive Park in Burlington, Massachusetts, and the zip there is 01083.

Alternatively, you may mail comments to the Secretary of Environmental Affairs. The address is Attention: MEPA, that's M-E-P-A, office, Mr. Arthur Pugsley, P-U-G-S-L-E-Y, EOEA Number 10458. The street address is 100 Cambridge Street, 20th Floor,

Boston, Massachusetts, and the zip there is 02202.

I'd also like to add that if you have written comments here this evening and you'd like to deliver them to us, there is a box for other testimony at the end of the table there.

THE MODERATOR: Thank you, John. At this point, let me make a verbal footnote. Although I am also an employee of the Federal Aviation Administration, I will take, personally no part in the decision involving this document or this project or review of the comments. I am here strictly as a moderator for this evening's meeting and tomorrow evening's meeting.

Now we'll hear from the Massachusetts Environmental Policy Act office.

MR. WICKERSHAM: Thank you, Chris. I am Jay Wickersham from the MEPA office in the Executive Office of Environmental Affairs. With me is Arthur Pugsley who is the MEPA analyst who is assigned to this

project.

The purpose of review of this project under the MEPA statute is to insure that Massport, as a state agency, has taken all feasible measures to avoid, minimize, or mitigate the adverse environmental impacts of its actions. The purpose of the MEPA review process is to insure an open public review and comment period on the documents. The MEPA process is not a permitting or an approval process.

The comments that we are receiving are as to the adequacy of the draft environmental impact report which has been submitted. We encourage comments to be as specific as possible, and to address both the general requirements of the MEPA regulations which are at 301 CMR 11, and also the specific requirements in the scope that was issued by Secretary Cox in November of 1995. You will find the scope that applies to the draft environmental impact report at the front of Volume 2 of the document submitted by Massport.

As John and Chris have stated, in addition to the spoken comments today, we are receiving comments. We are receiving those through Friday, April 23rd. Comments should be received at the MEPA office by 5 p.m. on that date. Again, I'll quickly give the address which is 100 Cambridge Street, Boston, 02202, Attention, Arthur Pugsley, and be sure to make sure that all correspondence has the EOEA file number which is 10458. These addresses as well as the fax number of the MEPA office are also found outside by the locations of the sign-in sheets.

THE MODERATOR: Before Massport gives its presentation, I'll remind people again that when I open the floor to public comment, I will be recognizing people to speak by the sign-up sheets that were outside the front door, so if you want to speak, please avail yourselves of those sign-up sheets. That's what I'll be using to recognize people in order to make comments.

Now we hear from Betty Desrosiers from Massport.

MS. DESROSIERS: Thank you and good evening. Over the last three-and-a-half months, Peter Blute, Tom Kenton and I have participated in over 45 public forums and addressed over 3,500 people about this project and tried to provide a detailed overview of the project and listen very carefully to comments that we have heard in each of those forums. Before the close of the comment period on April 23rd, we expect that number of forums will increase to nearly 50 forums.

I know that many of you in this room have participated in one or more of those forums, and tonight's presentation is a shortened version of what you have seen earlier. And for those of you that have not yet had the opportunity to hear the overview of this project, tonight's is a shortened version but I think it is a comprehensive one. So with that, let me begin.

Logan Airport is a very important component of the state and regional economy. It employs 15,000 people, and it contributes

5 billion dollars into the economy, nearly 1.4 billion direct, 3.6 billion indirect. Businesses in the greater Boston area alone, 79 percent of the businesses in the greater Boston area rely on convenient and safe air service at Logan Airport to do their business, and indeed, the high growth industries of New England and Massachusetts, manufacturing, communications, business services, management services expect that their reliance on air travel and on Logan Airport is going to grow over time.

Logan Airport has a problem today, and our problem is a delay problem. It is a delay problem primarily caused by wind and weather conditions. By any measure of indices of delay, Logan Airport has, for over a decade, ranked amongst the worst airports in the United States for delays. This is unacceptable for the traveling public. It is unacceptable to our neighbors because these delays cause adverse environmental impacts.

We have used as part of this environmental impact study state of the art

simulation modeling that was developed by world-renowned experts at MIT in the flight transportation lab. Indeed, this modeling has been used by airports within the United States and across the globe. It is a very sophisticated model, and it is exactly the type of model that is appropriate for the kind of complexity of operation that we have at Logan Airport because we are located in New England with very varied wind conditions.

So we sought out and selected a model appropriate to the kind of operation that we have at Logan Airport. It is a model that has been embraced by the FAA. It is a model that has been embraced by airports around the globe. That model has shown that Logan Airport experiences today over 120,000 hours of delay at a cost of over 300 million dollars to the economy including the passengers and the airlines.

This proposal to improve the airfield at Logan Airport is part of a multi-airport, multi-modal air travel transportation plan that has been developed

for over a decade, and for which the FAA and the New England states have invested over 600 million dollars to realize. This planning and investment strategy began in 1990 with the second airport study.

That study, by the way, had a 52-member blue ribbon panel comprised of community groups, business groups, and environmental organizations. The conclusion of that study was that it is likely infeasible to build a second airport in Massachusetts and instead, a second study was conducted called the Strategic Assessment Report which looked and, in fact, developed the strategy that has since that point already been implemented.

That strategy looked to improve the regional airport, looked to high-speed rail, and looked to Logan. Following on the Strategic Assessment Report, the New England state aviation directors and Massport began meeting on a regular basis to, in fact, advance and develop the regional airport strategy, and we did that arm-in-arm with the

FAA.

As a result of these studies, what has occurred is that we have seen significant investments in New England's regional airport. We have indeed seen high-speed rail become a reality. It is being tested today. High-speed rail will begin between Boston and New York later this year. High-speed rail has become a reality. The investment and the increased activity at the regional airports has occurred.

What this proposal looks to do is to complete the last piece of that puzzle which is also to make appropriate improvements at Logan Airport to address the delay conditions that we experience there. This is the regional airport system. This is the system, these airports, Logan Airport as the premier airport for the region of Manchester to the north, Green to the south, and Worcester to the west. These are the airports that collectively will handle the air travel demand that we in this region, that we in this commonwealth are indeed

generating.

And, in fact, what we are seeing as a result of the growth in the regional airport is that Logan Airport is carrying a smaller and smaller share of the total travel within New England, a smaller and smaller proportional share. That is precisely what I think we ought to collectively share as we go along.

What did we find? What did all these studies find about the extent to which these other alternatives could help to address the delay problem at Logan Airport? What these studies collectively found is that these alternatives could reduce demand at Logan Airport by about 7.3 million passengers. That's a tremendous help to Logan Airport, but it does not preclude the need to improve Logan's airfield.

What are we trying to do with this package of improvements? We are looking to reduce delays at Logan Airport, enhance the operational efficiencies of our airport, to enhance safety, and to do that by minimizing

environmental impact, and we believe that our document demonstrates that indeed we have and can do that.

What we are proposing -- our package of improvements include the following. The most well-known is a unidirectional runway 14/32, a series of taxiway improvements, the most well-known of which is the center field taxiway. The FAA is seeking to reduce the minimums of several of our runway ends, and we looked at peak hour pricing.

The environmental document itself has five alternatives structured in it. The alternatives allow for a comprehensive assessment of these improvements and an evaluation of the key concepts compared one to another. How will conditions be if we do everything? How will conditions be if we do everything but peak hour pricing? How will it be if we do everything but if we only do the taxiways? And how will it be if we only do the administrative actions, and what will conditions be if we do nothing?

As the result of the work that we have done over the last four years, we have selected alternative 1A as our preferred alternative for this project. How does this preferred alternative help us deal with delays at Logan Airport? What we see is that if we do nothing at Logan Airport, if we do not do anything at Logan Airport, delays at Logan Airport are going to increase and they are going to increase expidentially.

If we are able to build runway 14/32, then delays at Logan Airport will indeed go down and dramatically level off in the future. And what is very important to note is that delays, the delay reduction benefits of runway 14/32 increase over time. This is not a mandate. This is not a mandate program. Delay will always be less by building this runway, and delays in the future will clearly stabilize.

What do the environmental results show? What the environmental results show with respect to noise is that by being able to build runway 14/32 and a center field

taxiway, that we are able to reduce noise for those communities that live in the highest noise-impacted areas. There is nothing else that can be done to provide relief to those close-in communities but build this runway. It is the thing that provides that relief.

The second thing that we have found is that by reducing delays we are able to reduce late-night operations. The third thing we are able to find is that by building runway 14/32, we are able to take better advantage of our location adjacent to the harbor. We are able to shift 75,000 flights out over the water rather than over people's homes, and that is good for everybody close-in or out.

The last thing it does, it allows the air traffic control tower to have a more equitable distribution of noise at Logan Airport north, south, east, and west, and I'd like to show you a little bit how important the goal of equitable distribution is. Today, 76 percent of our operations are over communities north and south of the airport.

If we are not able to build runway 14/32, nearly 90 percent of the operations will occur over communities that lie north and south of Logan Airport.

If you live in Braintree, Milton, Dorchester, Quincy, South Boston, East Boston, Winthrop, Revere, Swampscott, this is what your future holds if we are not able to build runway 14/32. By building the runway, we are indeed able to create a much more balanced distribution of over-flights at Logan Airport. This is the goal that I think from a public policy perspective and indeed from a community's perspective when we established the community noise goals, this is what we were seeking to do, not that.

In terms of mitigation, what we propose to mitigate with this airport is the following. We guarantee that this runway will be a unidirectional runway, and we will use every independent mechanism available to insure unidirectionality, and we do that and we are proposing that in the following way. We are proposing that by seeking only the

permits to build it as a unidirectional runway.

We are seeking that by including it as part of a mitigation measure in our environmental document, and we are guaranteeing that by seeking relief for only unidirectional operations from the court injunction. Every independent mechanism available to us we will employ to insure the unidirectionality.

In addition, we will soundproof an additional 1200 to 1500 homes in those communities where the noise contour does go up as a result of more equitable distribution of noise. And the final key element of our mitigation program is to create or replicate a new habitat for the upland sandpiper which does come to Logan Airport, if you can believe that, right between runways. We are working with the state agencies to develop a program to establish a replication site for the upland sandpiper down in Cape Cod.

These are the key elements of our mitigation measures, and I believe that

that's the end of the overview. I thank you very much for your patience in letting me go through this presentation, and I look forward to hearing your comments this evening.

THE MODERATOR: Thank you very much, Betty. Now that I'm out of the spotlight, what we're going to do is take a five-minute break, and then I'll open the floor to comments. I will start the meeting again in five minutes so I would ask that if you have business to conduct that's going to take longer than that, please go outside. In five minutes, we will reconvene.

(Brief recess taken.)

THE MODERATOR: As part of the rules, we recognize that everybody here has an opportunity to speak, everybody here has an opportunity for their opinion. We should be civil to anybody who is speaking, and keep your comments civil and unemotional. I know this issue sparks a lot of controversy, and with good reason. Again, I'd remind you that the meeting is being transcribed, so when people come to the microphone, please speak

clearly, slowly, enunciate, and identify yourselves before you begin your comment. And if you can remember, spell your last name. That would help Pete, our stenographer, out greatly.

After everyone has had an opportunity to speak and if we still have time left in the evening, it may be an opportunity to speak again. One of the things that we're not going to permit, though, is to allow one speaker to donate time to the next speaker.

I will announce two people at one time so you can be prepared not only to mentally be prepared for your own comments, but also so that as soon as one person ends comment, then the next person can start right away. In the beginning, at least, we will alternate comments of who opposes the project with the comments of who supports the project.

It's important to recognize what the point of the meeting here is. This is not a forum for debate with the officials

that have presented the draft report. I will allow short questions for clarification or maybe procedural questions, but I will not allow questions or responses to comments that will engage in a debate on the merits of the draft EIS. There have been many public hearings that were heard already for that purpose, and you have an opportunity to not only speak tonight but give us written comments or give to the agencies written comments on your views.

Finally, please try to refrain from applause or other forms of verbal approval or disapproval because that only takes away from the time we all have to listen to everyone's comments, and I want to move the meeting along as efficiently as possible.

First, before we hear comments, there are some government officials that wish to be recognized. Boston City Councilor Mickey Roache and Boston City Councilor Paul Scappichio. My apologies to the councilor for mispronouncing his name. We will take those government officials and those

officials representing agencies first. First we'll hear from State Representative Bruce Ayers of Quincy followed by Selectman Robert Driscoll of Winthrop.

MR. AYERS: Thank you. Bruce Ayers. I'm here tonight, ladies and gentlemen, in a dual capacity. Not only am I a state representative but also a city councilor in the city of Quincy, and I've been fortunate enough to be a city councilor in Quincy for the past eight years, and one of the most consistent complaints I've received from the city of Quincy has been the amount of airplane noise and pollution flying over my district not only of North Quincy but also Squantum. T1.1

I strongly oppose runway 14/32 because it's only going to increase the problems to my constituents. Based on the feedback that I've received, I introduced a resolve before the city council meeting last Monday night, and I will try to be brief and articulate the points that I brought up at the council meeting.

Whereas, they have not fully examined the alternatives to the airport expansion like Hanscom Field and Worcester Airport; whereas, other transportation accesses like regional airports Green in Rhode Island and Manchester in New Hampshire; and whereas other management tools that could be used to alleviate delays such as peak period management programs; and whereas, the operation of the new runway would severely impact several neighborhoods in my district in the city of Quincy, especially Squantum, West Quincy, North Quincy, Montclair, Houghes Neck, Merrymount, Wollaston. T1.1.1 T1.1.2 T1.1.3

And most importantly, being a state representative and city councilor is the importance to have public meetings, and we've done this over the years many, many times, and I feel that Massport has not come out and asked the city of Quincy to have or to hold a public meeting. T1.1.4

So one of the reasons I wanted to come here tonight was to invite the officials down to the Quincy City Council for a public

meeting, and I'd also like to extend that opportunity to a community meeting so that, based on some of the concerns we're addressing tonight, ladies and gentlemen, could be better understood. It would give my constituents a better understanding as to what impacts we'll have. Whether it's quality of life issues like noise pollution or air pollution, they will better understand it, and they haven't been given any chance. I think it's unfair.

So I come before you tonight to submit written testimony from several of the community centers, and also request that the Federal Aviation Administration withdraw its support for the expansion until these questions are addressed and answered. I don't think it's fair. The amount of calls I am receiving are strongly opposed to this. We need more information. We need to protect the quality of life throughout the South Shore and our community, and we have some serious concerns here that aren't being addressed.

T1.1.5

This resolve was based on a lot of points that are unresolved, and they were put into a form which was unanimously passed by the Quincy City Council. So I'd like to submit that along with other documentation I have from various residents who wrote to me, and neighborhood associations who are very much concerned. So based on that, I would like to voice my opposition not only as a city official but as a state representative for these areas. Thank you.

THE MODERATOR: Thank you, Representative Ayers. Representative Ayers actually went to the microphone. I meant to comment on the media has requested that people who wish to be heard by them use the microphone to my left, not the one in the center of the room because that's the one they're hooked up with. Next we'll hear from Selectman Robert Driscoll of Winthrop, followed by Steve Muench, Massachusetts Aeronautical Commission.

MR. DRISCOLL: Good evening. My name is Robert Driscoll, Jr., and I'm one of

T1.2

the members of the Board of Selectmen for the town of Winthrop, and thank you for having us here tonight. The town of Winthrop, the Board of Selectmen, unanimously all oppose the project of 14/32 and the center field taxiway, and I think Winthrop's in kind of a unique situation because we are one of the few communities that, according to projections from the EIS, the EIR, are supposed to benefit in some way because of a reduction in the use of the runways that most impact our community.

A lot of people are asking us why we're opposed to this project if our town is going to benefit, and the answer to that question is that there's a long history of treating our town which happens to be a host community to Logan Airport, runways 22 left and 22 right begin actually within the boundaries of the town of Winthrop, we have had a long history of working with Massport and we have had a long history of responding in the past to GEIR and updates and EEIS and all that.

And I think that one thing that we've always been consistent in is that we've always taken the position that these impacts cannot be looked at on a segmented basis. We've tried to implore MEPA on that argument, not successfully in the past, but I think that's something that we've been consistent about and that is primarily the reason we are opposed to this because we don't believe the EIS, the EIR looks at all of the total cumulative impacts of building 14/32 and building the center taxiway. T1.2.1

Because we've had such a long-standing working relationship with Massport, we have a good sense of their ability or inability to come forward and meet commitments that pertain to the use of the runway, and I think the PRAS goals is probably the best example of that. PRAS goals was established some time ago, and if PRAS goals were actually adhered to, the town of Winthrop would be in much better environmental condition than it is today, yet those goals cannot be attained.

And part of the argument for 14/32 and the center field is based on the ability to achieve something like PRAS goals again. However, we're not sure, we don't feel confident that Massport and the FAA will be able to commit to meet those objectives. In fact, we had asked Massport at a meeting in Winthrop at the Winthrop Arms whether or not they could commit somehow to the EIR and the EIS to guarantee the runway usages, and we were informed, I think as we expected, that no, that's not going to be possible because there are too many factors beyond their control, the FAA being a factor, the weather being a factor.

So I think that between the PRAS goals not having been met and with the fact that there's no accountability for meeting these runway objectives, that leads the town to conclude that this is not a good alternative, it doesn't look at the whole picture, and we think that the EIR should be withdrawn. Thank you. T1.2.2

THE MODERATOR: Thank you, Mr.

Driscoll. Next we'll hear from Steve Muench from the Massachusetts Aeronautics Commission, followed by Paul Guzzi from the Greater Boston Chamber of Commerce.

T1.3

MR. MUENCH: Good evening. For the record, my name is Steve Muench. That's M-U-E-N-C-H. I am the executive director of the Massachusetts Aeronautics Commission. Contrary to published reports, considerable regional planning has been done on a multi-state level. The six directors of the New England state agencies that have a responsibility for oversight of aeronautical activities within their respective states have been working with the Federal Aviation Administration, the Massachusetts Port Authority, the New England Council, and nine regional airports since 1994 to improve air service throughout New England.

Those regional airports are Worcester Regional Airport and New Bedford Regional Airport in Massachusetts, Manchester Airport in New Hampshire, T.F. Green Airport in Rhode Island, Bradley International

Airport and TWI-New Haven Airport in Connecticut, Bangor International Airport and Portland International Jetport in Maine, and Burlington International Airport in Vermont.

In 1990, the Massachusetts Aeronautics Commission initiated a siting study commonly referred to as the second major airport study to determine whether there were any suitable sites for a second major airport in Massachusetts. That study started with 182 sites, and eventually recommended consideration of two sites, at Fort Devens and in the Gardner-Winchendon area.

In 1992, we announced that we would reevaluate air transportation demand and capacity in the context of a multi-modal high-speed transportation system, and initiated a second study commonly referred to as the strategic assessment report study. In November 1993, that study reconfirmed that the demand for air service at Logan will surpass capacity.

More importantly, however, the

study also identified a number of scenarios which it implemented to avoid the necessity for construction of a second major airport to meet that excess demand. Those scenarios involve improving air service at regional airports, improving rail service, improving telecommunications technology, and making air side improvements at Logan.

The logic behind the pursuit of these alternative solutions is obvious given the staggering financial, environmental, and social cost to construct a second major airport. Our ongoing regional planning efforts are a natural progression from the second major airport and strategic assessment report studies, and complement the analysis of surface transportation performed under the New England Transportation initiative.

Today we have identified existing air service levels, estimated the degree of leakage for each airport which is defined as the number of passengers in a regional airport's marketing area that use either Logan or one of the three New York City

airports, Laguardia, JFK, or Newark.

We analyzed the potential for improved or new air service at the regional airports in New England, conducted a regional airports route development conference where representatives of the regional airports actually met with representatives of more than a dozen major regional and Canadian air carriers.

We assessed the potential impacts that improved air service at regional airports would have on Logan. We designed the regional airport fair sampling methodology, and analyzed the results of a common fair pricing strategy at a regional airport.

In 1998, approximately 40 percent of the domestic destination passengers departing from those regional airports and Logan departed from the regional airports. That's up from 35 percent in 1996. In that two-year period, the total number of domestic enplanements at all ten airports rose by 13.4 percent.

However, domestic enplanements at the nine regional airports increased by more than 31 percent while Logan's domestic enplanements only increased by approximately 4 percent. Clearly, the combined efforts of the six-state aviation agencies, the nine regional airports, the FAA, Massport, and the New England Council are diverting demand away from Logan and to the regional airports.

Each year, as the state directors and regional airports work with the FAA to update their respective capital improvement plans, we consider both the local and regional impacts of those proposed capital improvements. The new airport terminal, runway extensions, and other improvements at Manchester, New Bedford, T.F. Green, and Worcester are all complementary of our individual and joint efforts to improve regional air service throughout New England, and they all contribute to reducing delays at Logan.

We urge you to approve the air side improvements proposed by Massport. They are

T1.3.1

necessary to insure a safe and efficient New England airport system to serve scheduled passengers, and similarly, we oppose efforts to artificially constrain demand for the employment of peak hour pricing or peak period pricing. T1.3.2

Notwithstanding the success of those regional airports, communities throughout New England will continue to use Logan for markets not served by those regional airports. Thank you very much for this opportunity to offer these comments this evening.

THE MODERATOR: Thank you, Mr. Muench. Are you going to also submit that written paper?

MR. MUENCH: We will next week. It's going to be signed by the other directors.

THE MODERATOR: Now we'll hear from Paul Guzzi from the Greater Boston Chamber of Commerce. Did I pronounce that right?

MR. GUZZI: Good evening. I've been called far worse. My name is Paul T1.4

Guzzi.

THE MODERATOR: Excuse me just a second, Mr. Guzzi. Following him, we will hear from Andrea D'Amato from the city of Boston.

MR. GUZZI: I am president and CEO of the Greater Boston Chamber of Commerce. Let me try to summarize my written comments which I will submit. The Chamber as well as other business organizations is supportive of both the runway 14/32, and as well we are supportive of regional solutions and expansion of capacity on a regional basis. T1.4.1

In a word, we are supportive for three reasons. One, we think that air transportation issues, Logan and regional air transportation issues together, are critical for our economic well-being, are critical for economic growth, are critical for jobs in this area.

All too often, this debate has been focused around a we-they type of dichotomy. The employer community that I represent, the employer community that others represent,

employ individuals, employ people. You've seen the economic impacts in the prior slides that Massport put up. You've seen the estimate of some 300 million dollars of lost productivity.

What you haven't seen is the impact of an inferior regional air transportation system including Logan that impacts not only the expansion of companies within our region and within our state, but also the relocation of companies into our region as well. We are supportive of this because of economic growth and jobs that are provided for people.

Second, we are supportive because of the delays that occur at Logan. The data that we have looked at, the data that has been supplied by independent national agencies, all indicates the same thing. Whether you rank Logan second, third, sixth, or seventh, Logan is delay-prone, and with the increases projected, with or without the airport runway extension, these delays will get worse, not better. Delays are important not only for competitiveness, delays are

important not only for attracting individuals and tourists into our area, delays impact individual people, individual families.

Finally, let me say that we are supportive of this extension, we are supportive of increases in regional air capacity, and we are supportive of a more regional and more comprehensive transportation policy within our region and within our state. I congratulate this group for attempting not only to streamline the process, but to have an environment where data and alternatives can be looked at, where people can come together not in terms of we against them, but in terms of all of us trying to provide regional solutions to regional problems that will benefit all of us. Thank you very much.

THE MODERATOR: Thank you. Now while we're waiting for Andrea D'Amato to come forward, let's go off the record for a second.

(Off the record.)

THE MODERATOR: Back on the record.

Now we'll hear from Andrea D'Amato from the city of Boston, followed by Todd Fontancella from the city of Somerville.

MS. D'AMATO: Good evening. Thank you, members of Massport, the FAA, and the state MEPA for the opportunity to come here tonight. I am Andrea D'Amato, chief of environmental services for the city of Boston, and also the commissioner of transportation for the city of Boston. My name is spelled D apostrophe capital A-M-A-T-O. I'm here tonight to read into the record testimony of the mayor of the city of Boston, Thomas Menino. T1.5

The Massachusetts Port Authority projects that passenger traffic at Logan Airport will grow 26 million in 1998, with as many as 45 million by 2010, an increase of roughly 33 percent. More passenger traffic at Logan Airport will only mean more cars, trucks, and shuttle buses on our congested highways and our urban road system.

During peak travel times, this could make traffic congestion unbearable on

the Southeast Expressway and Route 1A. It will also encourage more drivers to seek alternative routes, worsening congestion on roads such as Storrow Drive.

The majority of Logan's users actually come from beyond the Route 128 area, according to Massport's 1996 data. These people are not getting to Logan via the Blue Line. They are driving long distances at great lengths of time on congested roads. As traffic at Logan expands, road traffic congestion will grow worse. More vehicles will be on the roads, and suburban travelers may not be able to get to Logan on time.

There will be more traffic on our urban road systems during peak travel time which raises the issue of whether residents near Logan Airport will be able to navigate their own community, and whether employees will be able to travel to and from work without further delay.

Finally, the addition of more vehicles to our roads increases concerns about environmental and economic impact,

traffic congestion, air pollution, of lost time and productivity. The region is already in serious non-containment of the air quality standards for ozone according to the U.S. Environmental Protection Agency.

Massport's environmental impact statement report addresses none of this. It is incomplete because it avoids the land side impact of airport growth. Air side and land side impacts are related and inseparable. I therefore respectfully request that you require the Massport board to provide a full and complete accounting of all the land side impacts of its improvements before proceeding any further. To do so would only deny the people of greater Boston the answers they deserve. Respectfully submitted, Mayor Thomas Menino. Thank you very much. T1.5.1

THE MODERATOR: Thank you. We'll now hear from Todd Fontancella, followed by Phil Lemnios from the town of Hull.

MR. FONTANCELLA: Thank you. I represent the city of Somerville administration, and I'm here to register our T1.6

opposition to the construction of runway 14/32. About a year ago, our administration became involved with the Citizens Advisory Committee to Massport, and we became deeply involved in the review of the improvements that are proposed for Logan Airport.

In the context of that study, a great deal of information has been presented in a number of forums, and we have listened to all of the other members of the Citizens Advisory Committee. Many of the points that Commissioner D'Amato just made were the ones that we also felt very strongly about. We can't emphasize strongly enough that we have come away from reviewing the document with a feeling that, although a lot has been said about regional cooperation, in fact, there remains a great deal of work to be done.

Regional travel requires regional solutions. We do feel that at this time, given the information that's been presented, that it is inadequate in one key area. Again, that the land side improvements that are proposed for the airport are not

T1.6.1

coordinated with this document. They do function together and they need to be given more priority in the context of this EIR/EIS.

So with that, I would like to state for the record officially that the city of Somerville also opposes runway 14/32. Thank you.

THE MODERATOR: Thank you very much. Now the representative from the town of Hull, Mr. Lemnios. After Mr. Lemnios, we'll hear from Bernice Mader from the Norfolk-Plymouth Counties Democratic Committee.

MR. LEMNIOS: My name is Phil Lemnios, L-E-M-N-I-O-S. I'm the town manager in Hull representing the town of Hull. The town of Hull is opposed to this runway. We're one of the two communities, and probably the only community that sees an increase of about 50,000 flights over our community if this runway were to be built. That's our primary reason for being opposed, obviously. T1.7 T1.7.1

Just as a quick aside, I find it

interesting that we're going to relocate the sandpipers to Cape Cod because the noise might disturb them but not the rest of us poor humans. It seems to me that there are some real technical credibility issues that are at stake here. This morning's Boston Globe had a very interesting article. The slide Betty put up showed that the FAA has one methodology of measuring delay, the Department of Transportation has another.

The FAA says 3.18 percent, the Department of Transportation has a blended rate of 20-plus percent. Massport, for this particular document, came up with a whole new way of measuring delay. So there seems to be a problem; has the problem been identified? What exactly is the rate of delay? There is nothing in the report that said what is an acceptable rate of delay. There's nothing in the report that says how many flights can this facility handle, period. What is the ultimate capacity of this facility? T1.7.2 T1.7.3

Because as it stands, if this were to be built, we'll all be back here in five

years saying, what are we going to do now? Additionally, there's an alternative, alternative 2, which is a no-build runway alternative, that actually in one of the scenarios presented in the report has a much better payoff for delay reduction if you buy the model that is put into the report.

So there seems to me to be a series of glaring inconsistencies in the report. There's some factual inconsistencies that need to be rectified. What is delay? The other problem in the report is, there's no discussion in the report as to the causes of delay. There are inferences, winds northwest direction 37 percent of the time; inference, 37 percent of delay is from northwest winds. No factual data to support that.

T1.7.4

For instance, if there's delay at an airport in New York, for example, or Newark, does that lead to delay at Logan? There is not a detailed discussion as to the total analysis of delay. What exactly are the causes of delay, and how much does this particular solution expect to diminish

overall?

It kind of reminds me of the story of somebody seeing a person sitting at a table drinking a diet Coke and thinking the diet Coke is the reason for putting on weight. There is just not a good connection here. The report is flawed, the discussion of delay is flawed, the planning process talks about regional approaches, but really doesn't get to some of the heart of the issue.

We would ask simply that Massport actually withdraw the report, the architecture, until there is a real analysis of the problem and we have a discussion of exactly how much of the delay problem can be reduced. Are we trying to get to zero tolerance on delay? Is that where we're going? Is FAA incorrect in saying there's only 3 percent delay? Who's correct? FAA helped sponsor this report.

Is FAA saying the DOT is correct about this issue and FAA is incorrect? These are the questions, and I would like Mr. Silva

to answer that actually, the FAA representative. Do we accept the FAA numbers or the DOT numbers for delay or the Massport numbers?

THE MODERATOR: That's an interesting question but we will save it for the final report.

MR. FONTANCELLA: And no one's going to comment on that?

THE MODERATOR: That's not the purpose for this hearing.

MR. FONTANCELLA: I know, but you did say you would allow some type of question be responded to.

THE MODERATOR: A question of clarification if what Mr. Silva said produced some ambiguity, then he clarify what he said.

MR. FONTANCELLA: No. The report produces ambiguity.

THE MODERATOR: The report has one measure of delay. That's not fair game for this meeting.

MR. FONTANCELLA: I didn't suspect it would be. Thank you.

THE MODERATOR: Does Mr. Cowin want to speak when we get to the individual speakers?

MR. COWIN: No, I don't. Thank you.

THE MODERATOR: Thank you very much. Now we're going to hear from Bernice Mader, and then following that we'll hear from Anastasia Lyman from the Citizens Advisory Committee.

MS. MADER: I am an elected official for the Norfolk-Plymouth County as democratic state committee woman, but I'm also speaking here as someone who formerly was a member of the Community Advisory Committee to Massport and the city of Quincy's representative for 19 years to the CAC, so in those capacities what I would like to do is to present the Community Advisory Committee's response to what Betty Desrosiers, the director of aviation, earlier presented to you. T1.8

First, we believe that Massport has violated both the spirit and the regulations T1.8.1

of the EPA, MEPA, and the FAA, as well as a sense of fair play and environmental justice. Now, the NEPA and MEPA process, when it's used in an honest fashion, can be a very helpful learning tool, but in this case, Massport has tried to twist the way it can be used, we believe, in an unfair fashion, and instead, in trying to reach a consensus with the diverse cross section of groups, it's causing conflict instead. T1.8.1 (cont.)

Massport has used outdated and worst case scenario data which I'll speak to very briefly later. T1.8.2 One of the things that Massport never does in its study is it never examines Logan Airport itself as it is right now. They talk extensively about delays, but they never really mention what the major problem and the real problem is at the airport, and that is the size of the airport. T1.8.3

A newly-created international airport based on the minimally-acceptable federal standards would be at minimum about 5,000 acres, and many would be 10,000 or more such as Dallas or Denver or some of the

others that have been built in the last couple of years.

If you look at that in contrast, Logan International Airport is only 48 percent of the minimum size that you would need to start to develop an airport, and it doesn't work. No major physical improvements have been made to Logan since 1977 until this past year when they opened the parking garage. To allow an international airport to be able to continue even to operate in this atmosphere, Massport has stretched every possible system that exists at the airport to its limit and beyond its limit.

Anyway, no 5,000-foot unidirectional commuter runway can address Logan Airport's overwhelming shortcomings. It just doesn't have any more room to grow and that's what the problem happens to be. Now, parking, ground access, pedestrian access, the parking lots, the off-site cargo terminals, the relocated fuel line, the outrageously difficult sign system are now all to their extreme limits, just postage

T1.8.3 (cont.)

stamp size.

A major commercial airport is now trying to squeeze another runway in to accommodate its basic lack of adequacy. Not only is Massport's study inadequate, so is the airport. The growth of the commercial passenger industry over the past two decades has outstripped Logan Airport. In the site where it currently is located, it is out of space, it is out of time, and it's out of capacity.

Now, a large number of cities both in this nation and across the rest of the world have observed the trends in aviation growth and they planned for it. Massport didn't. They conducted studies but studies aren't plans, and what they refer to as studies, they really didn't come out with any kind of a comprehensive master planning aviation approach to the Massachusetts plan. I understand regionalism and I am a strong supporter of regionalism, but they have not come up with a Massachusetts plan, and that has not worked.

Instead, what they did was a series of stopgap measures to patch its inadequate infrastructure system. Massport continues to provide for 20 pounds of power inside a five-pound bag. It doesn't work. If you read the EIR, Massport has not at all, and it's inadequately addressing the whole section regarding alternatives and the way they looked at them. T1.8.4

I'm not going to cite the sections within the MEPA regulations except to tell you when their consideration of alternatives is just so inadequate I don't know how else to express it. To dismiss Hanscom Field in two-and-a-half paragraphs, video teleconferencing in three paragraphs, and the north-south rail link, the Portland rail link, the northeast corridor improvement in three paragraphs? I think there's certainly short shrift. They have not done any serious commitment to looking at real alternatives.

Instead, Massport wanted the shoe to fit no matter how they've got to cram the foot into the glass slipper. Anyway, again,

I address to you that there is total inadequacy in the way they examined alternatives. Instead, it needs to be redone, withdrawn and redone.

Now, Executive Director Blute has made dozens, in fact many more than I even thought, according to Betty Desrosiers, maybe almost a hundred presentations to the state's delegations, to private companies, a variety of chambers of commerce, many large business councils, tech. councils, associated industries, New England Council, and so forth.

At that time, though, Mr. Blute, when he very first was appointed he appeared before the anti-review committee and he made commitments to the folks at that time saying that, as the new person he would step back and examine all the alternatives that had been proposed and he would get back to us with what he called a neutral and objective analysis.

Let me tell you something. Within less than a couple of months after Mr. Blute

made that statement, he had already been to Washington, D.C. to lobby Massachusetts federal congressional delegations to be in support of the runway, and he also already addressed East Boston Chamber of Commerce. This is from a person who said, I will neutrally examine the choices.

In addition, he did not acknowledge the form that his predecessor, Stephen Tocco, as the executive director of Massport that invested in what's called the air side review committee. That's the committee that former director Tocco had appointed which was composed half of the community advisory committee to Massport. That is composed of 24 citizens who are appointed by their neighbors or boards of selectmen, and one-half the other recipe represented by airline companies, airline agencies, or business interests.

That particular group, the air side review committee, was supposed to take the information that the Massport consultants presented, they were supposed to listen to

each other's questions in each other's presence, and comment on the Massport team's data. Everybody went into that process for many, many meetings with a sincere approach to it.

But what happened is all of a sudden, once Governor Weld left, there was an 18-month hiatus. All of a sudden, no reason given, the study was withdrawn, all work had stopped. We have been driven like galley slaves to meet, meet, meet, meet, meet. Boom, all of a sudden, no explanation, nothing. Everything stops dead. Instead, every time that I, and later on Anastasia will tell you, would make a phone call to Massport, and we were told that Mr. Blue was examining alternatives.

Let me tell you, we citizens knew different. Instead, we knew he was lobbying everybody else, as I said. Instead, what he did was he went into a variety of communities and he spoke to uninitiated citizen and business groups, and they neither had the background, the history, or the information

to ask him the pointed and probing questions that should have been asked of him. It was much easier for him to do that.

So we were told at that time that nothing much was going on during that 18 months. Massport consultants were gathering data, they were working on things. That would be about as specific an answer as anybody would get when we would say, what's happening in these 18 months. Then all of a sudden, the state elections happen and, what do you know, within about 10 or 12 days after that, wouldn't you know the process started up again.

And, as a matter of fact, we weren't even formally notified about what was happening behind our backs, which was the consultants were working again, they were generating some new information, things were going along. What happened? The holidays came and went, Thanksgiving, Christmas, New Year's. Anastasia Lyman got a phone call. The phone call said, guess what? We want to schedule one more ARC meeting in about a

week. That was about the notice. We're going to have one last one and we're going to ask you to sign off on it.

Now, if you've seen the document, I've never weighed it or measured it, but we say if it could be done, so I imagine it weighs maybe, I don't know, 15 pounds, and I don't know how many inches' worth of text. They were going to get that information to citizens and to our consultants the day before we were supposed to, quote, sign off on this.

Anyway, the ARC members were outraged and rightfully so. Over and over, we're told, trust Massport Authority. With that use of process, would you trust Massport Authority for using those kind of tactics? Anyway, all I'm going to say to you about delays, they used the year 1993, and Phil Lemnios raised a very good point about it. The year 1993 was an aberrant year for Massport. In fact, it was the single worst year they've ever had for delays, and nothing else has approached that since then.

T1.8.2 (cont.)

As a matter of fact, I wanted to know what else happened that year so I went to the U.S. Weather Bureau Information Service and I looked in and I found if I looked at the weather of 1993 and 1994, it had a record snowfall, 96.3 inches. It broke all records. So when they figure out the delays, as Phil Lemnios from Hull already pointed out to you, they never say to you, well, you know, if we got a foot-and-a-half of snow, even if we had 67 runways, we still would have closed down because we couldn't stay open.

MR. MODERATOR: Would you please wrap it up?

MS. MADER: I'm going to try as fast as I can. One of the other things I want to introduce which is a new concept is the concept of the interruption and delay factor. I have copies of this if people need it later. As they continued to talk about their 313 million dollars in loss due to delay, it occurred to me one day when a plane would have to stop right over my head where I

work and I had to wait until it went over.

I said, you know, that's a cost to me and my job and I wonder how many more me's are out there sitting listening to this airplane noise. So I decided to try and make up my own model of how that might work. I mean, Massport did so why can't I? As a matter of fact, what I did is I copied their exact same methodology. The way they count the delays, they didn't do it the way the FAA does.

What I did was this. In 1998, there were 483,000 flights from Logan. That's takeoffs and landings. That went over 19 Boston neighborhoods and 18 affected communities. If you totaled everybody up who lived under those, that's a million in the number of people who lived under that. Then if you take the figure which would be approved by the board and the Department of Labor, 62 percent of those people actually could work.

If you took the average income from the city of Boston, which is 37,750 average

annual income for people, that would come to about $18.00 an hour. However, I said, well, let me be extremely conservative and use $7.00 an hour, the lowest minimum wage that people might use, and I used the following example. If every one of you or us were in that area under those flight paths and not everybody gets the noise every day, and I'm willing to concede that, so I said maybe about one-third of the people three days a week each of the days, maybe six hours. You don't get it 24, but six hours.

What if you got five minutes of interruptions only for each of those six hours times three days? The long and short of it is at $7.00 an hour, that came to 11 million dollars a week, plus or minus. It came to 575 million dollars. If I took the probably more appropriate figure of what the real pay is for people at the time, businesses want to know what you're losing? If I really use the $18.00 per hour, what it came out to be, believe it or not, across one year was 1.5 billion, B, billion dollars.

THE MODERATOR: Thank you very much, Ms. Mader. I would ask you to sit down so we can move on to the next speaker. Next we'll hear from Anastasia Lyman. Ms. Lyman will be the last of the government officials to speak, and I'll let you speak until 8 o'clock and then we'll take a five-minute break. How's that?

MS. LYMAN: Thank you. I want to than you for allowing me to speak tonight. I am the co-chair of the Community Advisory Committee to Massport along with my other co-chair Sandra Coates from Braintree. The Community Advisory Committee represents 25 environmentally-impacted neighborhoods and communities surrounding Logan Airport. We were established in 1978 and we have been working with Massport on Logan-related issues ever since.

I am here this evening to submit to you the written document of our consultants on their findings on the draft environmental impact statement. The CAC concurs with their findings wholeheartedly. I will not go

through them. I'm sure other people will be mentioning most of them this evening.

Because I'm submitting the written document, all I can say is that they have found and we concur there are substantial planning deficiencies and omissions in this document. We ask your agency to find that this document is inadequate, and we ask your agency to require that a new one be done based on the findings in this report. Thank you very much.

THE MODERATOR: Are there any other elected officials or government officials that would like to speak at this time before we move into the individuals? Seeing none, we'll take a five-minute break and reconvene at 8 o'clock.

(Brief recess taken.)

THE MODERATOR: We're going to go back on the record now. As I said before, we're going to start by alternating people who oppose the project versus people who support the project. I'm going to ask you to keep your comments to three minutes, and I

will give you a gentle reminder then. We graciously allowed the elected officials and government officials a little bit more time, but I will try to keep us to our timetable now because we have several people who want to speak.

Again, I remind you that if you want to be heard by the media, use the microphone on my left, your right. If you don't care whether the media hears you or not, use the microphone in the center. I will call two people, two supporters and two opponents, so you'll know who follows whom. We will first hear from David Graham of the Aero Club of New England, followed by David Osborn of Winthrop, and then Christopher Good, Massachusetts Business Round Table, followed by Christopher Blackler from East Boston. Mr. Graham.

MR. GRAHAM: Thank you, Mr. Chairman. For the record, my name is David W. Graham, G-R-A-H-A-M. My comments are being submitted to John Silva in letter form. Dear Mr. Silva: My name is David W. Graham.

T1.9

I am the secretary of the Aero Club of New England and have been so for 30-plus years. It is our opinion that Boston Logan Airport desperately needs runway 14/32. T1.9.1

Here's why. Under normal circumstances, Boston has operated at least a two-runway configuration and often three which allows a fixed number of hourly operations to occur. This number is dramatically reduced with strong northwesterly winds either following a storm or a cold frontal passage.

When these weather phenomenon occur, the airport can be brought to its knees as there is currently but one runway facing into the northwest, and as we all know, aircraft must land into the wind when it exceeds a fairly low limit. The addition of runway 14/32 would accomplish two items. First, it would allow the airport to maintain a two-runway configuration for arrivals much as it normally does during light wind conditions or where the winds are in northern directions.

The second item runway 14/32 would do is provide relief by permitting additional departures over Boston outer harbor and Massachusetts Bay, thereby providing a dramatic reduction in lower altitudes over flights above neighboring communities. The simple fact remains that runway 14/32 would produce not one flight over the residential dwellings or industrial structures.

Furthermore, the assumption that runway 14/32 would only add more flights is categorically incorrect. Indeed, the addition of a one-direction runway 14/32 would only assure that the current level of two-runway configurations is maintained under all wind conditions.

A few years ago, the Massachusetts Aeronautics Commission held a hearing at Florian Hall in Dorchester. The resident attendees that evening were demanding to know why there was hesitancy in the implementation of runway 14/32 at Boston Logan Airport. At that time, there was no easy answer. Now, there is a resolution readily at hand for

that all-important question.

While it is true that there has been a slight reduction in flight operations at Boston Logan Airport since 1993, this has come about due to the fact that Manchester and Providence Airports have become on-line since then and have accomplished exactly what they were intended to do. However, transportation planners must take into consideration the worst case scenario available to it.

THE MODERATOR: Try to wrap it up, please, Mr. Graham.

MR. GRAHAM: Planning for the numbers to increase at Boston Logan Airport, which they will do, only addresses the need for runway 14/32. Boston continuously strives to increase its effectiveness to the traveling public, it's attractiveness to the traveling public, and you can see examples of that each and every day.

While the implementation of runway 14/32 at Boston Logan Airport is not the end-all towards that goal, the runway will

clearly benefit Boston's economy and will play a strong role in the region's overall transportation infrastructure. In short, Boston needs its airport, and the airport desperately needs its final runway, runway 14/32. Thank you very much.

THE MODERATOR: Thank you, Mr. Graham. Now Mr. David Osborn from Winthrop.

T1.10

MR. OSBORN: My name is David Osborn. I'm from Winthrop, Massachusetts. I'm an expert insofar as the last two decades I've lived on the water at 22 left and have watched it. As a taxpayer, I recall that a valuable piece of land like Massport has in Hanscom is running at a loss of more than 2 million dollars a year.

I'm concerned that Massport has never provided a model that could calculate or measure the anger and the fury of all of its abutters. I am also appalled that they take credit for relocating the sandpiper for, in fact, the sandpiper is our last bird. It's the last one we have. Anyone driving around East Boston, Winthrop, Chelsea, Revere

has to acknowledge that. There aren't too many birds left.

One flight per minute, one flight or takeoff per minute per hour for 16 hours a day every day of the year for life, that is what we have at 500,000 flights and takeoffs a year. That is what we have. It's growing. With another runway, it's going to increase exponentially probably 4, 5, 6 percent a year. It's going to be ridiculous.

I took information -- I could not have hoped for a better opening act than Mr. Graham on the northwest winds at Logan. I went to the Boston Public Library on the northwest wind issue, and let me run this through you. One hundred and forty-five days there were winds over 17 miles per hour in 1998 for the whole year. Fifty-six of those days were from the northwest. That's 15 percent of all annual flight time.

Of those 56 days, 24 days fell on Fridays, Saturdays, and Sundays. Those are the peak flying periods. Everybody knows that. Twenty-four days in the year. Now, of

those 24 days, there were 10 days that had constant wind problems between 17 and 29 miles per hour. That's less than one per montn from the northwest that Massport is claiming is really making a deep impact and why their delays are so high.

Now, that represents -- the 24 peak days, the 10 peak days, represent 3 1/2 percent of all flights and landings taking off. They're still taking off so half that is 1.75 percent. That's all they can improve upon with a new runway, 1 to 2 percent.

THE MODERATOR: Try to wrap it up, please.

MR. OSBORN: I went to the state transportation meeting and I was not allowed to speak. I am the most effected of all. I only need an extra minute. I really beg your indulgence. It's not much more than a minute. The distribution of wind theory, if I give Governor Cellucci half of my problems in Hudson so that I have half less, that's not a solution. You're giving more to some, taking away from others. That's just the

T1.10.1

same thing. More people are hurt. That's not distribution.

Where are the 2 1/2 million pounds of pollutants, emissions, toxins going that these aircraft put out into the air every single year? To what extent has Massport played a part in the pollution of Boston Harbor? No one knows. To what extent have they played a part in the chemical de-icing facilities that have been ongoing for decades; where does that go? Is that FAA-controlled? No one knows. T1.10.2 T1.10.3

If no one knows, why are we going forward with this EIR or whatever it is? No one knows. They have not provided any information. People are detached from this problem. They do not understand one flight per minute every year or whatever, and I'm going to give one more thing. I'm going to ask --

THE MODERATOR: You've already used your minute so I'm going to ask you to sit down.

MR. OSBORN: I just need one

minute.

THE MODERATOR: I'm going to ask you to sit down now. We really have to move along.

MR. OSBORN: One hundred and eighty flights in the air at one time is like this, one, two, three, four, five, six, seven, eight, nine, ten, 11, 12, 13, 14, 15. Those are planes with passengers.

THE MODERATOR: Thank you very much.

MR. OSBORN: Count to 180.

THE MODERATOR: Thank you very much, Mr. Osborn. I'm going to ask you to sit down.

MR. OSBORN: And add on another one every minute or every 30 seconds. That's safety FAA, that is safety. Thank you.

THE MODERATOR: The next speaker will be Christopher Good of the Massachusetts Round Table, followed by Christopher Blackler of East Boston, and then Christopher Anderson from the Massachusetts High Technology Council.

T1.11

MR. GOOD: Thank you. My name is Christopher Good, director of public policy for the Massachusetts Business Round Table, a state-wide organization with 75 Massachusetts leading chief executives. The round table's board of directors has voted unanimously to strongly support the opening of runway 14/32 and creation of the new taxiway at Logan Airport.

Over the last decade, the governor and the legislature accomplished a great deal to improve the ability of Massachusetts businesses to grow, to gain jobs, and compete with companies based in other states and around the world. However, there remain many factors that can impede job creation and continued growth of our economy such as the excessive and costly number of delays at Logan Airport.

The ability of Massachusetts businesses to expand and create jobs in good times and in bad depends on their ability to move employees, customers, and goods into and out of Massachusetts in a timely and

predictable manner. The efficient use of Logan's existing capacity with this runway and taxiway in coordination with a greater use of Worcester, Manchester, and T.F. Green Airports will allow our businesses to continue to create jobs here in Massachusetts and to compete nationally and around the world.

For reasons of job creation, competitiveness, quality of life, and economic growth, the Massachusetts Business Round Table strongly supports the opening of runway 14/32 and the creation of the new taxiway. Thank you. T1.11.1

THE MODERATOR: Thank you. Now Christopher Blackler from East Boston. The next opponent will be Arthur Harnet from South Boston.

MR. BLACKLER: My name is Christopher Blackler, B-L-A-C-K-L-E-R. I am not only part of the Neighborhood Association but I'm also part of a layman's council, and what I want to say is I live in an alleyway which is 2 Webster Ave., and I've been T1.12

hearing a lot of noise over my head every night, and the more noise that occurs, I can never sleep.

And also, I have asthma sometimes, but if it kicks up, it would also be because of toxins in the air. And I go to work every day usually breathing in more than polluted air. See, if I keep breathing in, I could become sick and I will not be able to work, and I wish Massport, you know, would reconsider building runway 14/32 because I do, in fact, oppose the runway.

The other thing is if you go back and look over the data again, they should have added something that should say about the air quality because if they don't do that, I will never get enough information to look at. That's all I've got to say. T1.12.1

THE MODERATOR: Next we'll hear from Christopher Anderson from the Massachusetts High Technology Council. The next supporter will be Albert Sherman from Arthur D. Little. Mr. Anderson.

MR. ANDERSON: Good evening. Thank T1.13

you for the opportunity. My name is Christopher Anderson, vice president and general counsel to the Massachusetts High Technology Council. Recognizing that Logan International Airport is vital to the entire New England region's economic interests, the high tech. council vigorously supports the well-thought out Massport Authority's proposal to reduce delays at Logan Airport. T1.13.1

We do this in the context of the regional transportation solution system, that it does incorporate the obvious increases in passenger use at Manchester and Green and, in fact, I personally have bailed out of Logan Airport now on trips to Chicago in favor of Manchester.

There are many legitimate and substantive anecdotal reasons probably that you've heard more of on the opponents' side particularly from those affected communities that are, in fact, important. However, we urge you to look at the report, the well-thought-out report, and its substantive contents.

Preventable delays at Logan impact negatively on where high tech. companies expand or locate, and the mobility of our high tech. economy can result in a quick relocation out of the region quicker than it took the New England Patriots to decide to move to Hartford.

Critical for Massachusetts global high tech. economy are the improvements proposed at Logan. In addition to shifting the noise burden from some of the hardest-hit communities, the new runway would reduce delays while not changing Massport's limit of 120 aircraft operations per hour set by the FAA.

The additional lost productivity caused by delays on beautiful blue sky conditions when the wind is out of the northwest, even if it only affects a percent or so, has a dramatic impact on the ability of our high technology companies to reach their customers and their vendors and vice-versa.

We support the improvements. We

hope they are approved forthwith. The High Technology Council consists of more than 180 chief executive officers of Massachusetts high technology companies and highly-valued service employers. Thank you.

THE MODERATOR: Thank you, Mr. Anderson. Now Mr. Arthur Hartnet from South Boston. The next opponent will be Ron Whalen from Winthrop.

MR. HARTNET: Thank you. I would like to address the number of hours of delays that have been presented to you tonight as 121,000 hours of delay from Massport's modeling. It is not supported by the FAA's own figures. You have to wonder about the 121,000 hours. T1.14 T1.14.1

The regional airport scheme, of course, is a great thing, but I don't think that the number of operations in all of the regional airports will ever equal what we have today at Logan Airport that are affecting the health and welfare of all of the citizens that surround the airport. It's a very congested city we live in. The

regional concept, of course, would help the high tech. industry by not having all of our eggs in one basket, so to speak. Think about that, high techies.

Within the ten-year period, the number of hours of delay, the number of hours of delay, not the percentage, I want to talk about number of hours, will overwhelm this airport and will be exceeding what Massport is predicting we have today of 121,000 hours. T1.14.2

Also, if this runway is built, runway 27 will see a dramatic increase in the number of operations. Runway 27, a federal EIS was conducted on this runway and concluded in 1996 and the flight of the departures, and just departures off runway 27, still to this day are not what the people that conducted this EIS desired, and they're still working on this and it's not working. Runway 27, which will see a four-fold increase in just departures when runway 14/32 is built is not working for jet departures, is impacting more people today than it ever impacted before. T1.14.3

We also had presented to us the fact that this runway will help Massport or the FAA, whichever one of those is the guilty party, achieve the PRAS goals. Well, PRAS goals have been put on the table for a good number of years and have been ignored. I don't know why all of a sudden we're looking at them. It would be nice if they were achievable but I think that with the number of operations that are coming into this airport and the excessive number of operations that are coming into this airport, PRAS goals as they were designed in the early '70s will never be achieved, ever. T1.14.4

Another item that I would like you to consider is your center field taxiway. We're building a center field taxiway and at the same time we're saying, well, if we built 14/32 we'll be able to relieve the air traffic off the north-south people, that's baloney, because the center field taxiway is going to be a conduser to have more operations on the north-south runways because you're going to be able to get the aircraft T1.14.5

off and on to these runways in a much quicker fashion.

I would just like you to mull over those points. And again, like I say to the high tech. and the high business people out there, more airports would be more beneficial, more regional airports with a greater number of operations so that there was a more equitable and environmentally-justifiable operation. Thank you. T1.14.6

THE MODERATOR: Thank you. Now we'll hear from Albert Sherman.

MR. SHERMAN: My name is Albert Sherman. I'm senior vice president of Arthur D. Little. Arthur D. Little is a firm that was founded 115 years ago, and we are located right here in the Boston area and are something of an institution in this town. We were here before Logan Airport existed. In fact, we were here before air travel existed. T1.15

We were at that time very fortunate to serve a local business clientele because in those days that was the way you did business, but as the city of Boston has

prospered and become a world-class city, we, in turn, have prospered and become a world-class consulting firm. We find that we are inextricably tied and dependent upon access to efficient, safe, reliable, and timely air service.

I'm here today just to make a few comments about what it's like to be involved in that kind of a business. I'm not here to debate or argue the very well thought out thoughts of those who spoke in favor of this and those who apparently are in opposition. It's just to share with you what it's like to be in a business that's so dependent upon air travel.

As I mentioned, we serve a national and international clientele and we spend a lot of time in the air. The way the Logan situation affects us is how it is that we plan our business, and the compromising that we increasingly have to make because of the delays, not only the actual delays but the contingency you have to build into your planning because of the possibility of

delays.

There's no way to measure the cost of disciplining a client by not making a meeting or of having to cancel a meeting or for the substantial inconvenience caused when they come to visit us and are unable to arrive at our facility. We do everything that we can to deal with that.

I am a user and have used the Providence airport, I take the train to New York when I can. I'll be using Bangor tomorrow, and for the first time I'll be using Manchester next month. I support those people who have argued for regional solutions. I think all of these things are necessary in order to make for a more prosperous local economy. T1.15.1

Just on a personal anecdotal note, I don't know how much of those 121,000 hours personally according to your model, but it must be a lot of them. I wasn't here in 1993 so I don't have data and I'm not comparing it to that, but I do know that it affects me personally in terms of how I plan my day and

my business.

So I'll just share with you that right now as part of my business planning with my colleagues, I am seriously considering locating out of the Boston area. You shouldn't be concerned, that's not the basis upon which you will make this decision, but I think it's an anecdote more broadly shared than I can imagine. It certainly affects growth at the margin, not so much where you locate facilities and people that are already there, but those at the margin that are yet to come.

It's becoming difficult to serve that national marketplace and I may need to relocate. I hope that Boston will continue to prosper and thrive. I don't know that Logan is the only answer. There are many other regional answers, but I encourage you to seriously consider the proposal in front of you for expansion, the addition of the runway, and to accommodate as reasonably as you can within that plan the very considered and thoughtful views of some of the opponents

who would like to see their considerations met as well. Thank you very much.

THE MODERATOR: Thank you, Mr. Sherman. Now we'll hear from Ron Whalen from Winthrop, and then the next opponent up will be Elaine McGrath from Chelsea.

T1.16

MR. WHALEN: First of all, I want to say that I appreciate the previous speaker's comments, the one that communicated that he is planning on using Manchester Airport. We appreciate that, and the fact that he indicated that we should consider our solutions as well; namely, regional transportation.

My name is Ron Whalen. I'd like to say that I'm from the Massport colony of Winthrop. I should say from the historic Massport colony of Winthrop. That was among the first communities to drive colonialism out of America, and that's what we're trying to do a little bit of that again here with Massport.

I think if you study colonialism and you study Massport and our relationship

with them in Winthrop, it feels a lot like the old days. I am a resident and homeowner in Winthrop, and I'm here at this Massport hearing, which to me is an oxymoron, to testify that the people of Winthrop, those who live in the communities adjacent to Logan Airport, have reached, indeed exceeded, the limits of toleration as far as Massport expansion is concerned.

Massport may not admit to the fact that Logan is at capacity, but I'm here to tell you this evening that as far as we, the residents, are concerned, we feel that Massport has far exceeded its capacity. The rallies that you have heard about, the resolutions, the writings, the recitations that you have seen, I think are but a harbinger of what you are going to see if Massport doesn't really put a stake in this proposal and start thinking about other solutions. T1.16.1

I am in Winthrop. I live in that 65 decibel area where we receive what you call mitigation windows, and I want to

mention that tonight because I want to make it very clear to the people in the Environmental Protection Agency that we consider those mitigation windows as nothing more than preemptive damages for taking away our outside, for making us prisoners in our own homes.

If those windows were tea bags, we'd be throwing them in the harbor. We really don't need and won't accept and we won't tolerate any further mitigation. Tonight I was very struck by the fact that this is an environmental impact hearing. We're here to comment on environmental issues. I have been at a number of meetings, I've been at the state house, and I've listened to the proponents of that runway, and it's embarrassingly silent, and I'd like you to sort of contemplate the silence from the business community when it comes to quality of life issues.

You'll notice when Massport got up, they start out immediately talking about the business context. When the business

community gets up, all they're talking about is the business interest. There's not even an attempt that I have seen for them to talk about quality of life issues within the neighborhoods of Boston, and that's what this hearing is all about.

THE MODERATOR: Try to wrap it up, please.

MR. WHALEN: I would like to ask you to put a stake in this proposal so that we can cause Massport, we can cause the government, cause the state to exert their energies in finding real solutions. We have ideas. We want to work with Paul Guzzi, we want to work with the round table, we want to work with the business communities in achieving real answers to Massachusetts air transportation policies, so let's not delay this. Let's kill this thing, the people want it dead, and let's move on to real solutions. Thank you.

THE MODERATOR: Next we'll hear from Kevin Cohen from the South Shore Chamber of Commerce, and the next supporter after Mr.

Cohen will be Jay Cortell from Boston.

MR. COHEN: Thank you very much. T1.17
My name is Kevin Cohen. I'm the affairs manager of the South Shore Chamber of Commerce which has 2500 members on the South Shore and it's based out of Quincy. First of all, I'd like to address a couple of misconceptions that have been repeatedly printed in the media and also relayed by a lot of people, supporters and opponents, actually.

First of all, that this is an expansion plan. It is not. Massport right now is limited to 120 flight operations per hour. If you build 14/32 or you do not build 14/32, it's still limited to 120 flight operations per hour.

The second misconception is that somehow 14/32 and the taxiway is a regional plan. It isn't. Massport has never presented it as a regional plan. They didn't present it to the South Shore Chamber of Commerce as a regional plan. This proposal addresses a wind problem and inefficiency

problems on the air side of Logan Airport, and that's why this proposal is here and before you. It shouldn't get caught up with some great answer to all the regional transportation problems that we have in this region and we do have a lot.

The appropriate authorities, some of you people here tonight but also the commonwealth of Massachusetts and the federal government, should be, and in many cases are, addressing those regional problems, whether they're addressing it through high-speed rail, commuter rail, also through the tremendous growth we've seen at Manchester, New Hampshire and Green in Rhode Island. T1.17.1

Also, the commonwealth of Massachusetts is proposing expanding Route 3 North that goes from 128 to the New Hampshire border, and they're proposing a unirail service from Massachusetts to Green Airport in Rhode Island. Also, the state did take many years and spent a lot of money to make a proposal for a second major airport. It was considered and it failed.

The real fact of the matter is, if you can't build a 5,000-foot small aircraft runway, there is no way in the world we're going to be able to build another international airport. It just can't happen. So we look at issues like 14/32, we look at an efficient way in which Logan Airport can be run, and that's why we support 14/32.

The last issues I want to address are the environmental concerns. Basically with this proposal, less delays equals less environmental damage. A plane that lands or takes off on time does not add avoidable pollution because they do not sit on the runway while waiting to take off, or they do not circle the city waiting to land. T1.17.2

Also, the noise pollution that's happened to a lot of these communities is going to be more equally distributed, and many of those flights will be pushed over the water. T1.17.3 This proposal before you is a pro-environment proposal. If 14/32 and the taxiway is built, the environment in and around Logan Airport will be better for us.

I think we should use the five to ten-year window of opportunity we have before the flights become overburdensome again to go even further to address these regional issues, but that is a responsibility of the commonwealth of Massachusetts and the federal government along with Massport or to direct Massport to address those opportunities.

I'm concerned that we're going to miss an opportunity here to make Logan run better, but also to address the larger regional problems. The opponents are being very narrow in their focus of just beating 14/32, and they think somehow that addresses those regional problems. It doesn't. We have to do it in addition to building 14/32 and the efficiency of the runway. Thank you very much.

THE MODERATOR: Next up will be Elaine McGrath, and the next supporter will be Raol Murrow. Mrs. McGrath.

T1.18

MS. McGRATH: Thank you. For those of you who haven't seen it, this is the Massport proposal. I've read it. My name is

Elaine McGrath, M-C-G-R-A-T-H. I live in Chelsea. Betty Desrosiers suggested that runway 14/32 and all the other parts of this proposal are the missing piece of the puzzle. What she didn't say is there's lots missing from this proposal.

This draft EIS is inconsistent with both the letter and the spirit of the Environmental Policy Act. In fact, it has failed to comply with MEPA. MEPA requires agencies to consider environmental consequences, to take a hard look at them, and to take a hard look at alternatives, and to make that information available to the public. T1.18.1

I live in Chelsea next to the airport overlay district. We are not within the noise contour map, but we live under a blitzkrieg. Here is a statistic for you. Massport says the problem is delays, the sixth-most delay-prone airport in the country. In 1993, the FAA said Logan was the sixth noisiest airport in the country. Where is that in this report? T1.18.2

Three critical flaws, I believe there are at least three critical flaws in this proposal. First, the information on environmental impact fails to assess those impacts adequately or accurately because the modeling is flawed and Massport knows this. T1.18.3

The monitoring of those impacts is also inadequate and Massport knows this but you do not because it's not reflected in here. The communities will know this. What this means is that this report does not do what MEPA requires Massport to do. It does not capture the reality of current environmental impacts.

This is about Massport's manifest destiny, but for people who live in the communities, it cannot be about that. It can't be about that for you. There are two other critical flaws that flow from the fact that their modeling and their monitoring are seriously flawed.

The second critical flaw, the alternatives are straw men, but communities, I understand that they have to do under MEPA T1.18.4

a no-action alternative. That is not an alternative for the communities. At 115 flights an hour right now, short of the 120 capacity, the communities are speaking with one voice and they're telling you it's unbearable. At 115, it's unbearable, and we've told Massport that and Massport has not told you that.

They are supposed to thoroughly evaluate all reasonable alternatives, but again, the assessment of the impact of those alternatives is flawed because their data is flawed, their models are flawed, and their monitoring is flawed.

Finally, and the last critical flaw I want to point out, the environmental justice analysis. Again, it's unreliable because it flows from faulty data. First, the impact analysis. T1.18.5

THE MODERATOR: Try to wrap it up, please.

MS. McGRATH: You have an obligation to assess real impacts of current operations and alternatives. In 1993, there

were 493,000 operations. In 1998, there were 507,000, and yet Massport says the noise impact decreased because of the stage 3 aircraft.

What they don't tell you here but they tell you in the GEIS is that on landing and takeoff, stage 3 aircraft are noisy and that cannot be remedied, and these communities have to live with landing and takeoff. T1.18.6

Why have they failed to represent the impact? They know about the community protest. They know that the noise contour does not capture the noise. They have admitted before the Chelsea City Council that although we're not within the 65 DBL noise contour that, in fact, we experience those impacts.

Their monitoring in Chelsea, the one noise monitor was out of commission for two years. You won't see that in here. What does that do to the accuracy of the environmental impact data? Their modeling is therefore unreliable. It's state of the art T1.18.7

but it does not capture reality and they know it. The monitoring is problematic.

There are other statistics in here. You'll see them. I'll just point out one page, Page 5-29, involving one about how they assessed a certain impact and they had to revisit it because more people were affected at higher levels. There's basic flaws in their data. What you've really got is a degradation of the human environment in these areas.

They're noisy, they're dirty, they're a danger, and they're ugly because of Massport operations. We need an informed environmental consideration under MEPA. How are we going to get it? This is the fox saying the chickens appear to be okay. We need EPA site visits. We need a state board of health involvement to assess air and noise monitoring. We can't do it. The communities cannot do it. We need your help. We need an independent competent assessment of these impacts. We need a supplemented EIS. The second critical flaw --

THE MODERATOR: I think I'll have to ask you to sit down.

MS. McGRATH: Could I please just have two minutes?

THE MODERATOR: I think you've made your points quite adequately, and I would ask you to sit down so we can move on. Now we'll hear from Raol Murrow from the Aircraft Owners and Pilots Association, followed by Mary Quinn of Chelsea, and then followed by Thomas Kershaw.

T1.19

MR. MURROW: My name is Raol Murrow. I'm the northeastern regional representative for the Aircraft Owners and Pilots Association. We broadly represent general aviation, and general aviation is all aviation except military flying and the scheduled airlines.

Our official position has been presented in a letter to you and I'm not going to read it to you or repeat its content. It pretty much reflects what the study revealed and what we studied over the last several years in the air side review

committee.

What I would like to do instead is to summarize some of my own personal experience and observations with respect to this process and the study. The fact is --

THE MODERATOR: Excuse me a second, Mr. Murrow. People in the back are carrying on a conversation. It's very difficult to hear up here. Please give Mr. Murrow your attention or leave the room. Thank you.

MR. MURROW: We have monitored or participated in many of the studies mentioned here starting with the second major airport study, the strategic assessment review, the New England transportation initiative, the capacity task force which looked very carefully and analyzed the various kinds of configurations at Logan and came up with the idea of the unidirectional runway would solve the problems without causing the environmental problems that the community was concerned about regarding runway 14/32 in the past. T1.19.1

There is really no surprise. Why

does general aviation care about this issue? We are a minority user of Logan Airport. Fewer than one out of 20 aircraft historically use it. We often go in on little runway 15/33 right which doesn't impact the runway at all, so it seems strange that we would comment, but it's because we understand a couple of major facts.

One of them is that this is a regional issue and really a national issue in terms of its impacts on your transportation system. Airports do not exist by themselves. They are part of a system, and this airport impacts airports all across the country when there are problems. When delays occur, aircraft sit on the ground elsewhere. Flight crews are delayed, passengers are delayed.

We, as general aviation users, are also airline users, airline passengers, residents of the community, and we are likewise impacted whenever we are delayed. This causes waste of fuel, equipment, and human resources, and I say, it compromises the ability of the aircraft to control system

which affects airports everywhere.

We also are sitting in an airport somewhere when we are delayed by problems at Logan Airport and cannot join our families for dinner as well. Some critics say, don't fix it. Computers will eliminate the need for air transportation. And I say, and I think the statistics show, that computers are going to eliminate need for air and other travel the same way they eliminate the need for paper.

We are basing a continuing and increasing need and a special need in an area so dependent upon such a high technology industry and consulting services as Boston, a real leader in terms of the intellectual capital, we really need to think about making our transportation efficient. The world depends upon it.

And my final comment, the purpose of this plan is to reduce delays, to get folks home earlier, to reduce late-night flights which negatively impact the community, and to put many more of those

flights over water. I'm sad that the MEPA has somehow or other degenerated into accusations and, I think, an awful lot of inadequate information going around.

I hope eventually the truth of the conclusions that we all really studied for a long time to get eventually do become accepted and embraced by the communities that we wish to serve. Thank you very much for the opportunity to give my comments.

THE MODERATOR: Thank you very much. Ms. Quinn, and the next opponent will be William Falcetano from Somerville.

MS. QUINN: I'm Mary Quinn. I live on the Chelsea waterfront, and I too sit in airports but that's only because it's quieter than in my home. The runways, actually if you sit in the terminal in the airport, are further away than they are from some of the homes. T1.20

What I want to talk about is the data that's in this report. As I understand it, the data that is given to you should represent the reality of the environmental

impact. I've lived on the waterfront for nine years, and the reality as I've lived it is that jets are registering as high as 109 decibels, and many, many, many, many flights are in the 65 to 95 range.

The statistics that Massport tells us, they told us that we aren't in the noise contour map because even though we get all this noise, all these flights, they average it out over 24 hours a day, seven days a week, and we just don't quite come up to snuff. But fortunately with the new runway, we'll have 23,000 additional planes, so we will come up to snuff on that and get a few windows.

The reality is that jets are less than 100 feet over my three-story home, and also with the proposed mitigation that is to be given to Chelsea when we get the additional 23,000 flights, my home, which will get one flight every five minutes 12 hours a day, seven days a week, 100 feet over my house, even with the new map, my home is not in it, so I think there might be

something wrong with the way they looked at these things. How do they get their statistics?

The reality is that jets can be as close as one to two minutes apart at a time, and that Chelsea does not get that nearly as bad as some other communities, and yet this is how we're getting hit. The problem I have with the statistics is that we are not in the report as having noise impact. We have noise impact, and I'd invite you down anytime to hear it.

It's not mentioned in the report and it's not alluded to. How could that be? Chelsea used to be in the noise contour map and we were taken out. Why? Why were we taken out? Could it be because we have a lot of low income residents, we have a lot of minority residents in Chelsea? I mean, if they were going to have to put an environmental justice chapter in this report, we could really skew their numbers there a little bit if Chelsea was in it. I don't know.

T1.20.1

As has been mentioned, the noise monitor that was on Admiral's Hill was broken for two years. They only found out about it when the residents requested information and all these zeroes had been filed month-in, month-out for years and nobody at Massport looked at this, and this is how we are pretty much not mentioned in this report. It's questionable data.

THE MODERATOR: I'm going to have to ask you to wrap it up, please.

MS. QUINN: Thank you. You may not live in these impacted neighborhoods so how could you know from reading this report what the reality is? This is a flawed, skewed, and inaccurate report, and if I were a cynic, I could say it is manipulated data, so how can you make an informed decision when this is all that's in front of you? We need an independent unbiased study, and I hope you can help us with this. Thank you. T1.20.2

THE MODERATOR: Next will be Thomas Kershaw from the Greater Boston Convention and Visitors Bureau. Following him will be

William Falcetano.

MR. KERSHAW: Good evening. My name is Thomas Kershaw, K-E-R-S-H-A-W. I am a business owner. I own the Hampshire House on Beacon Hill, and I'm also chairman of the board of the Greater Boston Convention and Business Bureau. The proposed Logan Airport runway 14/32 is critical to the health of Boston's future convention and business travel, and restaurants depend on the visitor industry, and I urge the state and federal officials to move forward on the approval of this project. T1.21 T1.21.1

If we do not act now on this, we will be making a multi-billion dollar mistake on Boston's future. Our competitive position as a leading visitor destination is directly tied to the ability of Logan Airport to handle the region's air service needs. The new 14/32 runway will be critical to reducing delays and making Logan airport more efficient.

The success of the new 700 million dollar convention center that will open in

the seaport district in late 2003 depends on the efficiency of Logan Airport. If the delay problem is not addressed, it will cripple our efforts to attract and retain conventions, meetings, and business travelers to Boston.

At the very time when the new convention center will open, delays at Logan International Airport will have grown to the point that will be unacceptable to meeting planners, the people who choose the cities where they're having their meetings. As the new center reaches peak efficiency attracting more than 300,000 visitors a year, Logan will become a national disgrace with delays up to 55 minutes per flight.

I support the development of a comprehensive regional airport system and the growth that has developed in Providence, in Manchester, and Portland is to be lauded, as well as the new high-speed rail system from New York to Boston that debuts later this year. T1.21.2

Nevertheless, Logan remains the hub

of the region's transportation system for business travelers and for the convention and meetings market, and the success or failure of the industry and the restaurants like the Hampshire House depend on an efficient Logan Airport. Thank you.

THE MODERATOR: Thank you very much. Mr. Falcetano from Somerville, and following Mr. Falcetano we'll have Representative Liz Malia.

T1.22

MR. FALCETANO: My name is Phil Falcetano, F-A-L-C-E-T-A-N-O. I live in Somerville and teach at Merrimack College. I've become involved in this dispute reluctantly as the result of the sudden and dramatic increase of air traffic noise I and others detected last year about this time.

Along with other concerned citizens, I took the initiative and started organizing meetings about this problem in December of 1998 before the organization CARE had been formed. I shun these kinds of political battles and prefer to live a quiet life of reading, reflection and study.

Nevertheless, this problem has severely interfered with my ability to think, read, write, and pursue other necessary activities of a college professor.

I have lived in cities most of my life and have gotten used to the ambient noise of cars, trucks, pedestrians, kids playing, et cetera. However, persistent and loud air traffic is an altogether different matter. Since the sudden spike in air traffic over Somerville last year, there has rarely been a single moment free from the sound of a jet or a plane passing overhead.

I hear loud low-flying air traffic even in the wee hours of the morning, at 2, 3, 4, and 5 a.m. Those rare moments of quiet last only for very short periods of time. As the traffic picks up again, it continues with the dismayed mechanical persistency.

Noise produced by neighbors talking, passing by, or playing is usually short-lived due to the limitations of the human voice, fatigue, distraction. But mechanical noise is a different matter. It

has a relentless and super-human resilience that does not offer any hope of relief.

The deleterious effects of noise pollution are well documented in journals of medicine and psychology. Noise pollution is a physical assault on the body. Although sound is a physical phenomenon, sound experienced as noise is not only physical but psychological as well. Therefore, any attempt to measure noise by decibels entirely misses the point that noise is not mere sound but sound as it is experienced by a living human being. T1.22.1

In this case, so-called anecdotal evidence cannot be dismissed as though it were irrelevant with the wave of a hand and the smug presentation of numbers that measure sound because the issue is not about sound but about noise; that is, sound as an experienced phenomenon rather than a merely physical event.

Noise produces high blood pressure, hypertension, stress, fatigue, sleeplessness and its related disorders such as

irritability, disorientation, confusion, and incompetence due to lack of focus and inattention. Recent studies have even shown that undue and distracting noise also interferes with the ability of children to concentrate at school.

Noise from airplane traffic prevents people from being heard in their own homes, from talking on the telephone, from listening to the radio or television, from reading, thinking, praying, playing musical instruments, or any other activity that requires mental concentration or intellectual focus.

THE MODERATOR: Please try to wrap it up, sir.

MR. FALCETANO: Okay. I'll go to the end, then. Some of Massport's EIR is not completely accurate or satisfactory. I urge you therefore to refuse their request to go ahead with this unfair and injurious scheme to inflict even more suffering and hardship on communities that already endure a disproportionate burden of noise, air

T1.22.2

pollution, and traffic. Thank you very much.

THE MODERATOR: Thank you. Next we'll hear from Representative Liz Malia.

MS. MALIA: Thank you for hearing me.

THE MODERATOR: Just a second. And following Representative Malia, we'll hear from Dan Wolf from Cape Air.

MS. MALIA: Thank you very much. I'm not a transportation planner. I'm not going to try to look at numbers and draw any conclusions from that specifically. I am a resident of the city of Boston and I've lived here since 1967. I actually came here as a student. I love the city and I stay here. I stay here basically because of the quality of life and a lot of the aspects of the city make it a very livable place.

T1.23

I'm now an elected official. I worked for an elected official in the district I represent which is part of Jamaica Plain, Roslindale, Dorchester, and Roxbury. I have an extremely diverse community that I represent. One of the things that I look at

when I hear all the arguments that we've been going through over the last few months is the fact that there are questions here, some very serious questions, that I don't see answers to.

And as someone who's now an elected official involved in determining public policy, part of my concern comes from the fact that aside from having a chance to come to some of the meetings that were held in public because the community pushed them, I don't have a lot of information to work from, and that's one of the things that I think is at the heart of where we are today. We're talking about environmental impact.

What disturbs me is that what I see before us is a retread idea that was brought up 20 years ago that didn't fly then, that had very serious questions involved in it, and I hear too many questions about if we do implement the new runway, where are we going to be? The questions that really strike me are when people come in, Massport has been saying consistently that no matter what

happens with the new runway, we're going to increase our flights and our passengers coming to Boston by about 3.4 percent a year.

I have real concerns about once those people get here, what happens to them, where I see serious congestion on the ground already, and I know that there are serious environmental concerns with the effect of diesel just in general ground transportation. T1.23.1

I also am aware that one of the problems that I think we all need to be dealing with at this point as elected officials or state officials and as community people is dealing with the long-term transit needs that we have in this part of the country, and I don't see that happening and that's what troubles me.

If we get to a resolution on this runway and the runway is built, I am concerned that we're not going to see the follow-up on the regionalization because regionalization was not discussed prior to this what I feel is a short-sighted, short-term, narrow-minded approach. I'm afraid T1.23.2

that the officials who are now saying that as an afterthought, oh, yes, we'll work on regionalization.

We'll be gone, and then we'll find a couple of years from now they'll be in different jobs, I'll probably be in a different job, but I'm not sure that the issues around is Worcester really going to be expanded? How will we get people from the Mass. Pike to the Worcester Airport when there are houses in the way, when there's no accessible roadway?

I'm really concerned that the current discussion about putting money into a high-speed rail to Rhode Island, but I don't see any of those proposals coming before me and the legislature. I haven't seen any indication that these measures are institutionalized and have been committed to so that we're on some parallel tracks, that there's also -- there's a runway proposal but there's also strong proposals in place to get us to solutions for some of these problems.

So I just think that there are

health issues that haven't been resolved. We are very concerned about the fact that there was a lack of faith involved when the Community Advisory Council was removed from the discussion process for 20 months. That, to me, does not speak of good faith. That doesn't speak to me as someone who's coming to the table to deal with the facts as they are and to see who wins with that. T1.23.3

There's too many questions that are raised in the data that are brought out. I'm not comfortable that they've been resolved, and I think that we need to look at this data, the data Massport has already come together with, find some resolutions, and do some long-term planning.

Perhaps the long-term planning that we'll look at would consider a runway. I don't know, but I think too many of the other aspects that we're talking about have been severely overlooked, and what I don't want to see happen is to watch us come to the edge of this discussion. We've done it twice before in the last ten years.

We've had a series of discussions about whether or not we need a second airport and we've walked away from it. The problems we're trying to address aren't going to go away. In three or four or five years, we will have gone back up to the same number of delays, and we will not have gotten any closer to a resolution of our overall transit needs.

So my concern is that we get to that resolution phase now, that we not waste any more time, and we not put our hope in false promises or inadequate solutions, or one-dimensional solutions when what we need is a multi-dimensional comprehensive plan. We need Massport, we need the communities together, we need some serious proposals to deal with what happens to the city of Boston, its businesses, its economic vitality, its community, it's quality of life 10 years, 20 years, 30 years from now.

It's our responsibility now as citizens of this state to deal with those issues in the long term and not give in to a

short-term quick fix, well-intentioned, it looks like a good piece, but that's what my hope is that we move on to something more productive. Thank you.

THE MODERATOR: Thank you very much. I extended Representative Malia additional time as we did with the other government officials. Now we'll go back to trying to keep everyone to about three minutes. Next up will be Dan Wolf from Cape Air, and then we'll hear from Allison Stieber from Somerville.

MR. WOLF: Good evening, sir. My name is Dan Wolf. I'm the president and founder of Cape Air, and my goal tonight is to finish before you ask me to sit down. I'm going to be very, very brief. We have submitted a written testimony which really will speak for our position on this. T1.24

I have flown in and out of Logan Airport for the last 20 years as a pilot. Ten years ago I founded an airline, Cape Air, which literally flies now hundreds of thousands of people in and around the Cape

and islands and up to Boston, and we really depend on Logan to provide the service.

Our observation is that the primary problem relative to delays is the northwest wind which will cut the capacity of the airport when the airport is forced to go to that configuration to as low as 60 operations per hour from 120. So we see the runway specifically as a way to level the capacity of the airport regardless of wind conditions, that, and that alone. T1.24.1

As far as the regional approach, we are committed to a regional approach. I believe Massport is committed to a regional approach. Again, we've been here ten years dealing with Massport. We've had discussions relative to Worcester, relative to New Bedford, relative to Providence. We, in fact, are now providing hourly service out of Providence to the islands of Nantucket and Martha's Vineyard specifically for the reason that we want to pull some of the traffic out of Logan Airport, so we are pitching in and doing our part. T1.24.2

I just want to speak, and then I'm going to finish, a little bit about the process because I think a lot of the credibility issue here involves the process. My observation is, having been involved in this process for ten years, I was on the blue ribbon panel looking at a second airport, I've been to virtually every ARC meeting, I've been to virtually every public comment session, and I've been to many of the community meetings as well.

My observation is, and I really sincerely believe this, Massport has made an effort to listen to input. Massport has made an effort to analyze this from very, very different points of view, ours included. It probed and prodded me, I can tell you that, and whether I look at these people and say friend or foe depends on what the last prodding session was like because not all my interactions with these folks have been positive.

T1.24.3

They have sometimes advocated and attempted to implement things that would have

been very devastating to our business such as peak period pricing, but my observation is they really have attempted to do a serious analysis here, and have attempted to listen to the communities, and I know we have been listened to, and I believe that that's very important as you look at this document and decide on the credibility of it.

I do believe in the process. I believe Massport has done their part, and I also believe that you will do your part, and I think that the outcome of this is going to be a suitable outcome. Thank you very much.

THE MODERATOR: Thank you, Mr. Wolf. Now we'll hear from Allison Stieber from Somerville. Following her, Frank Gibson, and following him, Christine Silverstein.

MS. STIEBER: My name is Allison Stieber, S-T-I-E-B-E-R. I am a resident and homeowner in Somerville, a city that over the last 12 months has been bombarded by air traffic from Logan Airport, and especially during what Massport euphemistically refers

T1.25

to as the off-peak hours.

Off-peak hours in lay person's language happen to be times when people would most likely be at home; that is, nighttime, early morning, weekends, and holidays, times when people are trying to sleep, study, relax, or spend quiet time with family and friends.

For example, three days ago on Easter Sunday, we received a steady stream of aircraft at a rate of two planes per minute starting at approximately 6:10 a.m. and consisting of most of the day. Although 6:10 a.m. is the usual time for the daily onslaughts on our city during spring and fall, on this day they lost an extra hour of sleep due to the time change so, in effect, we were awakened by planes on what was the equivalent of 5:10 a.m. on what was supposed to be a day of rest.

Massport did what I describe as business as usual. However, to those of us who had to spend that day as we have so many others in a fog of fatigue caused by lost

sleep through late night, middle of the night, and pre-dawn aircraft noise, this was a mean-spirited intrusion by an arrogant neighbor that has repeatedly demonstrated its disregard for our community.

Massport officials have taken every possible opportunity to tell those of us who protest the frequent disturbances as well as to misinform the media that Somerville's air traffic rate is negligible and we are only getting our fair share.

A 300 percent-plus air traffic increase that Somerville would suffer if runway 14/32 is built is also dismissed by Massport as negligible because, according to its fiction, our current rate of air traffic is almost nil. However, those of us living under the flight paths know otherwise. We know that any semblance of peace that remains for us with the use of the present flight pattern will be almost totally obliterated by the tripling of the impact that we endure already. T1.25.1

Runway 14/32 would be more than a

potentially minor annoyance. It would mean an all-out attack on the quality of life. Some people talk as though the quality of life is just an antiquated notion. They are mistaken. If you take away people's ability to experience or even to be able to expect to live in a peaceful environment, then you are stripping them of what keeps them going, what makes them able to contribute to and function in an increasingly-stressful and uncertain world.

No amount of economic expediency can even begin to justify the magnitude of the assault that Massport and the FAA have planned for us.

THE MODERATOR: Try to wrap it up, please.

MS. STIEBER: Right. Runway 14/32 must not be allowed to be built. Its harmful effects will be permanent and will far outweigh any short-term benefits. Furthermore, current air traffic patterns that are injurious to our community should be scrutinized and amended. Finally, it is our

understanding that Massport is going to appear in Somerville next Tuesday, April 13 for a public hearing, and we expect to be there. Any member of the public is invited to attend.

THE MODERATOR: Thank you. Now we'll hear from Frank Gibson from the organization called NEED Logan. Following him will be Christine Silverstein from Nantucket, and following Ms. Silverstein will be Candace Collins Boden from the Provincetown Chamber of Commerce. Mr. Gibson.

MR. GIBSON: Thank you for the opportunity. My name is Frank Gibson, G-I-B-S-O-N. I live in Cumaquid on Cape Cod. I have some written reports here but I'll shorten it up. I'll begin with I'm a strong believer in the need to complete runway 14/32 and the center field taxiway. T1.26

Back some ten years ago when the former Massport board proposed PACE, this program for airport capacity efficiency, I organized a grass roots citizens group called T1.26.1

NEED Logan. It's an acronym that stood for New England's Economy Depends on Logan, and it still is a very valid one, and I offer it to anybody from Massport who wants to use them.

The proposed PACE was a program that was very detrimental to our local airlines with its pricing. Thankfully, the FAA determined that PACE was stopped. With regard to the current talk about period pricing and slots, there's no question in my mind that financially that limited access to Logan are not the answer to Logan's problems. Logan's delays are caused by weather.

The important factor for the airport is its physical capacity to handle all the flights scheduled by its users to arrive and depart as scheduled. As I understand, when all of Logan's runways are in use, Logan has the capacity to handle all the traffic scheduled by the airlines that are using it.

I'd like to emphasize the point, as Mr. Cohen from the South Shore pointed out,

too, using Logan's current runways, Logan can handle 120 operations per hour. However, with strong winds, as we heard, from the northwest, Logan is limited to one runway. And you know what it's like, those of you who travel to Cape Cod, there's three lanes of traffic and there's an accident and you're down to two lanes of traffic and then you're down to one lane of traffic, there's a hell of a delay.

As soon as the traffic is cleared, which is what runway 14/32 would do in effect, you'd wind up with cleared traffic. Runway 14/32 is not meant to increase the number of aircraft using Logan. Simply, it's to allow the aircraft currently using Logan to arrive and depart as scheduled.

I think 14/32 also would enhance the safety because it would be able to limit it to a lot of the smaller aircraft not to be following the same traffic patterns as the big ones, and you don't have to be six miles behind.

The completion of the runway would

T1.26.1
(cont.)

help the utilization of Logan at all times. Since aircraft arrivals on 14/32 would be over water, this is another thing. I think the thing we're here to talk about I think is the completion of runway 14/32. Noise would be mitigated because the departures and arrivals on 14/32 would be over water.

THE MODERATOR: Try to wrap it up, please.

MR. GIBSON: Sure. For those who are skeptical, I invite you to come down to Barnstable Airport, Hyannis and stand in the parking lot at the end of the runway, runway 24, which would be like standing in Harborside Hotel and watching the airplanes go down 14/32. I guarantee you would not hear them. That's the quality of life that should be very enhanced. I think you should consider that. Thank you very much.

THE MODERATOR: Thank you, Mr. Gibson. Now Christine Silverstein, and the next opponent after her will be William Manning.

MS. SILVERSTEIN: My name is

T1.27

Christine Silverstein, S-I-L-V-E-R-S-T-E-I-N. I've come to speak to you from the second busiest airport in New England, Nantucket Airport. We also have a hundred operations an hour quite frequently during the year.

However, the reason I'm here is not to speak about our relationship with you, and I also am quite aware that we are not involved in some of the regional planning that's going to be going on hopefully in New England here. I'm here to speak to you because I'm a member of the chamber of commerce in our community, and an esteemed fellow member of our chamber of commerce is Dan Wolf and he definitely came to our community and asked for our support for this project, and he asked our planning and economic development commission and I think also our board of selectmen, so that you will be receiving letters from those bodies from our town.

But I also am happy to hear that Dan addressed the process issue because I think that is important for you to know that

both of those bodies in our town will be writing to you not having had a public hearing to decide if our community actually did support this project. So I'd like the members of the communities here around the airport to realize that other communities are being lobbied to support this project without having the process that they should have before they make that kind of decision.

T1.27.1

We certainly haven't read the report, and I've learned more tonight than I ever knew about the issue, so I just would like you to know that there needs to be a balanced representation from our community and it isn't just the letters that you receive. Thank you very much for giving me the chance to balance that view.

THE MODERATOR: Thank you very much. Now we'll hear from Candace Collins Boden, Provincetown Chamber of Commerce. Following her will be William Manning from East Boston.

MS. BODEN: My name is Candace Collins Boden. Thank you very much for

T1.28

listening to me tonight. B-O-D-E-N. I have a whole different slant on this than anybody else who has spoken tonight because our airport is in jeopardy of becoming extinct. Our airport serves the outer Cape towns from Orleans to Provincetown, and if this runway is not implemented by you and you decide to consider peak period pricing, we are in jeopardy of losing our service airline which is Cape Air. T1.28.1

We have a contract with the National Seashore in Provincetown which is the federal government for our airline, and part of that contract is if we don't have a carrier, we no longer have the airport. Our airport is very vital to Provincetown. We have an elderly community. A big percentage of our community is elderly. Another big percentage is gay. There are a lot of health problems.

Our airport is our lifeline. It's a quality of life issue, but is our lifeline. Safety, number one; economic growth, number two. In the past ten years, I have been

promoting public transportation to Provincetown from visitors because our roads are getting smaller and smaller, the bridges are getting smaller and smaller coming onto the Cape, traffic is terrible, and we really depend on public transportation.

So I'm asking you please build that runway and don't consider peak period pricing and save our airport. Thank you.

THE MODERATOR: Thank you very much. Now we'll hear from William Manning, East Boston. Mr. Manning. Mr. Manning doesn't appear to be here. Is Gerry Falvo from Winthrop here?

PARTICIPANT: He left. He's going to testify tomorrow night.

THE MODERATOR: He will speak tomorrow night. Thank you very much. Peter Koff from Boston. After Mr. Koff, we'll have Charles Carrera and Enrique Miranda.

MR. KOFF: Thank you. My name is Peter Koff, K-O-F-F, for the record. I'm the attorney for Airport Impact Relief, AIRINC, which was founded in 1980, and I think has

T1.29

been a consistent voice of the need for sound transportation planning and concern about proposals of Massport that might increase capacity and environmental impact. I also am an officer and board member of the new regional group, Communities Against Runway Expansion. In three minutes, it's kind of hard to provide comments on the Massport proposal so I'll try and simply just hit some bullet points.

First, AIRINC quite strongly believes that the benefits of the proposed runway, the degree to which it will affect the delay problem are greatly overstated in the reports, and that's certainly made clear in the report of the CAC. We also think the impacts on the surrounding communities are substantially understated. As an example of the overstatement, Massport tonight, in fact, said for over a decade there's been a delay problem at Logan Airport. For over a decade, Boston has continued to grow quite nicely. Its business has expanded, convention centers being planned and to be constructed. There's

T1.29.1

T1.29.2

been no sense that the economic lifeblood of Boston or Massachusetts has been crippled by what's been a problem for ten years.

It certainly would therefore be unreasonable to assume that in the future suddenly the economic foundations of Boston are going to collapse. A kind of hysteria is being used to trump up support for this runway as far out ahead of any possible benefit that it might serve. Other problems, we suggest, exist with the report are the use of old data. That's been mentioned already. T1.29.3

In terms of alternatives, they haven't been adequately examined. I specifically call attention to the letter that I wrote on behalf of my client, Airport Impact Relief in October of 1997 which was addressed to Mr. Blute, CEO, executive director of Massport. Copies went to counsel for Massport, Betty Desrosiers, the head of the FAA, the regional director of the FAA. T1.29.4

In that letter, we made it clear that we thought Massport was going to give peak pricing a chance before it went forward

with the runway. We talked about the need to specifically look at Hanscom Airport and other alternatives to expansion at Logan, and we asked specifically to sit down with Massport and start the process of discussion of some sensible ways of dealing with the issues surrounding airport growth. We did not receive one response to this letter. Nobody from Massport ever called us, ever offered to sit down, and ever talked with us specifically about what their plans were.

We think that shows, and I'm moving into another one of our concerns --

THE MODERATOR: Try to rap it up, please.

MR. KOFF: One of our concerns is under the Airport Act, 49 United States Code, Section 47-106. The interests of the community have not been given fair consideration. We have not been told that we were required to be told that we have the right to petition the secretary of transportation because we are not represented on the Massport board. Protection and

T1.29.5

enhancement of the environment, inter-modal planning requirements of federal law, and I also mention Section 47-101 have not been followed. T1.29.5 (cont.)

And lastly, the issue of trust upon which Massport bases much of its case, we obviously do not trust them when they cannot document how 75,000 flights are going to be over water, and when they tonight say that the second major airport study concluded that such an airport would be unfeasible, when one or two speakers later the representative for the Massachusetts Aeronautics Commission said that two sites were recommended in that report. Given the lack of accurate information and the inadequacies, we ask that the secretary find the report to be inadequate and require a new draft, and we urge the FAA to withdraw its support of this project. Thank you. T1.29.6

THE MODERATOR: Thank you very much. Now we'll hear from Charles Carrera and Enrique Miranda from the Logan Airlines Management Council. They asked to be called

together so I assume we have a duet. And then following these individuals, Curt Walter from Cambridge.

MR. CARRERA: Good evening. My name is Charles Carrera. I serve as the director of airport services with Cape Air-Nantucket Airlines. In addition to those duties, for the last three years I have served on the executive committee of the Logan Airlines Management Council, and am privileged to serve as its president. I'm here tonight in my capacity as president of LAMC. I'm also here with my colleague, Enrique Miranda, who is current chairperson of the cargo subcommittee of the Logan Airlines Management Council. T1.30

We have a written statement but I'll just make a brief comment and submit this written statement for you. We rise in support tonight of the series of air side improvements that are currently being proposed by Massport. In an effort to reduce delays and improve efficiency on Logan's airfield, we support the following projects. T1.30.1

Construction of a unidirectional runway 14/32 for over-the-water operations, construction of a center field taxiway to reduce taxiway congestion, a realignment and extension of the existing taxiways to enhance airfield safety, and a reduction of the approach minimums on runways to upgrade Logan Airport to industry standards.

MR. MIRANDA: On behalf of our cargo customers, we annually ship 814 million pounds of cargo and mail out of Logan International Airport. We strongly, the cargo subcommittee strongly supports the Logan air side improvement project. T1.31 T1.31.1

MR. CARRERA: And on behalf of the over 26 million customers using Logan Airport, we strongly reiterate our support for EOEA 10458, and we'll submit comments for the record, and thank you for the opportunity to address you tonight.

THE MODERATOR: Thank you very much. Mr. Walter is no longer here. Is Arthur Krolman in the audience? Mr. Krolman will speak, and then John Tarter from

Winthrop.

MR. KROLMAN: My name is Arthur Krolman, K-R-O-L-M-A-N. I'm a business owner and homeowner in Charlestown. It is my understanding that the unidirectional use of proposed runway 14/32 cannot be legally guaranteed by the Massachusetts Port Authority, the Federal Aviation Administration, or the commonwealth of Massachusetts. T1.32

Consistent with their proposed use, Massport has analyzed runway 14/32 as a unidirectional runway only. However, to better satisfy the aims of the National Environmental Policy Act and the Massachusetts Environmental Policy Act, the scope of the EIR/EIS should address the possible future implementation of bi-directional use. Thank you. T1.32.1

THE MODERATOR: Thank you very much. Now John Tarter from Winthrop. Is Mr. Tarter still here? Not seeing him, is there an Alan Wright from Roslindale in the audience? You're up, sir.

MR. WRIGHT: Thank you. My name is Alan Wright. That's W-R-I-G-H-T. I live at 57 Arbor Road in Roslindale next to the Arnold Arboretum. I am here tonight representing my family and neighbors, all of whom are very concerned about Massport's proposal. T1.33

When runway 27 is in use, the direct overflight of Roslindale and the Arnold Arboretum is unrelenting and deafening. Massport's proposal to build runway 14/32 will triple; that is, increase by three-fold overflights to over 45,000 per year. That means an average of over 130 flights per day year-round. T1.33.1

This is intolerable, unreasonable, and unfair. It must not be allowed. When flights are overhead and I am outside playing with my child or talking with my neighbors, we must stop talking as we cannot hear each other, and we are located more than six miles from Logan.

Massport has not adequately addressed what the quality of life of 35,000 T1.33.2

residents in Roslindale, the tens of thousands of visitors to the Arnold Arboretum who come from all over Massachusetts and other New England states, or the hundreds of thousands of residents of urban Boston and surrounding communities must decline.

Part of the problem is that the pilots never follow through on the runway 27 flight pattern. Instead of staying over Franklin Park or Forest Hills Cemetery, they get off over the Arboretum and Roslindale. Massport must fix this problem. T1.33.3

My family and I and my neighbors do not want Logan to be shut down. We use it. What we want Massport to do is to end the continued growth of this very badly-located airport, and truly shift traffic to other airports including Hanscom. T1.33.4

I also would like to react to some of the business testimony that's been given today. I work in the business community, I fly to other cities and conventions. I am increasingly using teleconferences and e-mail. It has resulted in a decrease in my

attendance to conferences and to outside meetings.

I do not believe the testimony from the ADL consultant's vice president. His clients are not asking to meet with him. His clients are talking with him through teleconferencing, through e-mail. It was a canard. The real issue here is the quality of life in the greater Boston area and it will not be improved with the implementation of runway 14/32. Thank you very much.

THE MODERATOR: Thank you. At this time, we're going to take another five-minute break and we'll reconvene at 9:30.

(Brief recess taken.)

THE MODERATOR: Let's reconvene. If anyone is outside, you can call them back in. We're back on the record. We have exhausted our list of supporters so all we have left is our opponents. There are 16 names on the list. I'm going to run through them all and if somebody is not here, then I will skip them.

First would be Rob Trainer from the South End. Is Mr. Trainer here? I don't see him. Richard Goldhammer from Hingham, Mass.? How about Englehart from Hingham? John Mahoney from Malden? Darryl Pomicter from Beacon Hill? Did I mangle that name?

MR. POMICTER: Pomicter.

THE MODERATOR: Jeff Buck? Joe Galino? Bob Driscoll, Sr.? Roland Choquet? How did I do with that one?

MR. CHOQUET: That's okay.

THE MODERATOR: Very good. Rick Rose? Bill Galvin? Dovi Abbey? Kathy Callahan? James Stamos? Todd Payton? There are a few that aren't here so we'll proceed very quickly now hopefully. Mr. Trainer?

MR. GOLDHAMMER: Actually, Richard Goldhammer from Hingham. Good evening.

THE MODERATOR: That's right, Richard Goldhammer from Hingham.

MR. GOLDHAMMER: Thank you. I just want to share basically three points briefly at this late hour. One is the fact from my perspective as a Hingham resident near the

T1.34

Hull line. The planes overhead, the rate is one per minute, the frequency is four to five days per week, the hours are from 5 a.m. to 10 a.m., and at 5:30 p.m. to 2 a.m. The noise level of 65 to 95 decibel range, that's equivalent to the noise of an average lawn mower up close once a minute.

My second point is that it's negative and very significant to myself and the neighbors. Being woken up at night is a problem when the right to required sleep is a right which is taken away. I have trouble hearing myself think which is a right taken away.

Playing with my daughter outside peacefully without interruption is a reasonable right that's taken away. The stress that my wife reported. During low cloud coverage, a plane appeared so low she thought it was going to crash into our neighborhood over World's End in Hingham is a right to peace of mind which is taken away.

Nearby Wampatuck State Park, World's End Reservation which is supposed to

offer some solitude and repose for our citizens, are rights that are taken away. So the rights of the minority business community appear to override the rights of the majority of the citizenry that is surrounding the airport. Thank you. T1.34.1

The third issue is Massport's trustworthiness is highly suspect just from my experience. I had sent an October letter to Peter Blute and asked specifically, I've heard about this runway extension. Will flights over Hingham expand? Just wondering would you please do me the justice of giving me an honest answer.

Blute's reply, November 19, 1998, second-to-last paragraph: Massport is evaluating plans to improve the efficiency of Logan's airfield. By reducing congestion and delay at the airfield, planes will spend more time on the ground or on route and less time circling in the air.

I have a problem with that. He knows I'm a Hingham resident, and it's not about circling flights, it's about the 85,000

flights that are projected into those runways that fly over Hingham and Hull. When I asked him specifically would flights increase, I get a five-paragraph letter that says nothing, and I'll be happy to share it with you in full piece.

Shortly thereafter, the graphic came out in the Globe and said that flights in Hingham would increase from 32,000 to 85,000. So I leave you with some questions. What is the impact from a human perspective on residents of these communities?

Where do people like Christopher Good live, Mr. Guzzi live, Mr. Sherman, Christopher Anderson, Kevin Cohen, members of the business community? I submit they do not live in Winthrop, East Boston, Roxbury, Dorchester, Hingham, Chelsea, or Hull. They do not. We could probably check that out to be certain.

And is it true that high tech. companies, in fact, will be attracted to the lower cost of doing business inside or outside of the city? Where is it cheaper to

do business, inside the 128 belt or outside? Have they thought of that?

Is the logic the same that we've seen in years past? Let's serve their franchise with a hopeful trickle-down benefit to the region, or is the logic not to take seriously the majority of the citizenry? Thank you.

THE MODERATOR: Thank you, Mr. Goldhammer. Now we'll hear from Albert Engelhart, also from Hingham, followed by Darryl Pomicter.

MR. ENGELHART: Good evening. My name is Albert Engelhart, E-N-G-E-L-H-A-R-T, of Hingham. We're like a church service, it's a small group, and some of you wanted to come up front but it's kind of lonely up here. I'm currently a registered professional engineer and I'm firmly in the camp of high technology. I am one of the individuals representing the seemingly parochial interests of Hingham and Hull and Cohasset and Scituate. T1.35

In regard to runway 14/32, I am T1.35.1

opposed to it. If it's turned on, it will produce a tremendous increase in noise pollution which will exacerbate the already 60-second interval of planes that occur overhead on certain days. The expression greater Boston area, and the expression high tech., what does that mean? To me, and I think to 95 percent of everyone here, it means areas, for instance, Route 495, all areas radiating out from without and within 495 extending out beyond Worcester and 128. T1.35.1 (cont.)

Surely in jest that Boston Logan Airport area which is a tiny kernel within a very, very large net, can it honestly speak for outlying areas up to one-and-a-half hour's distance away? It's acting as though it's the sole spokesman.

Currently, there is tremendous political and economic power inertia locked in a small airport called Logan. I suggest that it be mandated that Massport divest itself of this censorious position, this almost fetish, drive, to make Logan the only existing means of air transportation, and

instead, Massport should revisit the greater reason called Massachusetts. Massport means Massachusetts Port. They're representing a very small area.

Instead, a tri-state organization, Rhode Island, New Hampshire, and Massachusetts, initiated by Massport should consider Hanscom as a strong candidate, Worcester, Green, Manchester airports. T1.35.2

THE MODERATOR: Try to wrap it up, please.

MR. ENGELHART: Sure. Finally, a fundamental fact about noise pollution and a recommendation that Massport be a true leader instead of a retread, as someone mentioned here before. For 40 years as an engineer, I know that fuselage problems making noise could have been corrected. It wouldn't have been corrected tremendously but they would have been significantly corrected, and it's not taking place. T1.35.3

General Motors, Ford, all the automotive companies have been forced in their areas to correct pollution problems.

The cost was tremendous at first and now it's routine. The same thing could happen if Massport took the initiative and started to force like California does. They say to Ford and General Motors and Chrysler and says you conform to our standards or no cars.

T1.35.3 (cont.)

Massport, in cooperation with the tri-state area, could start that process. That's why a lot of us aren't talking to the others, we're not talking with each other, we're talking against each other is the noise problem that could be corrected by now. It's an economic problem. It will take years to fix but it has to be started. How about Massport getting started on that? Thank you.

THE MODERATOR: Thank you. Now Mr. Darryl Pomicter from the Beacon Hill Civic Association. Following him we'll have Jeff Buck. Is John Mahoney in the audience? Mr. Pomicter.

T1.36

MR. POMICTER: I'm Darryl Pomicter, president of the Beacon Hill Civic Association here and on the CAC. I'm a long-term resident of Boston and I am trained as a

civil engineer. For all the reasons stated, we are against the new runway. This is a short-term partial inferior solution. We feel a longer-term solution that shares the wealth, that doesn't risk overloading the city. T1.36.1

That said, I'd like to go on and give some comments criticizing Massport's presentation of the information, and I've been very involved in this. Massport presented an overwhelming amount of information formally and informally. While most of that information is accurate, factually much of the presentation and information in print and verbally is inconsistent, misleading, and deceptive misinformation.

Many normal people are overwhelmed by it all and believe they have to accept the facts as presented, but they have to realize that if those facts are not accurate, the conclusions are inconsistent and wrong and don't need to be accepted.

Some examples. Director Blute T1.36.2

keeps talking about the 70,000 flights over the water and the few percentage of PRAS flights that are going to be rearranged in the city. Those 70,000 flights, about 50 percent, 15 percent of Logan's operations. Those few percent add about 40,000 flights to runway 27, 30,000 to runway 33, and 10,000 to runway 22. Since both airports get a couple of those -- neighborhoods get a couple of those, neighborhoods can easily get 50 to 70,000 increased flights even though 70,000 are initially aimed over water.

T1.36.2 (cont.)

Director Blute also talks about we have to do this because otherwise 90 percent of the traffic will be using only the north-south runways. Of course, even if we do do this, 90 percent of the traffic will eventually be forced to use both the north-south runways because there are no limits on operation plans, and it will only take a few years to get back up to those levels and exceed those.

Logan's ranking as the 11th in the U.S. in operations and sixth in delays has

been a justification for the runway. At one of the ARC meetings a couple of months ago, we pointed out that there was also a ranking of 17 from passengers.

Seventeenth in passengers means there are fewer than average passengers on an airplane, so if you can get more passengers on the plane, you need fewer planes, and you could cut the delays by working that side of the equation. You need to work both sides of the equation. Recently, talking about sixth in delays and 17th in passengers, so they just upped the ante but he doesn't mention anything about getting more passengers on a plane. T1.36.3

Massport, in their EIS, details in great detail going from sixth in 1997, to sixth in delays in 1990. They don't talk about the FAA statistics. They mention that 2 1/2 percent, 25 per thousand, they don't mention that that's down from 40 per thousand or almost 40 per thousand in 1992. T1.36.4

There is no handicap. They have this drive that we're going to be the best

somehow. Second or third is not enough. There's no handicap for the location in New England which is confining, which has New England weather, and while it's cramped in the city, that actually should decrease the amount of time that it takes to get back into the city assuming they don't overload the local transportation systems.

THE MODERATOR: Try to wrap it up, please.

MR. POMICTER: Okay. The 65 million dollars they say is going to be saved by building this runway, easily if you do those analyses you get up to a billion dollars whether you talk about 20 hours a week times 50 is a thousand hours a year per person, you can easily get to the billion dollar figure. The amount of delay hours issue, the percentages have gone up, down, and sideways back and forth, but if you dig into that report, there is a chart where you look at all actions except 14/32 and all actions with 14/32, and the difference is 20,000 hours. It's a 15 percent reduction

T1.36.5

even though you've got to look under the cars, under the piece to find that.

The last item is, Hanscom, asking if they're going to use it, when they talk about general aviation and it had more operations than any airport other than Logan, they overlooked the fact that -- they specifically mentioned Portland, Maine, we're more than Portland, they don't mention the fact that 70,000 of those touch-and-go's, that there's still 40, 50, maybe a hundred thousand dollar operations capacity at Hanscom that they have no plans to use. Thank you very much. T1.36.6

THE MODERATOR: Thank you. Now we'll hear from Jeff Buck, and following Mr. Buck will be Mr. Galino from Melrose.

MR. BUCK: Good evening. My name is Jeff Buck. I'm a Chelsea waterfront resident. I'm also the president of the Chelsea waterfront. Betty, I'm glad you made it back in time for my three minutes. I was hoping you wouldn't leave me hanging there.

I have just a small little

presentation. I'm sorry it's not as slick as Massport's presentation. I was trying to get some money from them but it got delayed due to some hot air delays. Basically, this is a community I live in. This is Chelsea. This is a waterfront. This is a community that has struggled like all the communities to improve itself, to improve every aspect of it.

Massport's had a big influence on the quality of my life. We've got this huge green bridge a block away from where I live, and I have airplanes that come over my head. Unless you're there, you really can't understand what it's like. I run my company in Chelsea and I've invested in Chelsea, and it's quality of life.

Arthur, Jay, Christopher, John, you guys have the power to help the people. It's not about the money, it's about the people. Boston is the coolest city in the United States. Everybody here knows that. That's why we're here. There's no place better. You could close Logan down, you could close

them down, and is that going to keep anybody from coming to Boston? No.

I came from Florida, the man who works for me came from Alaska. This isn't a question of money. It's a question of quality of life, and you guys, you're the environmental protection, you're there for me and these beautiful people out here. Whether they support Logan or not, if they do support this runway like Betty and Flavio and all those guys, you can't listen to what they want because they don't know any better. You know what's right. You know it's about the people.

I ask you, is the lack of business going to be due to the runway coming in? Are we going to lose business because of this? No. I'm a businessman. I work 12 hours a day, and I do whatever I have to do to overcome obstacles, and they're there every single day. My hands bleed at the end of the week. Business goes on regardless of the obstacles in front of it.

We're in an economic boom. We're

kicking ass. This country is stronger than ever. We have our problems, but we are Americans, we work hard, we overcome. Look at this cute little girl right here, and right behind her is this huge X files-looking oil refiner. I'm not even sure what it is. This is the Admiral's Hill area that we talked about.

THE MODERATOR: Try to wrap it up, please.

MR. BUCK: Well, I'd just like to say that Jay, Arthur, Christopher, John, Betty, Flavio, David, and Deborah, you guys have the power. Twenty years from now, you're going to be retired, you're going to be somewhere else, and none of this is going to matter, but before that 20 years passes, actions you take right now are going to affect millions of people. I have faith that you will make the right decisions. Thank you very much.

THE MODERATOR: Thank you. Mr. Galino, is that right?

MR. GALINO: Galino.

THE MODERATOR: And following Mr. Galino will be Roland Choquet.

MR. GALINO: Thank you. I appreciate the opportunity to speak even at this late hour. I appreciate you guys hanging around. My name is Joe Galino, and I am here to speak on behalf of the city of Melrose. I'm the CAC adviser for the city of Melrose. I'm the mayor's adviser, and I'm also a treasurer and director of CARE. T1.37

I'm here to ask Massport tonight to withdraw their proposal until such time as they can come to my community and explain the impact that this new runway is going to have on my community. At the last ARC meeting we had, I asked Betty to come talk to the community and she said they would. I then called. I spoke to our board of alderman and they requested Massport come. T1.37.1

I called Betty and I then spoke to a few other people, but I got the official response that Massport has reconsidered their policy with respect to individual communities, and that I would get a letter

explaining their position sometime in the next ten days. That letter did come, it's here. It basically doesn't say anything other than they're not coming to Melrose.

I find this unacceptable for my community to sit here and not have the opportunity to have Massport come and give their presentation. I guess we're not alone in this. There's been several communities where I've heard that they've gone so many other places to tell their story.

A letter has gone out recently from our state rep., Mike Fester, and I sent it to Richard Dusset and I assume you have that letter, as well as other North Shore representatives from other communities from the North Shore. We haven't heard yet. I'm wondering, Betty, if we are going to get that meeting. Is that something you could give us an answer on?

MS. DESROSIERS: I don't have an answer on that tonight, but we did just receive that letter.

MR. GALINO: It was probably a week

ago. It went out over a week ago.

MS. DESROSIERS: It just crossed by desk.

MR. GALINO: Okay. Fair enough. But considering there's 15 days left for the public comment period, I'm assuming there's not really enough time for our communities to respond on the North Shore. Melrose is only five miles away from Logan Airport, yet it isn't considered by Massport to be noise-impacted.

If you look at Massport's computer-generated flight tracks, you won't see a jet flying over Melrose. We have some great shots here that show, you know, these different flights in the computer-generated models, but yet I can look up any day and see jets flying over Melrose. They're not in the modeling, so I would suggest that they do modeling that doesn't quite reflect the reality of what's really going on up in the skies. T1.37.2

Whether I'm in my home, my office, I can hear planes. Now, I've been told that

we get a lot of commuter planes and I should be thankful for the fact that we're getting a lot of commuter planes but we're not getting jets, and I would only say to that, if this new runway is supposed to take some of that commuter planes and put them out over the harbor, where are jets going to go? Shifting commuter planes to this new runway, that's going to open up some opportunities for more jets to come north.

THE MODERATOR: Try and wrap it up, please.

MR. GALINO: I'll try to do that. Massport currently gets 4 percent of the traffic, we're supposed to get I guess 12 percent now with the new runway. That's 20,000 flights now. That means an increase of 60,000 flights. That's with current levels of half a million flights a year.

If we go to the 750,000 flights Massport's projecting or potentially a million, I've heard different numbers, you know, that means 90 to 120,000 flights over Melrose. We now get 20,000. We can't get

Massport to come to our community to explain how we're being impacted.

I would like to ask that an independent council be established to look at this issue. I've heard that there's been many studies before. I'd like this to include the citizens, the communities, have their input. I'd like to ask MEPA tonight to stop this project until such time as such a council can be put together to research all of the options, especially the mayor of Boston's suggestion about a new airport. T1.37.3

Boston is a world-class city. The citizens of Massachusetts deserve a world-class approach and long-term solution which meets its transportation needs. Thank you.

THE MODERATOR: Thank you very much. Now we have Roland Choquet, followed by Bill Galvin.

MR. CHOQUET: Good night and thank you for hearing me. My name is Roland Choquet. I come from Chelsea. I'm also a member of the CARE group, Citizens Against Runway Expansion. More than 25 communities, T1.38

as I understand it, are now involved in that, and I object to the expansion of the runways, unless you want to put it at Hanscom Air Force Base and build an airport there. T1.38.1

I think it's a sensible idea to limit any further growth at Logan. It was understood with a court injunction some 25 years ago that it was enough then, it's enough now, and more is not always better. You can sink a community by having too much of this sort of thing. T1.38.2

There's too much noise on the idea of pollution, noise pollution. Amnesty International has declared the number one form of torture in the world to be sleep deprivation, and I'm sure there are a number of people from the communities, the 25 communities that have since in the last month basically banded together to form CARE, we've heard tonight, too, that people aren't sleeping well.

This affects our children, it affects the people who work, and the business people ought to be concerned about that than

their people arriving late for a meeting. Their Massachusetts worker productivity is diminished. I know in Chelsea we have a B.U. school partnership, Boston University, and we have basically 47 nationalities in Chelsea, our school reports come out in five languages, and the children and the parents are requesting of B.U. to get the children rested. That's one of the primary requirements.

Try doing that when we have currently 9,000-some flights scraping our houses a hundred feet overhead, and you can watch the planes go by your house and see if the lunch trays are up or down. It's a little too low and too loud, the noise pollution again. If children aren't sleeping, if affects their grades. Consider that as an environmental impact, a serious one at that.

I think that it would be a sensible legislation to pass requiring aircraft manufacturers to reduce the level of noise permitted from the jets. What's the point of

this remediation on our windows? You're affecting several million people. Give them all windows, great, but you can't go outside and enjoy life. They can't play with their children. The pollution from the unburnt gases of jet exhaust has been coming down on their approach to Logan.

They don't combust all their gas they use in their engines. Maybe when they cool it down, they'll land, but what is that, a hundred feed over your head dumping on your house? We wash our windows in Chelsea. Two days later, there's a clear film and you can't see out of them. It's all dusty-looking.

We have some serious health considerations to this airport proposal. I have an alternative I'd like you to consider if it's within your power. Quickly, the idea of using Hanscom again. There's an aquifer to serve the Boston area with water from the Quabbin Reservoir. I'd like to recommend or suggest that Massport utilize Hanscom and get those blowing machines as soon as they're

T1.38.3

done with the aquifer, put a high-speed train, as Governor Cellucci mentioned.

It was a great thing to happen for the New York to Boston, run from Hanscom to the end of the Red Line, nice short trip, dedicated runway underground, won't impact communities, you don't have to go through abutting property and all that, and just have commuters land at Hanscom or take off if they wish, especially the high tech. area. We're talking about 495, 128, and Route 2.

Basically it would serve those commuters. Basically shuttle people back on high-speed trains so that there's no difference between landing at Logan or at Hanscom, and I think that's a possible sensible alternative to any more business at Logan.

As was mentioned, we have an objection to any more growth. Massport told us tonight it's not expansion but Citizens Against Runway Expansion is our group. If you add a runway, it is expansion. I'd like to argue against Massport's claim that it's

T1.38.4

not. I thank you for your time and hope you consider these things for the health of our children and our workers. Thank you very much.

THE MODERATOR: Thank you. Next we'll have Bill Galvin, and then following him, Mr. Abbey from Roxbury.

T1.39

MR. GALVIN: I'd like to address two issues. The first one is as to credibility, and the second one is the issue of environmental and social justice. My name is Bill Galvin. I'm a former licensed professional pilot and former general council in EOEA, but most importantly I'm the CAC representative from Charlestown.

On January 20th of this year, Director Blute and Massport came to Charlestown and told us three things. They first told us that it was something good for Charlestown in this document. When we asked them what it was, they couldn't tell us.

The second thing they told us was that there would be no negative impact from this. When it was pointed out to them that

air traffic over Charlestown would triple and the magic 65 DB line would come over from Chelsea down Admiral's Hill and start crossing the Mystic River, it just stopped short of Charlestown, they put it into their computer model in the most insulting way.

They told us in Charlestown that it was a question of fairness, that we had to share the burden. Charlestown. Now, 50 percent of Massport's -- Tobin Bridge, 24 hours a day, seven days a week, like noise and air pollution covering like a big dark cloud over our poorest section of Charlestown, an 1100-unit low-income housing project and another 347 subsidized housing development, 5 or 6,000 people there.

So the third thing that they told us -- I lost my train of thought. I apologize. One second. They told us, one, that it was -- and then the fairness issue. They have the bridge. And the last thing, we have 50 percent of Massport's seaport. We have the cars that come in to Boston Harbor. Massport's very proud of the fact that it has

a capacity for 220,000 cars. Averaging ten cars per truck, big noisy trucks that carry these cars, that's 44,000 truck trips in and out of Charlestown, one little square mile, in a given year.

Now, over in East Boston, in Revere, in Winthrop, 4400 houses are sound-insulated. This new proposal suggests that Chelsea, the poorest city in the state, get 1100 homes sound-insulated. Massport has a choice. They own two airports, Logan and Hanscom. There's a perception that the folks in Lincoln and Lexington and Concord, the affluent and powerful communities, are being spared. There are no houses, no households, in Lincoln or Lexington or Concord or Bedford that we know that are sound-insulated. So where is the fairness and where is the justice? T1.39.1

THE MODERATOR: Try to wrap it up, please.

MR. GALVIN: This is my final comment. Two years ago, I chaired a Massport meeting on the Tobin Bridge. They were

sandblasting and painting because the last time they had done it, some of our children were poisoned with lead paint. They said they were going to monitor it.

So they came to this meeting with their environmental consultant, their expert on locating this monitor. He suggested putting it further away from the bridge in the Bunker Hill housing project. He suggested putting it further away from the bridge at our Head Start school and its accompanying playground, and more importantly, he wanted it put to the west of the bridge.

So I suggested to him that the prevailing winds were from the west, southwest, and northwest, and he said, the Massport-paid environmental expert said, in Boston, all these winds average out over the course of a year. Two months later, I was in this room at a CAC meeting. Now when it served Massport's purpose to have this northwest wind direction that's the subject of this report, now all of a sudden Massport

came up with documents that said twice as much wind came from the west than the east.

So if Massport is willing to lie, willing to deceive through experts and consultants and reports, when children's health is at stake, I suggest to you you should examine and question every assertion and every alleged fact in that report because they cannot be trusted. Thank you.

THE MODERATOR: Thank you. Next is Dovi Abbey.

MR. ABBEY: Good evening. My thanks for staying. My name is Dovi Abbey. I represent Roxbury on the CAC, the Citizens Advisory Committee to Massport, and we just had a meeting last week with Massport. The newspaper article came out and heard what the community had to say. There was an overwhelming no, clear and loud, to 14/32 and to runway 27. T1.40

But clearly, all of us in the community minus one or two, we all are unequivocally opposed to runway 14/32. The main reason we believe it's a bad idea for T1.40.1

the city of Boston, and I've looked at many other cities with the magnitude of Boston. They do not fly without permission.

The airport that serves Paris are away from the city. The gentleman from Arthur D. Little was here earlier. He said colleagues are not flying downtown Paris, and there's absolutely nothing wrong with that. Business people do not have the god-given right to fly into downtown Boston. Communities in this area have a right to remain silent and quiet. We can't talk to our neighbors.

Boston is not a collection of runways. It is, first and foremost, a city with people, a history, a place to be preserved. Economic activity is not justification for a great city in severe disruption of the city, of its inhabitants. The high tech. over here might be mistaken. To all of them involved in high tech. have an airport that has two terminals. San Jose has two terminals A and B, period. Logan has an airport that has five terminals.

T1.40.1 (cont.)

In Roxbury, we have a tremendous burden right now put on us. Sometimes planes are 18 hours a day, and for up to five to six consecutive days, that is not conducive to economic health. I don't think the city of Boston can afford any more flights. People will desert the city for the sake of accommodating more passengers. Those can't be accommodated reasonably, economically, and especially with the consequence of a well-planned, well thought out approach.

Yes, there are international flights and I am addressing that in particular, because if you look at the report, Massport is saying that that was one of the fastest-growing segments. There were no international flights from any other airport in this area. It is not acceptable.

THE MODERATOR: Try and wrap it up, please.

MR. ABBEY: Sure. So let me just say that I urge you respectfully, MEPA, to avoid this. It also smacks of -- this battle was fought in 1970 and lost by Massport.

This is no time to fight the battle of the 1970s. We should try to get into the 21st Century. It's coming, a year away, and I think that should be the main focus. To use a very sad analogy, let's not turn Boston into Baghdad. Thank you.

THE MODERATOR: Thank you, Mr. Abbey. Is Tom Payton still with us?

MR. PAYTON: I sure am.

THE MODERATOR: As Mr. Payton approaches the microphone, is there anybody else in the audience that remains that signed up that still wishes to speak whom I didn't call? Anybody else who wants to speak and didn't sign up? All right. Mr. Payton, you have the honor or being our last commenter this evening.

MR. PAYTON: Great, and hopefully not the least. It's Todd Payton, P-A-Y-T-O-N. I live at 107 Roxbury. I am right under runway 27's flight path. That was changed so mysteriously a couple of years ago but I'm not going to talk about that now. T1.41

But I just want to go on record as

saying that that is a serious issue for that bay, and I hope that they will revisit that issue to look at and monitor what's going on with that, because I really believe that there are shenanigans going on.

The second thing I want to say is, runway 14/32 cannot go through. Eighteen thousand flights over my home right now. They're talking about going up to 67, 80, depending on who you listen to. Under no uncertain circumstances can the communities of color, of Roxbury, which already has 50 to 300 times the disease and death rates, can take another added stressor of noise and air pollution. We can't take it. T1.41.1

Having that runway go over our neighborhood is going to increase our death rates. I don't care how many people got to stand up and wait to come into Boston. I'm a business person. I'm a business owner. I fly to the airport. If it means people not dying, I'll travel five hours to get on an airplane.

I hope that we are not going to

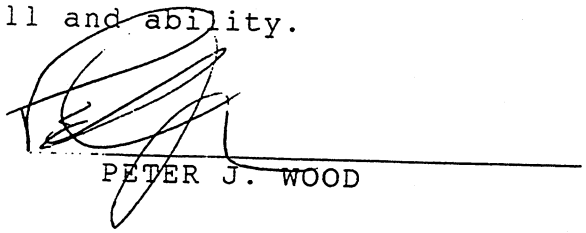
take these business communities' solutions for how they want to increase the livability or their bottom line. It cannot equate with quality of life. Massport has not done a good job as a good neighbor. You have the power, you have the authority to tell them, no more, no more. If you can't do that, as they say, no justice, no peace. No justice, no peace. Please, make sure these people live up to what they're supposed to do by taking care of me. Thank you.

THE MODERATOR: Thank you, Mr. Payton. You were under time. I would have allowed you more time. We're not going to borrow time for anybody else. That's one of the ground rules. There being no other people who want to make comments, then I will declare this hearing closed.

(The hearing concluded at 10:15 p.m.)

CERTIFICATE

I, Peter J. Wood, do hereby certify that the foregoing record, Pages 1 through 179, is a complete, accurate, and true transcription of my stenomask tapes taken in the aforementioned matter to the best of my skill and ability.



PETER J. WOOD

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Transcript 1.01
MA State Representative Bruce Ayers

Code	Topic 1	Topic 2	Comment	Response
T1.01.1	Regional Transportation	Regional Airports	...they [Massport] have not fully examined the alternatives to the airport expansion like Hanscom Field and Worcester Airport; (whereas), other transportation accesses like regional airports Green in Rhode Island and Manchester in New Hampshire;....	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
T1.01.2	Alternatives	Peak Period Pricing	...other management tools that could be used to alleviate delays such as peak period management programs;....	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport. See Section 4.5 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
T1.01.3	Noise	Runway Use	...operation of the new runway would severely impact several neighborhoods in my district in the city of Quincy, especially Squantum, West Quincy, North Quincy, Montclair, Houghes Neck, Merrymount, Wollaston.	In 1998, 77 percent of Logan Airport's jet traffic affected communities to the north and south of the airport—East Boston, Winthrop, Revere, parts of South Boston, Dorchester, Quincy, Milton, and Braintree. Without Runway 14/32, as much as 88 percent of Logan Airport's aircraft operations will overfly these communities when Logan Airport reaches 37.5 million passengers. Construction of Runway 14/32 will allow a more balanced geographic distribution of aircraft operations over populated areas, will increase the number of over-water operations, and will reduce noise exposure for close-in communities. In fact, the most heavily impacted communities will experience a decrease in overflights compared to 1998 levels. With the Preferred Alternative, when Logan Airport reaches 29 million passengers, overflights from Runway 4 arrivals and Runway 22 departures, which affect South Boston, Quincy, Milton, and Braintree, will decrease from 107,861 in 1998 to 58,305 operations. Similarly, overflights affecting Winthrop (Runway 27 arrivals and Runway 9 departures) will decline from 88,224 in 1998 to 55,805. As a result of the relief for these communities, flights over the water and flights over less impacted communities will increase. With Runway 14/32, the over-water procedure (Runway 14 and Runway 15 departures, Runway 32 and Runway 33 arrivals) becomes the most used set of runways with operations increasing from 34,222 in 1998 to 82,965. Overflights affecting the South End, parts of South Boston, and Roxbury (Runway 27 departures) will increase from 20,356 to 41,974, making this the fourth most used procedure, up from fifth in 1998. Overflights affecting Chelsea, the Eagle Hill section of East Boston, Everett, and Somerville (Runway 33 departures and Runway 15 arrivals) will increase from 9,804 to 35,801. This will become the fifth most used procedure, up from the sixth, or least used procedure in 1998. Also refer to Section 4.6 of the Supplemental DEIS/FEIR for a discussion of runway use and to Section 6.2 of the Supplemental DEIS/FEIR for a discussion of noise impacts.

Code	Topic 1	Topic 2	Comment	Response
T1.01.4	Environmental Review Process	Public Process	...Massport has not come out and asked the city of Quincy to have or to hold a public meeting.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
T1.01.5	Environmental Review Process	FAA/NEPA	...request that the Federal Aviation Administration withdraw its support for the expansion until these questions [submitted written testimony] are addressed and answered.	Comment noted.

Transcript 1.02
Winthrop Board of Selectman, Robert L. Driscoll, Jr.

Code	Topic 1	Topic 2	Comment	Response
T1.02.1	Alternatives	Runway 14/32	...we don't believe the EIS/EIR looks at all of the total cumulative impacts of building 14/32, and building the center taxiway.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
T1.02.2	Alternatives	Runway 14/32	...between the PRAS goals not having been met and with the fact that there's no accountability for meeting these runway objectives, that leads the town to conclude that this is not a good alternative.	Chapter 8 of the Supplemental DEIS/FEIR discusses a PRAS monitoring program designed to provide more information on performance relative to the PRAS goals and more accountability.

Transcript 1.03 MA Aeronautics Commission, Steve Muensch

Code	Topic 1	Topic 2	Comment	Response
T1.03.1	Alternatives	Preferred Alternative	We urge you to approve the air side improvements proposed by Massport. They are necessary to insure a safe and efficient New England airport system to serve scheduled passengers....	Comment noted.
T1.03.2	Alternatives	Peak Period Pricing	...we oppose efforts to artificially constrain demand for the employment of peak hour pricing or peak period pricing.	Comment noted.

Transcript 1.04
Greater Boston Chamber, Paul Guzzi, President and Chief Executive Officer

Code	Topic 1	Topic 2	Comment	Response
T1.04.1	Purpose and Need	Delay	The Chamber as well as other business organizations is supportive of both the Runway 14/32, and, as well, we are supportive of regional solutions and expansion of capacity on a regional basis.	Comment noted.

Transcript 1.05
City of Boston Environmental Services, Andrea D'Amato

Code	Topic 1	Topic 2	Comment	Response
T1.05.1	Ground Transportation	Access to Logan	Massport's environmental impact statement report addresses none of this [traffic]. It is incomplete because it avoids the land side impact of airport growth.	The Preferred Alternative is not expected to lead to an increase in passenger demand, and therefore, it will have no effect on congestion or delays on Boston area highways.

Transcript 1.06 City of Somerville, Thomas Fontacella

Code	Topic 1	Topic 2	Comment	Response
T1.06.1	Land Use	Landside Improvements	...it [the EIS/EIR] is inadequate in one key area...the land side improvements that are proposed for the airport are not coordinated with this document.	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's Environmental Planning and Status Report (ESPR, formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."

Transcript 1.07
Town of Hull, Phillip E. Lemnios, Town Manager

Code	Topic 1	Topic 2	Comment	Response
T1.07.1	Alternatives	Runway 14/32	The town of Hull is opposed to this runway...an increase of about 50,000 flights over our community if this runway were to be built.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Hull is affected by the use of Runway 33/32 arrivals. The total number of aircraft arriving to the northwest does increase with construction of the runway, but this is due to the PRAS goals more than any other factor. Since the Runway 33 arrivals that impact Hull approach primarily over water, and since Hull is further from the airport than those communities impacted by arrivals to Runway 15L/R, 4L/R, or 22L/R, the PRAS goals call for 42 percent of the equivalent arrivals to operate in this direction. Runway 33 arrivals accounted for approximately 27 percent of the equivalent arrivals in 1998, and since Logan Airport has a limited capacity in this direction, the northwest configuration has been underutilized as demand has increased over the years. Construction of the runway allows better achievement of the agreed-upon PRAS goals, but even with Runway 14/32, the equivalent arrivals in the Runway 33/32 direction never reach the goal of 42 percent under any fleet scenario or alternative.
T1.07.2	Purpose and Need	Delay	The FAA says 3.18 percent, the Department of Transportation has a blended rate of 20-plus percent. Massport, for this particular document, came up with a whole new way of measuring delay...What exactly is the rate of delay? There is nothing in the report that said what is an acceptable rate of delay.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.

Code	Topic 1	Topic 2	Comment	Response
T1.07.3	Purpose and Need	Airport Operations	There's nothing in the report that says how many flights can this facility handle, period. What is the ultimate capacity of this facility?	Airport capacity depends on fleet mix, weather conditions, runway assignments and other factors. The maximum sustainable capacity at Logan Airport uses Runways 4L, 4R & 9 under VFR weather conditions and can handle an average of 120 arrivals and departures per hour. For short periods, the flow may be greater or less than this rate, but the sustainable capacity does not exceed 120 operations per hour. Proposed airside improvements, including Runway 14/32 and reduced instrument approach minimums, are intended to increase the flexibility of available configurations in various operating directions, which can better meet this existing level of demand.
T1.07.4	Purpose and Need	Delay	...there's no discussion in the report as to the causes of delay.	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.

Transcript 1.08
CAC Quincy Rep. Bernice Mader

Code	Topic 1	Topic 2	Comment	Response
T1.08.1	Environmental Review Process	FAA/NEPA, MEPA	...Massport has violated both the spirit and the regulations of the EPA, MEPA, and the FAA, as well as a sense of fair play and environmental justice.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts.
T1.08.2	Analysis Assumptions/ Methodologies	Base Year	Massport has used outdated and worst case scenario data.... The year 1993 was an aberrant year for Massport.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
T1.08.3	Purpose and Need	Airfield Capacity	One of the things that Massport never does in its study is it never examines Logan Airport itself as it is right now...the real problem is at the airport, and that is the size of the airport...no 5,000-foot unidirection commuter runway can address Logan Airport's overwhelming shortcomings.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Code	Topic 1	Topic 2	Comment	Response
T1.08.4	Alternative	Preferred Alternative	...Massport ...[is] inadequately addressing the whole section regarding alternatives and the way they looked at them.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Transcript 1.09
Aero Club of New England, David W. Graham

Code	Topic 1	Topic 2	Comment	Response
T1.09.1	Purpose and Need	Airfield Capacity	It is our [Aero Club of New England] opinion that Boston Logan Airport desperately needs runway 14/32.	Comment noted.

Transcript 1.10
Private Citizen: David Osborn

Code	Topic 1	Topic 2	Comment	Response
T1.10.1	Noise	PRAS	The distribution [of noise impacts...is] not a solution.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
T1.10.2	Air Quality	NAAQS	Where are the 2 1/2 million pounds of pollutants, emissions, toxins going that these aircraft put out into the air every single year?	Emissions from activities at Logan Airport disperse in a variety of ways: heavy particles are likely to return to the ground close to the source, while finer particulate matter is likely to become suspended and transported, depending on meteorological conditions. Likewise, gases can be very stable, or they can be very reactive and undergo numerous chemical changes. In any case, the results of the air quality analysis indicate that the concentrations of pollutants will remain well within the NAAQS.
T1.10.3	Water Quality	Stormwater	To what extent has Massport played a part in the pollution of Boston Harbor...To what extent have they played a part in the chemical de-icing facilities that have been ongoing for decades; where does that go?	Massport water quality monitoring indicates that airfield runoff generally meets applicable water quality standards and that deicing activities have not had an adverse impact on harbor water quality. Results of ongoing water quality monitoring and compliance with applicable discharge permits are reported on annually in the Logan Airport ESPR (previously GEIR) and its Annual Updates. That many of the shellfish beds in the intertidal areas surrounding Logan Airport have recently been reopened to commercial diggers indicates that the airfield is not having an adverse impact on those sensitive aquatic resources.

Transcript 1.11
Massachusetts Business Round Table, Christopher Good

Code	Topic 1	Topic 2	Comment	Response
T1.11.1	Alternatives	Runway 14/32	For reasons of job creation, competitiveness, quality of life, and economic growth, the Massachusetts Business Round Table strongly supports the opening of runway 14/32 and the creation of the new taxiway.	Comment noted.

Transcript 1.12
Private Citizen: Christopher Blacker

Code	Topic 1	Topic 2	Comment	Response
T1.12.1	Air Quality	NAAQS	...[The EIS/EIR] should have added something that...about the air quality....	Current air quality conditions are discussed in Section 5.4 of the Supplemental DEIS/FEIR, and air quality impacts associated with the Airside Project are presented in Section 6.4 of the Supplemental DEIS/FEIR.

Transcript 1.13
Massachusetts High Technology Council, Christopher Anderson

Code	Topic 1	Topic 2	Comment	Response
T1.13.1	Purpose and Need	Delay	...the high tech. council vigorously supports the well-thought out Massport Authority's proposal to reduce delays at Logan Airport.	Comment noted.

Transcript 1.14
Private Citizen: Arthur Hartnet

Code	Topic 1	Topic 2	Comment	Response
T1.14.1	Delay	Model	...the number of hours of delays that have been presented to you tonight as 121,000 hours of delay from Massport's modeling...is not supported by the FAA's own figures.	Refer to Section 4.4 of the Supplemental DEIS/FEIR for a discussion on the estimation and modeling of flight delays. It includes a description of FAA and U.S. DOT delay measures and their limitations, an explanation of computer models for estimating flight delays, and historical data on delays at Logan Airport and other major United States airports. The methodology used for the Airside Project includes the effects of constraints at Logan Airport, and produces lower delay estimates than FAA modeling. The FAA approved all the models, which have been validated in previously published studies of Logan Airport. The FAA Technical Center was responsible for the capacity and delay results in the 1992 FAA Capacity Enhancement Report for Logan Airport that concluded the need for Runway 14/32, reduced minimums and taxiway improvements. The Technical Center simulated Logan Airport airfield operations with the RDSIM model and estimated that when activity reached 504,000 annual operations, total delay would exceed 260,000 hours per year. The Airside Project Draft EIS/EIR forecasts delays to increase to 157,500 hours per year when annual operations reach 510,000 with the 29M Low Fleet scenario. The Supplemental DEIS/FEIR compares the FAA Technical Center delay estimates in 1992 with those of the Logan Airside Project estimates. The FAA has concluded that the Airside delays represent "a plausible and conservative estimate...." The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's 20,000-hour threshold for a severely delayed airport.
T1.14.2	Delay	Model	Within the ten-year period, the number of hours of delay...will overwhelm this airport....	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
T1.14.3	Alternatives	Runway 14/32	Also, if this runway is built, runway 27 will see a dramatic increase in the number of operations... Runway 27 (which) will see a four-fold increase in just departures when runway 14/32 is built.	The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The total number of departures from Runway 27 (over South Boston, Roxbury, and Jamaica Plain) would increase, but the number of equivalent jet operations would remain essentially the same. The difference in these communities would be fewer nighttime operations and more daytime operations but the same noise impacts.

Code	Topic 1	Topic 2	Comment	Response
T1.14.4	Noise	PRAS	With the ...excessive number of operations that are coming into this airport, PRAS goals as they were designed in the early '70s will never be achieved....	During very high demand periods, the controllers have little or no flexibility for runway selection and PRAS recommends an appropriate runway configuration given the extant demand. Unidirectional Runway 14/32 would give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals. The Supplemental DEIS/FEIR demonstrates that the controllers have been improving performance with respect to PRAS recommendations. Section 8.5 of the Supplemental DEIS/FEIR contains methods for more comprehensive monitoring of PRAS. These methods will be implemented as part of the mitigation program for the Airside Project.
T1.14.5	Alternatives	Taxiway Improvements	...the center field taxiway is going to be a conduser to have more operations on the north-south runways because you're going to be able to get the aircraft off and on to these runways in a much quicker fashion.	The taxiway improvements are designed to improve ground movement efficiency and safety, and to reduce taxiing delays; thereby reducing associated noise and emissions. When using Runways 22L/R for departures, the Centerfield Taxiway would provide an alternate taxi route for Runway 22L departures to bypass the queue for Runway 22R, thereby reducing taxiway congestion and associated noise and emissions. Runway 22L departures represent less than ten percent of the total departures. Under existing conditions, aircraft needing to depart on Runway 22L (typically heavy jets, such as 747s with long takeoff distance requirements) must wait in the queue on Taxiway November with aircraft departing on Runway 22R. With the Centerfield Taxiway, aircraft departing on Runway 22L could depart quickly after reaching the runway end, and the number of aircraft queuing on Taxiway November should decline. Also, the aircraft on the Taxiway November should be smaller, implying lower noise and air quality emissions. With the addition of Runway 14/32, use of Runways 22R and 22L for departures would decline.
T1.14.6	Regional Transportation	Regional Airports	...more airports would be beneficial, more regional airports with a greater number of operations so that there was a more equitable and environmentally-justifiable operation.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Transcript 1.15
Private Citizens: Arthur D. Little, Albert Sherman

Code	Topic 1	Topic 2	Comment	Response
T1.15.1	Regional Transportation	Regional Airports	I support those people who have argued for regional solutions.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of regional alternatives to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of regional alternatives to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport

Transcript 1.16
Private Citizen: Ron Whalen

Code	Topic 1	Topic 2	Comment	Response
T1.16.1	Alternatives	Runway 14/32	Massport...[should] start thinking about other solutions.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Transcript 1.17
South Shore Chamber of Commerce, Kevin Cohen

Code	Topic 1	Topic 2	Comment	Response
T1.17.1	Regional Transportation	Passenger Rail	The appropriate authorities...[and] also the Commonwealth of Massachusetts and the federal government, should be...addressing those regional [transportation] problems, whether they're addressing it [them] through high-speed rail, commuter rail, [and] also through the tremendous growth we've seen at Manchester, New Hampshire and Green in Rhode Island.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
T1.17.2	Air Quality	Impacts	A plane that lands or takes off on time does not add avoidable pollution because they do not sit on the runway while waiting to take off, or they do not circle the city waiting to land.	Comment noted.
T1.17.3	Noise	Impacts	...the noise pollution that's happened to a lot of these communities is going to be more equally distributed, and many of those flights will be pushed over the water.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.

Transcript 1.18
Private Citizen: Elaine McGrath

Code	Topic 1	Topic 2	Comment	Response
T1.18.1	Environmental Review Process	MEPA	This draft EIS is inconsistent with both the letter and the spirit of the Environmental Policy Act. In fact, it has failed to comply with MEPA.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
T1.18.2	Noise	Runway Use	In 1993, the FAA said Logan was the sixth noisiest airport in the country. Where is that in this report?	The source of the comment is unknown. It is not mentioned in the Supplemental DEIS/FEIR.
T1.18.3	Noise	Model	...the information on environmental impact fails to assess those impacts adequately or accurately because the modeling is flawed.... The monitoring of those impacts is also inadequate...but...it's not reflected in [the EIS/EIR]...This report does not do what MEPA requires Massport to do.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Code	Topic 1	Topic 2	Comment	Response
T1.18.4	Alternatives	Other Non-Construction Alternatives	...the alternatives are straw men, [and]...[the] no-action alternative...is not an alternative for the communities.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
T1.18.5	Environmental Justice	Demographic Data	...The environmental justice analysis...[is] unreliable because it flows from faulty data.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
T1.18.6	Noise	Impacts	...In the GEIS [it states] that on landing and takeoff, stage 3 aircraft are noisy and that cannot be remedied, and these [affected] communities have to live with landing and takeoff.	While communities near Logan Airport will never be free of aircraft noise, Massport is committed to investigating legal and effective means of reducing exposure in all of the most highly exposed areas around the airport.

Code	Topic 1	Topic 2	Comment	Response
T1.18.7	Noise	Model	...one noise monitor was out of commission for two years...What does that do to the accuracy of the environmental impact data? Their modeling is therefore unreliable.	Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update).* In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft – a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 6 of the *Logan Airport 1999 Environmental Planning and Status Report*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.

Transcript 1.19
Aircraft Owners and Pilots Association, Raoul Murrow

Code	Topic 1	Topic 2	Comment	Response
T1.19.1	Alternatives	Runway 14/32	...the unidirectional runway would solve the problems without causing the environmental problems that the community was concerned about regarding runway 14/32 in the past.	Comment noted.

Transcript 1.20
Private Citizen: Mary Quinn

Code	Topic 1	Topic 2	Comment	Response
T1.20.1	Noise	Model	Chelsea used to be in the noise contour map and we were taken out. Why?	Chelsea appears on the basemaps showing the noise contours for each of the fleets and alternatives studied. The community is exposed to noise either from 60 to 65 dB or from 65 to 70 dB, depending on the fleet and alternative being evaluated. Chelsea is also listed as a separate community in the tables of population counts by increment of exposure (Refer to Tables 6.2-4 through 6.2-8 and 6.2-21 of the Supplemental DEIS/FEIR).
T1.20.2	Environmental Review Process	MEPA	This [the EIS/EIR] is a flawed, skewed, and inaccurate report...[and includes] manipulated data....	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Transcript 1.21
Hampshire House, Thomas A. Kershaw

Code	Topic 1	Topic 2	Comment	Response
T1.21.1	Purpose and Need	Delay	The proposed Logan Airport runway 14/32 is critical to the health of Boston's future convention and business travel...and I urge the state and federal officials to move forward on the approval of this project.	Comment noted.
T1.21.2	Regional Transportation	Regional Airports	I support the development of a comprehensive regional airport system and the growth that has developed in Providence, in Manchester, and Portland....	Comment noted.

Transcript 1.22
Private Citizen: Phil Falcetano

Code	Topic 1	Topic 2	Comment	Response
T1.22.1	Noise	Impacts	...Any attempt to measure noise by decibels entirely misses the point that noise is not mere sound but sound as it is experienced by a living human being.	Decibels, and especially A-weighted decibels and DNL levels used throughout this document, have been specifically designed to reflect human response to noise.
T1.22.2	Environmental Review Process	MEPA	Some of Massport's EIR is not completely accurate or satisfactory. I urge you therefore to refuse their request to go ahead with this unfair and injurious scheme to inflict even more suffering and hardship on communities that already endure a disproportionate burden of noise, air pollution, and traffic.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Transcript 1.23
MA State Representative Liz Malia

Code	Topic1	Topic20	Comment	Response
T1.23.1	Ground Transportation	Access to Logan	...flights and our passengers coming to Boston [will increase] by about 3.4 percent a year. ...once those people get here, what happens to them...[there is] serious congestion on the ground already....	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).
T1.23.2	Regional Transportation	Regional Airports	If...the runway is built, I am concerned that we're not going to see the follow-up on the regionalization because regionalization was not discussed prior to this....	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.0
T1.23.3	Environmental Review Process	Public Process	We are very concerned about the...lack of faith involved when the Community Advisory Council was removed from the discussion process for 20 months.	Comment noted.

Code	Topic1	Topic2	Comment	Response
T1.23.2	Regional Transportation	Regional Airports	If...the runway is built, I am concerned that we're not going to see the follow-up on the regionalization because regionalization was not discussed prior to this....	Logan Airport is part of a regional system of airports that includes T.F. Green/Providence, Worcester Regional and Manchester airports. Massport has long recognized that service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Massport has actively encouraged the development of regional airports and use of other options, including high-speed rail to Logan Airport's largest market, New York. Regional service was examined in Chapter 2 of the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR. This analysis supports the conclusion that greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.0
T1.23.3	Environmental Review Process	Public Process	We are very concerned about the...lack of faith involved when the Community Advisory Council was removed from the discussion process for 20 months.	Comment noted.

Transcript 1.24
Cape Air/Nantucket Airlines, Daniel A. Wolf, President, Cape Air

Code	Topic 1	Topic 2	Comment	Response
T1.24.1	Alternatives	Runway 14/32	...the runway [is]...a way to level the capacity of the airport regardless of wind conditions....	Comment noted.
T1.24.2	Regional Transportation	Regional Airports	I believe Massport is committed to a regional approach.	Comment noted.
T1.24.3	Environmental Review Process	Public Process	...Massport has made an effort to listen to input. Massport has made an effort to analyze this from very, very different points of view...they really have attempted to do a serious analysis here, and have attempted to listen to the communities....	Comment noted.

Transcript 1.25
Private Citizen: Allison Stieber

Code	Topic 1	Topic 2	Comment	Response
T1.25.1	Noise	Runway Use	A 300 percent-plus air traffic increase that Somerville would suffer if runway 14/32 is built is also dismissed by Massport as negligible...However...We [Somerville residents] know that any semblance of peace that remains for us with the use of the present flight pattern will be almost totaliy obliterated by the tripling of the impact that we endure already.	The Day-Night Sound Level values in Somerville are less than 60 dB for the future scenarios. The Supplemental DEIS/FEIR projects that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals, and Somerville is affected most by Runway 33 departures and Runway 15 arrivals. Total departures from Runway 33L and arrivals to Runway 15R would increase, but many of these are non-jets. These runway operating directions are currently running well below their PRAS goals, and the unidirectional Runway 14/32 would allow the controllers to approach but still remain below the annual goals for these operations. The PRAS goals were established based on a thorough public participation process in response to community noise concerns. Additionally, by increasing the number of operations over water, Runway 14/32 would reduce the total annual hours of dwell and persistence over populated areas in accordance with short-term PRAS goals.

Transcript 1.26
New England's Economy Depends on Logan, Frank Gibson

Code	Topic 1	Topic 2	Comment	Response
T1.26.1	Alternatives	Runway 14/32	...I'm a strong believer in the need to complete runway 14/32 and the center field taxiway...The completion of the runway would help the utilization of Logan at all times.	Comment noted.

Transcript 1.27
Private Citizen: Christine Silverstein

Code	Topic 1	Topic 2	Comment	Response
T1.27.1	Environmental Review Process	Public Process	...other communities are being lobbied to support this project without having the process that they should have...there needs to be a balanced representation from our community [Nantucket].	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Transcript 1.28
Private Citizen: Candace Collins Boden

Code	Topic 1	Topic 2	Comment	Response
T1.28.1	Alternatives	Peak Period Pricing	...if this runway is not implemented by you and you decide to consider peak period pricing, we are in jeopardy of losing our service airline which is Cape Air. Our airport is very vital to Provincetown.	Section 4.5 of the Supplemental DEIS/FEIR provides an analysis of a PPP exemption program designed to protect services to small communities that are most reliant on Boston (Logan Airport) for access to the national air transport system. The analysis examines the impact that an exemption program would have on the delay reduction benefits associated with PPP. It concludes that an essential level of air service in the peak period can be exempted from the peak period surcharge without a material impact on the delay reduction benefits. This exemption program includes all the Cape Cod communities currently served by Logan Airport, as well as other small communities in New England.

Transcript 1.29
Air Impact Relief Inc., Peter Koff

Code	Topic 1	Topic 2	Comment	Response
T1.29.1	Alternatives	Runway 14/32	...the benefits of the proposed runway, the degree to which it will affect the delay problem are greatly overstated in the reports....	The benefits of Runway 14/32 are significant: (1) It provides a third runway for operations during northwest winds; (2) it reduces total annual delay by 27 to 37 percent (Preferred Alternative vs. the No Action Alternative); (3) it reduces delays during VFR conditions by 47 to 57 percent (Preferred Alternative vs. the No Action Alternative); (4) it allows controllers to separate aircraft of differing size classes during northwest winds; and (5) it increases the controllers' ability to achieve PRAS goals.
T1.29.2	Cumulative Impacts	Socio-economic	...the impacts on the surrounding communities are substantially understated.	The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.
T1.29.3	Noise	Model	Other problems...[that] exist with the report are the use of old data.	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.
T1.29.4	Regional Transportation	Regional Airports	In terms of alternatives, they haven't been adequately examined. I specifically call attention to the letter that I wrote on behalf of my client, Airport Impact Relief in October of 1997...We did not receive one response to this letter.	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Code	Topic 1	Topic 2	Comment	Response
T1.29.5	Environmental Review Process	Public Process	...under the Airport Act, 49 United States Code, Section 47-106. The interests of the community have not been given fair consideration...Protection and enhancement of the environment, inter-modal planning requirements of federal law, and...Section 47-101 have not been followed.	The extensive analysis in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, and related public comment opportunities, demonstrate that Massport and FAA have complied with applicable Federal law requirements. The Final EIS and Federal Record of Decision will make final appropriate findings as required by Federal law.
T1.29.6	Environmental Review Process	MEPA	Given the lack of accurate information and the inadequacies, we ask that the secretary find the report to be inadequate and require a new draft, and we urge the FAA to withdraw its support of this project.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts. The Secretary of Environmental Affairs found that "...the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act...". Refer to the Certificate of the Secretary of Environmental Affairs on the DEIR, dated May 7, 1999.

Transcript 1.30
Cape Air/Nantucket Airlines, Charles Carrera

Code	Topic 1	Topic 2	Comment	Response
T1.30.1	Alternatives	Runway 14/32	We rise in support tonight of the series of air side improvements that are currently being proposed by Massport.	Comment noted.

Transcript 1.31
Logan Airlines Management Council, Enrique Miranda

Code	Topic 1	Topic 2	Comment	Response
T1.31.1	Alternatives	Runway 14/32	...the cargo subcommittee strongly supports the Logan air side improvement project.	Comment noted.

Transcript 1.32
Private Citizen: Arthur Krolman

Code	Topic 1	Topic 2	Comment	Response
T1.32.1	Alternatives	Runway 14/32	...to better satisfy the aims of the National Environmental Policy Act and the Massachusetts Environmental Policy Act, the scope of the EIR/EIS should address the possible future implementation of bi-directional use.	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.

Transcript 1.33
Private Citizen: Alan Wright

Code	Topic 1	Topic 2	Comment	Response
T1.33.1	Alternatives	Runway 14/32	Massport's proposal to build runway 14/32 will triple, that is, increase by three-fold overflights to over 45,000 per year...This is intolerable, unreasonable, and unfair. It must not be allowed.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
T1.33.2	Alternatives	Runway 14/32	Massport has not adequately addressed ...[why] the quality of life of 35,000 residents in Roslindale, the tens of thousands of visitors to the Arnold Arboretum...or the hundreds of thousands of residents of urban Boston and surrounding communities must decline.	The Supplemental DEIS/FEIR contains additional analysis of the project relative to parklands. As depicted in Figure 6.3-4 of the Supplemental DEIS/FEIR, the Arnold Arboretum, Emerald Necklace, and Franklin Park are well outside the 65 dB DNL noise contour associated with the Preferred Alternative. Therefore, the Airside Project will have no impact on these parklands. In addition, the Boston Harbor Islands, while within the No Action Alternative 65 dB DNL noise contour, will have no noise increase under the Preferred Alternative. Refer to Section 6.3 of the Supplemental DEIS/FEIR for additional discussion of parklands.
T1.33.3	Noise	Impacts	Part of the problem is that the pilots never follow through on the runway 27 pattern. Instead of staying over Franklin Park or Forest Hills Cemetery, they get off over the Arboretum and Roslindale. Massport must fix this problem.	Since the new departure procedure was implemented in accordance with the *Runway 27 EIS*, Massport and the FAA have been monitoring and analyzing aircraft flight track data for compliance and to determine the need for changes to achieve the objectives. Pilots are responsible for knowing and complying with noise abatement procedures unless otherwise instructed. As more aircraft are equipped with GPS navigation, compliance should improve.
T1.33.4	Regional Transportation	Regional Airports	...we want Massport...to end the continued growth of this very badly-located airport, and truly shift traffic to other airports including Hanscom.	Massport has no jurisdiction over the development, operation or use of infrastructure at airports other than Logan Airport, Hanscom Field, and Worcester Regional Airport (as of January 15, 2000). Massport plays no role, however, in the decisions of private airlines regarding air service routes or service levels. As proprietor of Logan Airport, Massport's primary responsibility is to supply, operate, and maintain Logan Airport's infrastructure which includes the runways, taxiways, terminal buildings, parking facilities and access roads. As a recipient of federal airport grants, Massport must adhere to grant covenants that require it to operate Logan Airport in such a way so as to ensure access and availability for public use on fair and reasonable terms and without unjust discrimination.

Transcript 1.34
Private Citizen: Richard Goldhammer

Code	Topic 1	Topic 2	Comment	Response
T1.34.1	Environmental Justice	Impacts	...the rights of the minority business community appear to override the rights of the majority of the citizenry that is surrounding the airport...What is the impact from a human perspective on residents of these communities? [that surround the airport]	The environmental impacts of the Preferred Alternative on residents of surrounding communities is discussed in Chapter 6 of the Supplemental DEIS/FEIR.

Transcript 1.35
Private Citizen: Albert J. Engelhart

Code	Topic 1	Topic 2	Comment	Response
T1.35.1	Alternatives	Runway 14/32	In regard to runway 14/32, I am opposed to it. If it's turned on, it will produce a tremendous increase in noise pollution which will exacerbate the already 60-second interval of planes that occur overhead on certain days.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2.5 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.

Code	Topic 1	Topic 2	Comment	Response
T1.35.2	Regional Transportation	Regional Airports	...a tri-state organization, Rhode Island, New Hampshire, and Massachusetts, initiated by Massport should consider Hanscom as a strong candidate, Worcester, Green, Manchester airports.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
T1.35.3	Noise	Impacts	...[Aircraft] fuselage problems making noise could have been corrected [by the manufacturers]...it's not taking place...Massport, in cooperation with the tri-state area, could start that process [of forcing aircraft manufacturers to correct fuselage noise problems].	The FAA has preemptive rule-making authority for quieting aircraft at the source. Neither Massport nor any entity other than the FAA can force manufacturers to comply with noise limits.

Transcript 1.36
Beacon Hill Civic Association, Darryl Pomicter

Code	Topic 1	Topic 2	Comment	Response
T1.36.1	Alternatives	Runway 14/32	...we [the Beacon Hill Civic Association] are against the new runway. This is a short-term partial inferior solution.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.
T1.36.2	Alternatives	Runway 14/32	Director Blute keeps talking about the 70,000 flights over the water and the few percentage of PRAS flights that are going to be rearranged...neighborhoods can easily get 50 to 70,000 increased flights even through, 70,000 are initially aimed over water...even if we do do this [build Runway 14/32], 90 percent of the traffic will eventually be forced to use both the north-south runways because there are no limits on operation plans.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken.
T1.36.3	Alternatives	Other Non-Construction Alternatives	[Logan's ranking of] Seventeenth [in the U.S.] in passengers means there are fewer than average passengers on an airplane, so if you can get more passengers on the plane, you need fewer planes, and you could cut the delays by working that side of the equation. You need to work both sides of the equation.	Federal constitutional provisions, federal aviation statutes and regulations, and contractual provisions related to Federal Airport Improvement Program grants prevent Massport from any control over airline rates, routes, and schedules. Congress has specifically forbidden airport operators from exercising any discriminatory action against any class of airport users. Major factors in airline competition are frequency of service and number of markets served, and Massport has no ability to force airlines to consolidate or eliminate flights to influence load factor or aircraft size.

Code	Topic 1	Topic 2	Comment	Response
T1.36.4	Purpose and Need	Delay	Massport, in their EIS, details in great detail going from sixth in 1997, to sixth in delays in 1990. They don't talk about the FAA statistics. They mention that 2½ percent, 25 per thousand, they don't mention that that's down from 40 per thousand or almost 40 per thousand in 1992.	The Supplemental DEIS/FEIR contains a discussion of the FAA and DOT delay measures and historical data, along with comparisons of Logan Airport with other United States airports. The FAA consistently rates Logan Airport as one of the most delay prone airports in the United States Logan Airport's estimated annual delay hours are over five times the FAA's threshold of 20,000 hours for a severely delayed airport. FAA Opsnet delays at Logan Airport peaked in 1993, declined for two years and are rising again. Arrival delays which would be directly affected by Runway 14/32 have risen steadily since 1994.
T1.36.5	Purpose and Need	Delay	The 65 million dollars they say is going to be saved by building this runway, [can be calculated]...The amount of delay hours issue, the percentages have gone up, [and] down...but if you dig into that report, there is a chart where you look at all actions except 14/32 and all actions with 14/32, and the difference is 20,000 hours. It's a 15 percent reduction....	Table 4.5-3 of this Supplemental DEIS/FEIR shows the incremental benefit of Runway 14/32 ranges from 20,000 hours to 86,000 hours, which is a reduction of 19 percent to 27 percent. These are significant benefits. FAA defines 20,000 hours as a severely delayed airport.
T1.36.6	Regional Transportation	Regional Airports	...[If Massport] going to use it [Hanscom Airport]...there's still 40, 50, maybe a hundred thousand dollar operations capacity at Hanscom that they [Massport] have no plans to use.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Transcript 1.37 CAC Melrose Rep., Joseph Gulino

Code	Topic 1	Topic 2	Comment	Response
T1.37.1	Alternatives	Runway 14/32	I'm here to ask Massport tonight to withdraw their proposal until such time as they can come to my community [Melrose] and explain the impact that this new runway is going to have on my community.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.
T1.37.2	Noise	Model	Melrose is only five miles away from Logan Airport, yet it isn't considered by Massport to be noise-impacted...They're [jets flying over Melrose] not in the modeling, so I would suggest that they do modeling that doesn't quite reflect the reality of what's really going on up in the skies.	Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with

Transcript 1.38
Private Citizen: Roland Choquet

Code	Topic 1	Topic 2	Comment	Response
T1.38.1	Alternatives	Runway 14/32	I object to the expansion of the runways, unless you want to put it at Hanscom Air Force Base and build an airport there.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.
T1.38.2	Alternatives	Preferred Alternative	I think it's a sensible idea to limit any further growth at Logan. It was understood with a court injunction some 25 years ago that it was enough then, it's enough now, and more is not always better.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
T1.38.3	Public Health	Effects	We have some serious health considerations to this airport proposal [from noise and air pollution].	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. The 1999 Massachusetts budget included $150,000 to fund an environmental assessment of the health impacts of Logan Airport on any community located within a five-mile radius of the airport. The final protocol for the study is being developed. The study is expected to be completed in summer 2002.
T1.38.4	Alternatives	Preferred Alternative	Massport told us tonight it's not expansion but...If you add a runway, it is expansion. I'd like to argue against Massport's claim that it's not.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Transcript 1.39 CAC Quincy Rep., Bill Galvin

Code	Topic 1	Topic 2	Comment	Response
T1.39.1	Regional Transportation	Regional Airports	Now, over in East Boston, in Revere, in Winthrop, 4400 houses are sound-insulated. This new proposal suggests that Chelsea, the poorest city in the state, get 1100 homes sound-insulated. Massport has a choice. They own two airports, Logan and Hanscom. There's a perception that the folks in Lincoln and Lexington and Concord, the affluent and powerful communities, are being spared. There are no houses, no households, in Lincoln or Lexington or Concord or Bedford that we know that are sound-insulated., So where is the fairness and where is the justice?	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Transcript 1.40 CAC Roxbury Rep., Dovi Abbey

Code	Topic 1	Topic 2	Comment	Response
T1.40.1	Noise	Impacts	...clearly, all of us in the community [Roxbury] minus one or two, we all are unequivocally opposed to runway 14/32...Economic activity is not justification for ...severe disruption of the city, of its inhabitants.	Comment noted.

Transcript 1.41
Private Citizen: Todd L. Payton

Code	Topic 1	Topic 2	Comment	Response
T1.41.1	Environmental Justice	Impacts	...runway 14/32 cannot go through...Under no uncertain circumstances can the communities of color, of Roxbury, which already has 50 to 300 times the disease and death rates, can take another added stressor of noise and air pollution.	Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the Environmental Justice analysis. Noise was found to be the only adverse impact from the Preferred Alternative with the potential for Environmental Justice impacts. Additional demographic analysis of the noise-affected areas was conducted to determine if minority and/or low-income populations would be disproportionately affected by the Preferred Alternative. This analysis found that there is no high and adverse disproportionate impact caused by the Preferred Alternative.

Supplemental Draft Environmental Impact Statement/
Final Environmental Impact Report

EOEA #10458

Logan Airside Improvements Planning Project

Boston
Logan
International
Airport

massport Massachusetts Port Authority

Federal Aviation Administration

March 2001

Responses to Comments **Volume 11**

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Acronyms

Airside Project	Logan Airside Improvements Planning Project
CAA	Clean Air Act
dB	decibel
DEP	Massachusetts Department of Environmental Protection
DOT	Department of Transportation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENF	Environmental Notification Form
EOEA	Executive Office of Environmental Affairs
EPA	Environmental Protection Agency
ESPR	Environmental Status and Progress Report
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GEIR	Generic Environmental Impact Report
ILS	Instrument Landing Systems
INM	Integrated Noise Model
Logan Airport	Boston-Logan International Airport
Massport	Massachusetts Port Authority
MBTA	Massachusetts Bay Transportation Authority
MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MassHighway	Massachusetts Highway Department
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
OPSNET	FAA Air Traffic Operations Network
PM_{10}	particulate matter less than 10 microns in size
PPP	Peak Period Pricing
PRAS	Preferential Runway Advisory System
ROD	Record of Decision
SDEIS Panel	Supplemental Draft EIS Panel
Supplemental DEIS/	Supplemental Draft Environmental Impact Statement/Final
FEIR	Environmental Impact Report
VFR	Visual Flight Rules
VOC	volatile organic compounds
29M Low Fleet	29 Million annual air passenger Low Fleet
37.5M High Fleet	37.5 Million annual air passenger High Fleet

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MASSPORT/FAA PUBLIC HEARING

HELD AT:

HOLIDAY INN
EAST BOSTON, MASSACHUSETTS

THURSDAY, APRIL 8, 1999
6:35 P.M.

Christopher Poreda, Moderator
John Silva, FAA
Jay Wickersham, MEPA
Arthur Pugsley, MEPA
Deborah Meehan, President, SH&E
David W. Hollander, Vice President, SH&E
Betty Desrosiers, Massport
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PROCEEDINGS

THE MODERATOR: Good evening. It's now 6:30. My name is Chris Poreda. I'm a senior attorney for the Federal Aviation Administration's office of the regional counsel in the New England region. I will be the hearing officer for tonight's hearing.

This meeting is jointly sponsored by the Federal Aviation Administration and Massport. I would like to thank the Holiday Inn for allowing us to use these facilities, and I welcome those individuals who are here this evening to listen and make public comment. I also want to welcome the members of the media though I would ask that you remain as unobtrusive as possible while you perform your valuable function to cover this event.

This meeting is being transcribed so each of us who speaks needs to remember to speak clearly, use the microphones, and please identify yourself and spell your last name, if you remember to do so.

Before I introduce those

individuals who will make presentations tonight, I must briefly outline the purpose of the meeting for the record. After those presentations, I'll open the meeting for public comment.

The purpose of this meeting is to receive public comment on proposed airport developments at Logan International Airport. Those proposed developments are detailed in a document published jointly by the Federal Aviation Administration and Massport entitled Logan Air Side Improvements Plan Project dated February 1999. This document serves as both a draft environmental impact statement to meet the procedural requirements of the National Environmental Policy Act, or NEPA, and other federal requirements, and a draft environmental impact report to meet the requirements of the Massachusetts environmental policy act, or MEPA, and other state requirements.

The FAA is the leading federal agency for purposes of the airport layout plan approval and any funding approval which

are federal actions subject to NEPA. Massport is the project proponent for the proposed developments which fall within its purview as the proprietor of Logan International Airport.

The draft EIS/EIR was sent to several elected officials, community leaders, and federal, state, and local government offices. In addition, copies of the document were sent to public libraries in Boston, Brookline, Chelsea, Charlestown, Milton, Quincy, Revere, Somerville, and Winthrop. A notice seeking comment from that document was published in the Federal Register on February the 26th, 1999, and appears on Page 9508 of Volume 64 of the Federal Register.

This evening from the Federal Aviation Administration to my right and the left of me as you look at me is John Silva, environmental programs manager in the airports division of the Federal Aviation Administration's New England region. With us from the Massachusetts Environmental Policy Act office on my left, my right as you look

at me, is Jay Wickersham and Arthur Pugsley. On my far right to the left of the room in the front from Massport we have Betty Desrosiers, director of planning and development, Deborah Meehan, project manager from SH&E, a consultant to Massport on these projects, and David Hollander, a planner for SH&E. The fourth individual who isn't there right now is Flavio Leo. He's the director of aviation planning for Massport.

At this point I will introduce John Silva, and he will make a brief statement. John.

MR. SILVA: Good evening. My name is John Silva and I'm manager of environmental programs, airports division, New England region, Federal Aviation Administration. I'm FAA's project manager for this environmental impact statement. The hearing this evening is being conducted to meet the requirements for public input under Council on Environmental Quality regulations and the Airport and Airway Improvement Act as amended and recodified.

In addition to the opportunity to provide comments this evening, the written comment period on the draft environmental impact statement and draft environmental impact report will remain open through April the 23rd, 1999. Comments may be mailed to me, John Silva, S-I-L-V-A, and I'm going to give you my address now. It's Airports Division, FAA, New England Region, 12 New England Executive Park in Burlington, Massachusetts, and the zip is 01083.

Alternatively, you may mail comments to the Secretary of Environmental Affairs and Arthur or Jay will have an address for you in a minute. That's about all I have to say.

THE MODERATOR: Thank you, John. Now we'll hear from the Massachusetts Environmental Policy Act office.

MR. WICKERSHAM: Thank you, Chris. I'm Jay Wickersham from the MEPA office in the Executive Office of Environmental Affairs. With me is Arthur Pugsley who is the MEPA analyst who is assigned to this

project. The purpose of this report under the MEPA statute is to study the adequacy of the draft environmental impact report which has been filed by Massport, and to review whether Massport has taken all feasible steps to avoid, minimize, or mitigate the environmental impacts of this project.

We will be reviewing the adequacy of the draft EIR consistent with the MEPA regulations which are found at 301 CMR 11, and also consistent with the scope for the EIR which was issued by Secretary Cox in November of 1995, and you can find this scope at the front of Volume 2 of the draft EIR.

In addition to the spoken comments tonight, we are also taking written comments. You can put them in the box here at the end of the table after you've spoken or you can mail them to the MEPA office. The address for mailing those comments is Executive Office of Environmental Affairs, 100 Cambridge Street, 20th Floor, Boston, Massachusetts, 02202, Attention, Arthur Pugsley, P-U-G-S-L-E-Y, and we ask that you

put the EOEA file number on each piece of correspondence. That file number is 10458. Again, EOEA file number 10458. Thank you. Also, the comment deadline for MEPA is the same as for the FAA, and that is that we are receiving written comments until 5 p.m. on Friday, April 23rd. That is two weeks from tomorrow. Thank you.

THE MODERATOR: Thank you, Jay. At this point, let me, as a verbal footnote, note that although I am also an employee of the Federal Aviation Administration, my role here tonight is strictly as moderator, and I will play no role in the determination of this draft or the final report or review of the comments. My job here is to give everybody, supporters and opponents alike, a fair opportunity to comment and I will endeavor to do so.

At this point, we'll have a brief presentation from Betty Desrosiers of Massport, but before she starts I would like to remind everyone again that if you wish to speak, please sign up on the sign-up lists in

the lobby. I will be recognizing people to speak from those lists so while Betty is speaking if you haven't signed up and wish to speak, please go out to the lobby and sign up. Betty.

MS. DESROSIERS: Thank you and good evening. Over the last three months, Peter Blute, Tom Kenton, and I have attended over 45 public forums to talk about the air side improvement program that is presently before the state and federal environmental regulatory agencies. We have addressed nearly 3,500 people about this project and we have listened very carefully to what people have to say at each of those forums and we'll do so again this evening.

I want to thank you for giving me the opportunity to take 15 minutes of your time this evening to do an overview of the project. Let me say that for those of you who have seen this presentation by Massport before, this one's a little bit different and certainly much shorter so thank you for bearing with me. Let's begin.

The presentation is really in three parts. It first talks about the airport in terms of its economic and regional transportation role. I then will describe the project as it is presented to the environmental agencies and highlight the key environmental results of the analysis.

First, Logan Airport is a key economic engine for Massachusetts and New England. The airport itself employs 15,000 people and contributes 5 billion dollars to the regional economy.

Next slide. A survey of Boston area businesses indicate that today 79 percent of the Boston area businesses rely on a safe and convenient airport to do their business, and indeed that same survey has shown that the high growth industry in the greater Boston area expect their reliance of convenient and safe air service to increase in the future. In particular, businesses such as communications, high technology, management services, all expect that they will continue to see their reliance grow at

Logan Airport.

There are several kind of indices of delay. Does Logan Airport have a delay problem? We certainly do have a delay problem. There are many measures of delay. The two that are up here, one by the U.S. DOT Consumer Service and one by the FAA Air Traffic Operations Management. Both of these indices, and these are indices, they do not calculate delays, they're simply a benchmark to compare airports amongst each other in terms of their potential delay problems.

Each of them show over the course of nearly a decade that Logan Airport is a delayed airport and we have ranked consistently among the worst delayed airports in this country. Our project, our modeling, which by the way was based on a modeling that was developed by world-renowned experts at M.I.T. in the flight transportation lab there. We used the model that has been used by airports around this country and indeed around the globe.

That model has shown that Logan

Airport is experiencing today over 120,000 hours of delay, and that the cost of those delays to the regional economy is over 300 million dollars annually. We are a significantly delayed airport and it does have significant economic consequences for today and in the future.

Is this proposal part of a regional aviation strategy? Indeed, it is. It is part of a multi-airport, multi-modal transportation strategy that has been developed over a decade of planning, and indeed, has been affected by significant capital investment in the regional airports of over 600 million dollars.

The planning work, again in the commonwealth of Massachusetts, in the early 1990s when the commonwealth of Massachusetts conducted a second major airport siting study, that study was done with a blue ribbon panel of over 52 members. That study basically concluded that there was no viable feasible location to build an airport in Massachusetts given both the environmental

and social and financial consequences of trying to build such a facility.

That study was then followed on by a strategic assessment report. The strategic assessment report, by the way, also had a blue ribbon panel. That study really set the framework for a multi-airport strategy to meet growing demand for travel in Massachusetts and New England.

That study was followed on by a study that was conducted and continued to be done by six states and the state aviation directors to look at how utilizing the existing airports in New England -- how we could meet the air travel demands in the future utilizing the existing airports in New England and indeed we have.

Those studies all said that to meet the demand for air travel today and in the future that the region should invest in high-speed rail, and indeed that investment has occurred. High-speed rail is being tested right now and will become fully operational in the fall of this year.

Second, those studies concluded that we needed to build up the regional airports. We needed to invest in those regional airports to make them ready to handle increased traffic, and indeed that has happened. It has happened at Manchester Airport, it has happened at Providence, it has happened at Worcester, and New Bedford is trying to do the same.

Those studies also concluded, however, that in addition to high-speed rail and in addition to improvements at the regional airports and growth at the regional airports, that we also needed to invest and improve Logan Airport, and that is exactly what this proposal seeks to do. In fact, it is the last piece of the strategy to be advanced.

This slide shows a depiction of the regional airport system with Logan Airport as the premier airport, Manchester Airport to the north, Green Airport to the south of Boston, and Worcester to the west. These airports, these four airports, will be able

to accommodate demand for air travel in New England into the next several decades. This is the regional aviation strategy. This strategy is happening.

Green and Manchester Airports are the fastest-growing airports in the United States, and to further advance the growth of this regional aviation system, the governor has asked Massport to take a greater role at Worcester Airport and we will be doing that.

PARTICIPANT: Excuse me, Betty. Could you point out Hanscom there? I don't see Hanscom there.

MS. DESROSIERS: Yes, sure. Hanscom Airport is right about here. Now, as you can see, Hanscom Airport is intersected by the markets of three other airports. Regional alternatives were explicitly examined in the environmental document, and in the environmental document what we found is that regional airports, high-speed rail, and other activity could, in fact, have to reduce growth at Logan Airport by 7.3 million passengers, but that will not preclude the

need to do improvements on Logan's airfield.

Logan's ground access plan. Last night we heard some comments about Logan's ground access plan. Can we do roadway networks to accommodate growth at Logan Airport? Logan Airport has a comprehensive and a fully-developed ground transportation program. It is fully disclosed and evaluated in our GEIR document which we file annually with MEPA.

The proposed air side improvements will not change the ground access demand, and our ground access program has, in fact, been highly successful, particularly our Logan Express program which takes over 1 million passengers to the airport in high-occupancy vehicles.

What are we proposing to do with our project? What we are seeking to do is simply to reduce delays at Logan Airport, to improve our operational efficiency, to enhance our safety, and to do that while minimizing environmental impacts.

What we are proposing in this

document before the federal and state environmental agencies is to construct a unidirectional runway 14/32, to undertake various taxiway improvements on the field, the most notable of which is to build a new center field taxiway. The FAA is seeking to reduce the approach minimums for several of the runway ends, and we also looked at peak hour pricing.

The environmental document itself has five alternatives in it. Each of the alternatives are designed to allow for an evaluation of kind of key elements of each proposal. What we have chosen as our preferred alternative is alternative 1A.

How will runway 14/32 help the operations at Logan Airport? Logan Airport generally operates on a three-runway configuration in which the air traffic control tower can accommodate 120 arrivals and departures in an hour. Runway 14/32 will not increase that operational capacity, but what it will do is allow Logan to maintain that operational capacity when winds are

coming from the northwest.

Delay reduction. How much does it help delay reduction? It helps delay reduction at Logan Airport significantly in the near term and in the long term. As you can see here with the green bars, if you do nothing, if we are not able to build the runway, delays at Logan Airport will grow and they will grow expidentially. With the runway, the red bar, you can see that delays will decrease for nearly a decade, and even as they increase in the future, they do not increase significantly over that level which we have today.

And you can see that the comparison between doing nothing and building the runway, in fact, grow. The benefits of the runway in terms of delay reduction grow over time. This is not a band-aid approach.

Results of the noise analysis. The noise analysis shows that we are able, by building this runway, to reduce noise for those residents that live in the highest-impacted area. We are able to reduce

nighttime operations by getting aircraft on the ground quicker. We are able to shift 75,000 flights out over the harbor rather than over people's homes.

And finally, we are able to obtain a more equitable distribution of overflights for communities surrounding Logan Airport, and I want to talk a little bit about that. Today, 76 percent of our operations occur over communities that are located north and south of the airport. If we do nothing, that's going to grow to nearly 90 percent of the operations will overfly communities north and south of the airport.

If you live in Milton, if you live in Quincy or Dorchester or South Boston or East Boston, Orient Heights or Winthrop or Revere or Swampscott, you will end up in the future -- today you have 76 percent of that burden. In the future, that will grow to nearly 90 percent. If we are able to build the runway, you can see that what we are able to obtain is a much more equitable distribution of noise and overflights for

communities north, south, east, and west. And, in particular, as I mentioned, we are able to increase the number of operations over water.

What do we do to propose to mitigate the impact of the runway? First, we propose that we will build this runway and operate this runway as a unidirectional runway in perpetuity, and we will use every independent legal mechanism available to us to provide that guarantee. Those mechanisms include the state and federal regulatory agencies. We will look to include unidirectionality in our Section 61 commitments. We will seek relief from the court injunction for unidirectional operation only. We will use every mechanism available to us.

To mitigate the noise impact, we propose to soundproof nearly 1500 homes. And with respect to the environmental commission, the upland sandpiper -- excuse me. This is my very last screen. You will have all evening long.

THE MODERATOR: Excuse me one second, Betty. Please refrain from making comments. They do not add to the presentation, and detract from the amount of time that people who agree with you will have to make public comment.

MS. DESROSIERS: The last thing. With regard to the upland sandpiper, what we propose to do is to establish or create a habitat for the upland sandpiper down on the Cape which is in conjunction with the state Natural Resources Department which is desirous of that. That is the end of the presentation. I want to thank you for letting me complete it. I want to assure you that we are listening. We will continue to listen this evening. We welcome the role of the state and federal agencies to take an independent and objective view of this analysis, and we welcome their conclusions. Thank you.

THE MODERATOR: Thank you very much, ladies and gentlemen, for giving Betty your attention. Before I open the meeting

for public comment, at this time I want to explain some of the ground rules for public comment. First, let me explain what we are doing with the sign-in lists. The first people I will recognize to speak are state, local, and federal elected officials and other government officials. They will be afforded more time to speak than the rest of you by virtue of their positions, and I'm sure you can extend them that courtesy as well.

However, we already have enough people signed up. Even at three minutes per person, that will take us to about 10:30 tonight, so I would encourage you to please keep your comments distinct, and as soon as you're finished, sit down so the next person can get right up and speak.

The second group of people that I will recognize are those individuals that attended last night's meeting, signed up to speak, but then did not speak for one reason or the other. There were a number of people who left before they were called.

The third group of individuals I'll recognize are people who have not previously added comment from last night. Lastly, the fourth group of individuals I'll recognize are those people who made comment last night. Remember that your comments from last night are on the record. You need not repeat what you said last night. If you want to make a different point, however, this is your opportunity to do so. Consequently, I will be most stringent with the timing of that fourth group because if I detect they're merely repeating what they said last night, I will cut them off.

Due to the number of people that wish to speak, each speaker, aside from the government elected officials, will be limited to about three minutes. I reserve discretion in that regard. Approaching the end of the time of your opportunity to comment, I will ask you to please wrap it up, and if you continue on and don't wrap it up shortly, then I will please ask you to sit down and I would ask you then to be civil and please sit

down so that your colleagues and other people who agree with you might have an opportunity to speak. I hope I don't have to use the gavel.

Remember, this meeting is being transcribed, so each speaker should come to a microphone. I think there are three located around. There's one in the center and there's one over here on my right, your left, and there's one up front on my left, your right. Remember to identify yourself with your name and your community, and spell your last name so the recorder has an opportunity to get it right.

We will not entertain requests to donate portions of your time to somebody else. I will announce the name of the speaker who will go next and the next speaker so you can both mentally prepare and also physically get ready to step right up to the microphone when the speaker ahead of you is finished.

Let's remember what the purpose of this meeting is. The purpose of this meeting

is to give your comment to both the FAA officials and MEPA officials who will be determining the adequacy of the draft environmental impact statement/report. This is not a forum for debate. If these individuals said something tonight that was ambiguous, then I will allow a question for clarity, but I will not allow questions on the draft report itself and I will not allow debate on the draft report itself.

And as I said at the close of Betty's presentation, please refrain from vocal opposition or vocal support for what the speakers say. They do not add to the record and I will detract time from people who agree with your position for as long as the demonstration lasts. Also, those of you who are holding signs in the back, I ask that you do so so that it doesn't block anybody else's view.

With that, I will call the first speaker. I note that Congressman Michael Capalano has signed up to speak. I don't know if he's here or not, but in deference to

another speaker who has a physical disability, I will let that speaker go ahead of the congressman. So the first speaker will be Whit Saltmarsh from the Massachusetts Aeronautics Commission, followed by Congressman Michael Capalano.

T2.1

MR. SALTMARSH: Thank you very much, Mr. Moderator. For the record, my name is Sherman W. Saltmarsh, Jr., S-A-L-T-M-A-R-S-H. I am currently the chairman of the Massachusetts Aeronautics Commission. I've been chairman for the last eight years. I appreciate you allowing me to just say a few words. I know you've got a lot of people who want to speak here tonight.

I think just to give you a bit of history how we got to this point and how we at MAC feel about this, I think we owe it to the people who are really concerned about the prospect of runway 14/32. As was previously pointed out by Betty Desrosiers, the various studies that related to the second major airport study, the strategic assessment report, we also did a report for cargo in

southeastern Mass., particularly by New Bedford and Worcester. We did a passenger study for all the New England states.

As a result of all these studies, going back to the second major airport, there are a lot of people saying, then why didn't you build it? We went around the state and had a lot of hearings, we talked to a lot of people. We surveyed 182 sites. We came down to two, Fort Devens and Winchendon. Winchendon was 55 miles outside the city of Boston, and really the only good site was Fort Devens, approximately 35 miles from Boston.

Ninety-five hundred acres of land, 4500 acres of land on the north side, approximately 5,000 acres on the south side of Route 2, a good location. So that was our recommendation. If you are going to build a second major airport, that was the location. I think you people ought to know that. That was the end of it.

What happened after that? We looked into it again. The airlines didn't

want any part of it. They didn't want to spend a buck up there. What would the cost be to build a second major airport? Somewhere between 4 and 6 billion dollars. Is the commonwealth ready for it? As someone who sat in the legislature for 14 years, I don't think so.

We've got this thing going on in Boston called the Big Dig, 12 million bucks. So I don't think really from a fiscal standpoint of view you would have seen it for many years. From an environmental standpoint of view, how long would it take to get the first shovel in the ground and get it built? Somewhere between 18 and 20 years. You'd probably say, we can't believe how long it would take to do that, that length of time.

Well, Mass. Aeronautics is currently working on an extension in New Bedford from 5,000 feet to 8,000 feet. I went down with Governor Weld seven years ago to the city of New Bedford. The city council favored it, the mayor favored it, the senators, the representatives, the whole

delegation down there wants that runway extended. As you and I sit here tonight seven years later, we're still in the midst of an environmental impact report. Not one shovel of dirt has been done. So I want you just to see how long it will take to get to even build a second major airport. I think you are owed that explanation.

Now, you've got a problem at Logan. They talked about delays and whatnot. There's controversy. Some say there aren't so many, some say there are more. From the Mass. Aeronautics Commission's standpoint of view, if the delays don't ever increase any more than they are today, I think Massport has got an obligation to the people that surround this airport, all the communities that have been mentioned, to do anything they can to lessen the impact on the homes, their residences, their businesses, and their schools, et cetera, in that area. T2.1.1

Now, as Betty pointed out, they will take approximately 75,000 flights over water. To me, that's an improvement to the

people in this area. You deserve it. But if they don't do anything, you'll say to yourselves, what's going to happen? It's going to go on and on and on, and Massport owes it to you, we at MAC owe the support to make sure you'll get this small runway. T2.1.1 (cont.)

Now, what else have we done in this state? We've heard them talk about, well, what have they done to take the load off of Logan? At Mass. Aeronautics, as I mentioned, we're extending the runway in New Bedford. We work with all the directors in New England. Today as you and I are sitting here, almost 5 million people use Green Airport in Providence. Over 2 million use Manchester. We supported that, we worked with the FAA on this encouraging these projects to be built.

Manchester Airport is lengthening their major runway today from 7,000 feet to 9. They're also going to lengthen another runway at a later date. I'll guarantee you Mass. Aeronautics is going to do everything we can to make sure we lessen the load at

Logan and the best way to do it, the soonest way to do it, is to get some of these flights, some of the people, not to use Logan. If you just stop and think how many people, if we didn't have the use of Green and Manchester, the problem would be much greater today.

Now, there's one thing that hasn't been mentioned about this. I haven't heard it very much. Our main concern at Mass. Aeronautics is safety. The most important thing that we do is to make sure that the landing and taking off of planes is done on a safe basis.

Now, the people at the FAA, at this control tower at Logan, they've probably got one of the finest safety records in the country, but you know when you have delays, when you have taxiways that are jammed, when you have flights that are up in the air going around and around, the chances of something happening are a lot greater. And I don't think anybody in this room wants to see any type of an accident.

I don't think it's going to happen but there's always that possibility because when you have delays, planes circling around overhead, on the ground inadequate taxiways, then there's a much greater chance for an accident. As I say, our main responsibility is safety. There hasn't been much said about the center field taxiway. That's one of the most important parts of this project, not just 14/32 but the moving of those planes around on the ground, it's critical.

Also, I'd just like to say here in closing that we've looked at all the different things and I've talked to Steve Muench, and I just want to point out to you that eight years ago, Mass. Aeronautics only spent about a million bucks a year to improve these airports about Massachusetts and work with the region. As of today, we have spent 121 million dollars to improve these airports.

The one airport I think will give you the biggest relief is Worcester. We built that terminal up there about five years

ago. It's a shame. They used to have over 300,000 people use that airport. Now they're down below I think 70,000. I think that in due time, there's going to be enough pressure that Worcester's going to come on line. It's a beautiful facility but the problem is you can't get to the darn place. It's a shame.

I've talked to Karen Sullivan who is now the executive secretary of transportation, used to be the head of Mass. Highway. They're doing a study which is going to come up with a route to make the egress and the access into Worcester much better than today. I think when that's done, it's going to have a great impact on taking people out of Logan.

People in Worcester and that central part of the state, they'd love to have a good airport, but one they can get to. If any one of you in this room have been up in that area and you've seen how hard it is to get to, you wouldn't fly out of there, either. You'd go to Providence or Manchester. So I'm telling you that we're

going to work with Massport to do all we can to get that beautiful facility up and running.

It's got a great terminal, it's got good runways, a bright new FAA tower, and it's a shame it isn't being used. We're going to do all we can, whether it be fiscally or through the management, through the assistance of Massport and with the city of Worcester to really get that on line, and I think it will happen. It won't happen overnight but whatever goes on in Worcester is going to be taking more out of Logan.

So just in closing, I want to thank you very much. I had a hip replacement and I can't stand very long, but as someone who has served in the legislature for 14 years, I say to you, I understand why you are concerned. It's in your backyard. But believe me, for a long period of time, nothing was done at Logan, nothing was done at any of the airports in Massachusetts.

They went to hell in a hand basket, and I really believe that this current board

of directors is out to try to really improve the facility and get some of these planes off your back, and I think that you can see you're going to get 75,000 flights moved over different directions over the water, and I would suggest that you support it. Thank you very much.

THE MODERATOR: Thank you, Mr. Saltmarsh. Is Congressman Capalano here? We'll move on to the next speaker and let him speak as soon as he gets here. Next we'll hear from the mayor of Revere, Bob Haas.

MR. HAAS: I am Mayor Bob Haas from the city of Revere. I'd like to thank you for inviting us this evening, and more importantly to have the people here and at least let them voice their concerns and opinion.

The proposal to lower the weather minimums for landing on runway 22F, Revere simply objects this proposal to lower decisional heights for landing on runway 22F in poor visibility weather. We see no advantage to the airport, and possible danger

T2.2.1

to the community as a result of this proposal.

With lowering the decision height, the control tower will allow more planes to approach over Beachmont Hill during weather with poor visibility because planes would be allowed to fly closer to the airport before the pilot has to see the hill under worst conditions. T2.2.1 (cont.)

In poor visibility weather, the pilot does not have to see Beachmont Hill in his approach. Given the already narrow envelope between the existing approach down and the top of Beachmont Hill, an early decision height would increase the potential of a hazard for the Beachmont residents.

In speaking on proposal 14/32, Revere is extremely concerned with the implications an additional runway would have on additional air traffic. We are not totally convinced that the construction of runway 14/32 will result in less air traffic over the city of Revere. The city needs to be assured that the existing number of T2.2.2

flights currently utilizing runway 32L will increase as a result of the construction of runway 14/32.

It is Revere's opinion that the new runway will increase airport capacity which will obviously result in increased air traffic congestion and additional air traffic over our community. Until the community is guaranteed that air traffic over Revere will decrease from the current condition as a result of this new runway, the community will stand opposed to the construction of runway 14/32. T2.2.2 (cont.)

My comments were sent on March 26th, 1997 when the issue came out from Massport that they were thinking about increasing and bringing back to the table 14/32. I will be submitting additional comments before the final deadline which will be April 22nd, and I hope all the people who back me will also voice their concerns one way or the other. T2.2.3

If we are talking about increasing airport traffic, passengers, over the next

ten years by almost 20 million passengers, people coming from the north have to go through my city in order to get to the airport. If I'm looking at the traffic congestion that is there presently, you're addressing ten years down the road when, as Massport indicated, we'll have almost 20 million more passengers coming into our area.

T2.2.3 (cont.)

When I talk about our area, I'm speaking about Revere tonight, but again, what happens in Revere happens in Winthrop, Boston, Quincy, East Boston, Chelsea, et cetera. This is an area that I believe if we don't address the traffic problems which were addressed in 1997 in our communications, we in Revere will be in complete gridlock.

I just came from the city of Revere coming from Mahoney Bell Circle and I'm coming south. There's all kinds of traffic there. What was it, 6:30? As you can imagine with all this additional traffic going into the airport, I think we have to really research that, I think we have to put a hold on our plans at this point in time. I

think that if you're looking at the airport, maybe the airport's expanded much too much at this point in time. So I really honestly think you people should really listen to what the people here say tonight.

I look at one other issue that I find quite disturbing. We have a land side committee, an air side committee, and it seems like you divided -- some people think by dividing their forces, it's easier to conquer. I honestly believe that people here, the elected officials in the affected areas, this is one issue and it showed last week in Boston when I arrived at 5:30 at the state house, we looked out, we saw signs not only from Revere, not only from Chelsea, Winthrop, Boston, and we saw them out in the outskirts also.

So what I'm saying, in summary, is that I believe the traffic congestion, without question, is a major, major problem. I have to look at the decrease in the visibility coming over the Beachmont area which also affects the Point of Pines area

because, in case you have to abort, you have the airport, and I think it's much more dangerous because there's more planes that are stacked up that come in.

So with that for the city of Revere, we thank you for listening to our comments, and we will be here if anyone has any questions later on. Thank you.

THE MODERATOR: Thank you. Next we'll hear from Preston Galano from Chelsea. Following Mr. Galano we'll hear from Paul Nowicki, Chelsea City Council.

MR. GALANO: Thank you very much. T2.3
The majority and the focus of my presentation today will address the inconsistencies and inadequacies of the proposal before us as they relate to the city of Chelsea. I will, before the April 23rd deadline, submit a more comprehensive written comment.

First I'd like to address the issue of the noise impact assessment. In order to go forward, it's necessary to look backward. I first started examining the noise contour shortly after I bought my home in the

historic waterfront district in 1996. After becoming elected to represent District 8, one of the communities that will be most heavily impacted if this proposal is authorized, I had the opportunity to attend a public hearing with the FAA and the Massport noise abatement and aviation planning officials.

It was at this meeting in 1998 and through several communications between myself, Senator Kerry's office, and the FAA that I learned why Chelsea is considered just outside the 65 D and L noise contour. It's because Massport submitted a map to the FAA based on a prediction made by a computer model that has consistently underestimated the noise level in our community.

The proof is in the GEIR and I will submit copies of my communications with the FAA along with this statement. The fact is that actual, that is, measured noise results in Chelsea have been year after year above 65, and the predicted number used by Massport to assess the noise impact on my community is below 65. How convenient.

T2.3.1

Without an accurate noise assessment, the true impact of health, environmental, and real estate value effects cannot be clearly defined, making any mitigation offer unreasonable. Based on the fact that Massport is using the same process to measure noise impacts that they have in black and white and in public admitted is not accurate, and based on the fact that the FAA recognizes the predicted noise levels are less than actual noise levels, the draft EIR should be rejected. T2.3.1 (cont.)

Further, it should be noted that the noise monitor location, that's Figure 5.2-1 on Page 5-13, indicates that there is a permanent noise monitor on Admiral's Hill in Chelsea, while all subsequent analysis of measured noise data is placed at Shirtleff and Essex Street in Chelsea. That's a site that has not had a permanent monitor since 1991, and then for only one year. T2.3.2

Another area of the EIR that's inadequate with respect to accuracy and thoroughness is the four-page evaluation in

Section 8.7 of the environmental justice issue. Chelsea will receive the brunt of the short-term negative impacts of this proposal should you see fit to give your approval.

In a presentation to the Chelsea City Council on March 3rd, 1999, Massport representatives said runway 33 departures will increase from 4.8 percent to 12 percent of total departures. That's a 150 percent increase. And runway 15 arrivals will increase from 1.5 percent to 7.7 percent. That's a 413 percent increase. T2.3.3

The associated increase in noise is large enough that even using the understated predicted noise measures, 1100 homes will be eligible for soundproofing. While we feel sound insulation cannot fully mitigate the impacts of increased ambient noise levels, many of the older homes will not be eligible for funding due to FAA order 5100.38A which requires the property owner to bring homes up to code before they pay. T2.3.4

We realize that Chelsea is the only community impacted devastatingly enough to

qualify. The EIR concludes, and this is in quotes, Given the reduction in the highest noise-exposed population and this mitigation, soundproofing, the low-income and minority populations will not experience disproportionally high adverse impacts in comparison to the affected population as a whole.

T2.3.5

This analysis is neither thorough nor accurate as the EPA census maps on population density, minority concentration, and people below poverty level in Chelsea show. The EIR's conclusion conflicts with President Clinton's environmental justice executive order 1289A which was designed to prevent the types of environmental and health injustices that have occurred in Chelsea for over a hundred years.

To demonstrate this, I've also attached a copy of an EPA-funded report on the extent of industrial pollution in Chelsea and its relation to the socioeconomic status of Chelsea residents. This is no coincidence. Essentially, the four-page

environmental justice analysis contained within the EIR does not adequately analyze the environmental effects including human health, economic, and social effects of the proposed expansion, and I would suggest the analysis is yet another clever obfuscation of the truth, and the analysis in the EIR does not meet the standards of the Department of Transportation order. T2.3.5 (cont.)

I really consider the two previous points my strengths, but I'd like to briefly add that the EIR is either inaccurate or incomplete with respect to the following. One, alternatives under discussion such as comprehensive peak hour pricing analysis using a range of operations per hour levels instead of the single higher operational threshold that underestimates the delay reduction. Hanscom should not be ruled out as a piece of the regionalization solution, and a second major airport should have at least been considered. T2.3.6 T2.3.7

Two, air quality measurement. Noise and air quality equipment should be

along flight paths. Chelsea's air monitors at the Soldier's Home, out of harm's way. T2.3.8

Three, the impact on the upland sandpiper, a plan to relocate or mitigate for this endangered species is inadequate and also indefinite. T2.3.9

Also, the traffic study. A study of the long-term traffic impacts on the surrounding communities should be as comprehensive as possible. T2.3.10

Also, a benefit cost analysis, how can you realistically and honestly mitigate the noise, health, and real estate cost to our residents? Also, the commitment to maintain the new runway's unidirectional status, there isn't one. Data used for this analysis is over five years old and does not reflect current conditions. T2.3.11

For all of these reasons and I'm sure many more, I encourage you to find the proposal before us today functionally inadequate, and I would respectfully request that a new draft document should be required before any expansion can be considered. I would also suggest that any future requests

for expansion include an independent impact assessment that would meaningfully, thoroughly, and accurately detail the impacts on surrounding communities like Chelsea. Thank you.

THE MODERATOR: Councilor Nowicki, I'm sure you will agree with me that we will hold you off and let Congressman Capalano now speak.

MR. CAPALANO: Having just flown in and arriving on 15/33 45 minutes late, I'm still against 14/32. I'm against 14/32 because my 45 minutes is not as important as the peace and quiet and the enjoyment of their homes of the 600,000 people that live under the flight paths. I will speak about many of the things you'll hear tonight. I believe that you will take into consideration the environmental justice of overloading one area of the state or one area of any region that benefits the entire region, yet the burdens are not fairly and equally shared. T2.4

That's why I oppose this runway, because I don't think enough thought, enough

consideration, and enough heart has gone into the decision to do this that hurts too many people too directly, yet benefits the entire region. That's what environmental justice is supposed to be all about. Everybody gets to benefit, and everyone shares the burdens as equally as possible. That doesn't happen if this runway is built. That doesn't happen.

Tonight you'll hear an awful lot of details, more details than I can give you, more statistics than I give you, because you've got a lot of people in this room that know this issue better than I do. But I don't think it takes 5,000 pages, I don't think it takes a Ph.D., I don't think it takes a brain surgeon to understand that building this runway before adequate and fair consideration and every single effort is taken to reduce the impact, the negative environmental impact, on the most densely-populated area in New England, one of the poorest areas in New England no matter how you measure it, one of the most racially-diverse areas no matter how you measure it in

T2.4.1

this country.

I came tonight to ask you to make sure that you stop this runway at this time because it's not fair and it's not right. Thank you for taking me out of order.

THE MODERATOR: Now we'll hear from City Councilor Paul Nowicki from Chelsea. He'll be followed by Jerome Falbo from Winthrop.

MR. NOWICKI: Good evening. My name is Paul Nowicki. I've been a city councilor in the city of Chelsea since 1991. I'm standing here on behalf of the people of Chelsea because for far too long, we've been taken advantage of and we are very angry, we are very upset, we are very worried. It started with the bridge in the '40s and the '50s and it went to, as Mr. Devellis will note, to MWRA that was stuffed down our throat and 42 other communities, and now this runway.

T2.5

T2.5.1

All of these things benefit the entire state and region, but instead we're the ones that take the full burden and it's

not fair, it's not proper, it's not right. We look at, and I'm speaking solely on behalf of the people in Chelsea, there have been no communities that's had to battle back from more problems than the city of Chelsea since the early 1900s, whether it be corruption, fiscal chaos, two conflagrations that destroyed blocks, 10, 20, 30 blocks of our community. No city has had to come back.

But you know what we've done since 1991? We've put professional government in place, we've balanced five consecutive budgets, we have a surplus of over 4 1/2 million dollars, we have state of the art new schools, our population is increasing. What we have is improvement to the city of Chelsea.

What issues we do face is quality of life issues, that is, of noise, of traffic, and of pollution, as that's everything this airport, this runway stands for. That's what we're worried about. We stand up here today talking about improving everything. Well, what has improved in the

city of Chelsea is the fact that our property values have gone up over 20 percent over the last few years, 20 percent. And if you look at a 1985 FAA study, it says for every decibel level increase, there is a 2 1/2 percent decrease in property values.

That is something that the city of Chelsea cannot afford, or we will go back to receivership and we're going to go back to being a part of either Revere, Everett, Boston, some other city, and as a city councilor, that frightens me because the people of Chelsea are indeed the true foundation, the poor, the middle class, the working class of our community, of our society. That's what we are in Chelsea.

We're not the multi-million dollar business owners. They live out in Newton and Wellesley and out west. They take millions of dollars off us and then go home. We're the people that make minimum wage. We're the people that have to sit in our backyards with our children to have a barbecue and a family outing and have planes going over our heads.

We're the people who walk our dogs on the front lawn and down Central Ave. and Eastern Ave. in front of our 40 million dollar school and have trucks heading to the airport, have the vans with passengers heading to the airport on my streets.

We're the city that has put in 20 million dollars of capital improvement, taxpayers' money, to improve our sewer system, but more importantly our streets and sidewalks which continuously gets destroyed by the overburden of traffic which a lot of it comes off that bridge through Revere, as Mayor Haas has said, right down Eastern Ave. hitting Webster Ave. off of Route 16, Central Ave. coming through our square, William Street when they cut through Charlestown. All of the cities are impacted by this.

The people of Chelsea cannot afford to take this hit again. We've replaced over 100-and-something homes which took away millions of dollars of taxes when they put that bridge through our city. And then when MWRA got stuffed down our throat, we were

paying more on water and sewer bills than our taxes.

And now we have fought so hard, come back from so many situations to have a city that is viable, that is alive, that is putting millions of dollars back into its streets and sidewalks. It's quality of life. Crime rates going down, trees going up, people coming to our schools. That's what's important. That's America. That's what Chelsea is all about, and the 28,000 people of Chelsea are with me and we are against 14/32. Thank you very much.

THE MODERATOR: Now we'll hear from Jerome Falbo from Winthrop, and following him will be Jerry Ogus, selectman from Winthrop.

MR. FALBO: Gentlemen, I am Jerry Falbo, chairman of the Winthrop Airport Hazards Committee. I want to thank you for having us here tonight and listening to our statements. I'm not going to be repetitive. There are many people that want to speak. We have a lot of younger people who have good ideas and have plenty to say. I want to make

T2.6

one comment and then I want to read a letter which was a pleasant surprise we received yesterday, and I think the rest of the audience should enjoy the contents of this letter.

I kind of resented the condescending point of view expressed a few moments ago and some facts by the head of the Massachusetts Aeronautics Commission. Let's face it, gentlemen, you remember what the true facts were back in 1990 when the study was done for the second airport by I can't remember his name. He's now a professor at Trinity College. But when he came out, he said the second airport should be at Fort Ayer. That was buried by Governor Weld. It never got off the table. You know that.

THE MODERATOR: Mr. Falbo, if you would make your comment.

MR. FALBO: That was a fact. I didn't mean that as a personal attack. I'd also like to say what the gentleman neglected to mention is within the next year, Governor Weld appointed a commission to study the

T2.6.1

regionalization of airports. They came back within six months to a year with a beautifully bounded edition recommending that's how we should go in the future. That was years ago, and Massport nor the commonwealth has taken any action on it.

T2.6.1 (cont.)

Let me get to the real point. We were pleasantly surprised yesterday by receiving a letter from Representative Edward J. Markie from the 7th District of Massachusetts, and the letter was directed to John P. Devellis, regional administrator, the United States Environmental Protection Agency, with a copy to Jane F. Garvey, administrator. I think the contents of this letter has such depth perception over it that it almost summarizes everything that everybody will say here this evening.

Dear Mr. Devellis: I am writing to express my opposition to the proposed expansion of --

THE MODERATOR: I don't mean to interrupt you, but if you're going to read the letter, we can put it in the record

rather than having you read it. Please highlight it in a couple of minutes and then you can put the letter in the record. T2.6.2

MR. FALBO: Let me say here, The construction of the new runway would expand Logan's capacity for operations and increasing current potential for future growth, but there are several reasons why the Environmental Protection Agency should advise the FAA against the implementation of runway 14/32.

These include the resulting increase in noise pollution and other adverse environmental impacts runway 14/32's ineffectiveness in alleviating delays and the lack of comprehensive progressive regional plans to utilize New England's regional airports.

I'm going to skip a couple of paragraphs in deference to your position, sir.

THE MODERATOR: Thank you.

MR. FALBO: And I'll get to, Massport projects that in a 37-5 million high

fleet passenger scenario, there will be approximately 250,000 annual hours of delay with the implementation of alternative 1A. On the other hand, if alternative 2 was implemented which omits the construction of 14/32 but includes peak period pricing, delays would amount to approximately 205,000. That's a reduction of 45,000.

Then he talked about low fleet conditions and high fleet scenarios. In the high fleet scenarios in which more planes are used and over-scheduling becomes a factor in place during peak times, runway 14/32 becomes more of a hindrance than an assistance.

T2.6.3

I am firmly convinced that we must examine closely the status of our regional aviation transportation system before we implement any new structure changes at Logan International Airport. It is projected that Route 128 and I-495 corridors will experience the commonwealth's greatest population increase as we approach the new millennium.

It is the responsibility of both the federal and the state governments to

devise a strategy that insures some of the burden at Logan is relieved by those regional commercial airports that would welcome increase in regular scheduled passenger service. I agree with Boston Mayor Tom Menino that a blue ribbon panel should be established to drive such a regional aviation transportation strategy. T2.6.3 (cont.) T2.6.4

We must consider the adverse environmental impacts on these communities surrounding this airport. The primary goal for its construction is to alleviate delays caused when Logan is burdened by heavy northwest winds. However, without a plan for the optimal use of our regional airports to alleviate these pressures from Logan, I cannot support the implementation of a new runway or any additional expansion at Logan Airport. My final word is this, and that is the EIS/EIR. It is irreconcilably inadequate and the secretaries should so find.

THE MODERATOR: I do appreciate you cutting your remarks short. Next we hear from Jerry Ogus, a selectman from Winthrop,

followed by John Nucci.

MR. OGUS: Good evening. I'm chairman of the Board of Selectmen from Winthrop and I know yesterday you heard from one of my counterparts. T2.7

THE MODERATOR: Just to make sure I've got your name right, could you say it again for the record?

MR. OGUS: Ogus, O-G-U-S, first name is Jerry.

THE MODERATOR: Thank you.

MR. OGUS: I'd like to see the focus shifted a bit here. We hear about things such as delays. What I think we really should be talking about here is we should be talking about people. I think we should be talking about people's health. I think we should be talking about the environment. I think that's what we should really be talking about, not delays.

Now, it defies, I think, our intelligence not to think that if you increase flights by a minimum of 70,000 flights a year and you talk about larger and

bigger planes, more people, that we're going to lessen the impact on the environment.

We know, just as East Boston knows, because the airport sits on Winthrop land and on East Boston land, we know what goes on out there every single day. We see the pollution. We know about the problems to the wetlands. We know about the problems to the clam flats. We know how it affects Bell Island marsh.

We see on our cars, in our homes, and what we breathe every single day, we see what impact the airport has on us, and there's no way that you can tell us that an increase in flights of larger planes is going to help the environment. I think that's where the focus should be.

How can we consider doing something like this without really having scientific evidence? How can we take a chance with people, with people's health, welfare, their very lives, their children's lives? How can we go forward on something like this without doing the necessary health studies?

T2.7.1

I was at a rally last week over at the state house and Senator Lynch from South Boston reported the results of a study there. He talked about the commonwealth of Massachusetts, and that South Boston had something like a 61 percent increase over the state average for breathing and respiratory-type ailments. Doesn't that say something? I think it says an awful lot.

T2.7.1 (cont.)

And before this is even considered any farther, I think what we really need to do is we need to go back and we have to do some really detailed analysis, and care about people and the health of people before we start talking about building more runways and having more people coming into the area.

In closing, I'd just like to say we have a detailed report from the town of Winthrop. We may have our unique situation where we're located, but I do know this from being around all of the surrounding communities and being as involved as we are in this process, that what we say is the same thing that they say in South Boston, the same

thing that they say in Chelsea and Revere and Dorchester and Mattapan and Roxbury, it's everywhere. People don't want this airport and tney don't want it because they have good old-fashioned common sense. Thank you.

THE MODERATOR: Now we'll hear from John Nucci.

MR. NUCCI: Thank you very much, and thank you for taking the time to come out to this community and hear comments right here in the impacted area. We do all appreciate that very, very much. T2.8

It's actually a pleasure to be before a group that has in its name environmental protection because if your mandate is to review environmental protection, I can't imagine it's going to take more than 30 seconds to determine that planes and runways don't protect the environment.

The people in this room have dealt for many, many years with Massport, with airports, with runways, with planes. My father stood before Massport and groups like

you fighting against airport expansion and here I am 25, 30 years later.

With all due respect to the people who are at Massport now, and they're good people, they're doing their job, if we allow them to build this runway, we remove all the incentive to look at the other alternatives. I guarantee you the game will stop, the process will stop. The other alternatives, the second airport, Hanscom, Worcester, and anything else will be off the table for a long, long time. We can't afford that. T2.8.1

Now, I've heard, and I've remained relatively silent as I've heard the criticisms of places and people like East Boston, Chelsea, Revere, Winthrop, and I've heard people, proponents of this runway, say that they are NIMBYS, that they're not in my backyard people, that they don't want it in their backyard.

Well, let me tell you something about my backyard. I'm a lifelong resident of East Boston and my backyard is this neighborhood, and in my backyard is this

hotel, other hotels, a racetrack, a couple of tunnels, an awful lot of traffic, three tunnels, an awful lot of traffic. We are not people who say not in my backyard. We are used to living with unpleasant things in our backyard.

But as I've heard said before, at some point, and the mayor said this quite well, at some point we have to say enough, and what you're hearing now is a group of people who are not trying to keep their community free of all urban pressure, of all urban negative effects. We understand. We live in an urban area. When I bought my house in East Boston after having grown up in my mother and father's house, I knew it was near an airport. I was aware of that. I knew there'd be airplane noise, but I'm not going to stand here and let you bring more airplane noise in.

I saw the news accounts of your hearing last night, and again, I do appreciate you having a second hearing in the neighborhood, and I'm reserving some comments

for them that I've also kept to myself. Last night you heard an awful lot of support for this runway from the Boston business community, the so-called pillars and leaders of our community.

You ought to understand that we all have motives for opposing this or supporting this. I've told you my motive is to improve the quality of life, to keep the quality of life for my family in East Boston. Those are my motives. The Boston business community folks should be ashamed of themselves. The Boston Chamber of Commerce, the Tourist Bureau, it appears as though their only important factor is getting customers into their business to spend money in their business.

They should not only be representing their business interests, as a chamber of commerce, as business leaders, they should be concerned with the quality of life in the city in which they work and do business, and they are not. To me, it is unconscionable that people don't live in this

impact area, come in here and root for a runway, drive back to their suburban homes, pour themselves a martini, and wait for it to happen.

I would ask you in closing to please fulfil your mandate, the very mandate that's in the title of your agency, environmental protection. Runways and planes don't protect the environment. Thank you.

THE MODERATOR: We have one more government official that wishes to speak, Juan Vega, president of the Chelsea City Council.

MR. VEGA: Thank you. I didn't come prepared to speak but I did want to take the opportunity and join my colleagues on the Chelsea City Council in also voicing opposition to this runway. I'm a lifelong resident of the city of Chelsea, and you mentioned, I'm currently serving as the president of the city council, and I just wanted to reiterate to you that the entire Chelsea City Council has voted and have taken steps to further the cause in terms of

T2.9

opposition to this proposal.

It does not represent anything good for our community. The information that was cited very eloquently by my colleague, Preston Galano, as well as Paul Nowicki, in terms of the impact and in terms of the things that we ask you to look into is essentially what I just wanted to reiterate.

I wanted to add the characteristics of this city council especially in light of the previous speakers mentioned that the business community is supporting this and so is their insinuation of the business community is that the rest of us aren't for business or the rest of us don't care.

In Chelsea's history, I don't think there has ever been a more pro-business city council or pro-business government which has been most responsible for Chelsea's turnaround. We have given unprecedented incentives to businesses to keep them in the community. We have taken unprecedented steps in terms of improving our schools, public buildings, improving our streets.

We have adopted a capital improvement plan which basically goes against some of our work with our constituents. The capital improvement plan says we're planning for five and ten years ahead of time so you don't get to fix your street in your neighborhood until it's time, until we've decided it's time in the plan. Those are the kind of steps that we have taken as a community.

And we very, very strongly support anything that enhances the community and enhances the business of the community because, in turn, that does improve the quality of life. This does not improve the quality of our lives nor of anybody in this room.

In terms of the impact, the massive negative impact that this will have on the quality of our lives, it is something that we ask and appeal to your sense of justice in terms of understanding, as was mentioned also by the previous speaker, all of the other things in your backyard, all of the other

things that we have to live with on a day-to-day basis, salt piles and trucks and oil tanks and asphalt plants, et cetera, et cetera, et cetera.

So I ask you all to take this proposal in that context. It's not just about a runway. For all of us, it's about all of those things combined and we ask you to look at that in that broad context in terms of what it's going to do to all the people in the surrounding communities.

Also, as was mentioned by my colleague, to measure the environmental injustice that this proposal represents, and the disproportionate impact that it will have in the surrounding communities given the economic, the socioeconomic of this community. T2.9.1

Let me also mention that for every single person that's here in opposition, make no mistake, there are 50 and a hundred and 150 neighbors that are also in opposition, and that is precisely what the president is looking to combat. This notion that

everybody, if they were really opposed, they would all be here, well, let me tell you something, there are people in my community and in surrounding communities that are afraid to come to a meeting like this, and there are people that can't come to a meeting like this because of other commitments.

Everybody that's here has taken time out of their personal life, a sacrificing they're making to come and speak to you this evening, but there are hundreds and hundreds of people whc just aren't going to come for a number of reasons, and that is precisely what the environmental justice strategy is that communities like ours have a lot of circumstances where we're not going to all come, not all 600,000 people are going to come in front of you, but don't wait for that. This is enough. These are the people that are telling you that they are here for their neighbors, they're here for their friends, their families, their children.

And it's really important again in terms of just understanding that the

communities we're dealing with are not going to be coming up here in great numbers, and these are the folks that are representing them. Thank you very much, and again, I appeal to your sense of justice to put a stop to this proposal and let them look for the alternatives and then take this up whenever, but no on runway 14/32. Thank you.

THE MODERATOR: We've exhausted the list of government officials who wish to speak. At this time I'm going to take a brief recess before we open the floor to individual comments. It's now 7:59. We'll reconvene at 8:05.

(Brief recess taken.)

THE MODERATOR: There are plenty of seats in the front row if you'd like to sit down. Once again, I remind people with signs if they would please hold them in a way that did not obstruct the view of anybody behind you. One more government official has signed up to speak. It's Rochelle Bennett. We'll hear from her, but before we hear from her, let me tell you what's going to happen

afterwards.

We will alternate between supporter and opponent, and in fairness, since all but one of the government officials spoke opposed to it, we'll start with a supporter. Also, there are far fewer supporters than there are opponents, as you might imagine. Each person will be strictly limited to the three minutes. We have enough people now that even at three minutes we will go way into the night, so I will hold people to a three-minute maximum.

At two-and-a-half minutes I will tell you to wrap it up. At three minutes, I will tell you to please take your seat and the next person should start right away. Any applause will take away the time from the next person. So first we'll hear from Rochelle Bennett.

MS. BENNETT: Thank you. My name is Rochelle Bennett and I'm a city of Chelsea councilor. I was not going to speak this evening but I have to speak. Chelsea, as you know from the list of previous speakers from

T2.10

the council, is a community that has gone through a lot as have all of the communities here, and the reason I got up to speak is the health impact isn't being addressed as much as it should be. T2.10.1

Chelsea not only has the Tobin Bridge, it not only has Logan Airport, we have salt piles, we have truck traffic that number in the thousands per day through the city of Chelsea to get back and forth to the airport. The salt piles that Massport has in Charlestown also affect Charleston, Chelsea, and East Boston. The salt piles that Chelsea has affects Charlestown, East Boston, and Chelsea.

I happen to live under runway 15/33, and it has impacted my health. I am one of the victims of what can happen when you live in a community that is so heavily impacted environmentally as Chelsea is. When I became the District A councilor, I couldn't believe the area that I got with all of their environmental problems we had there. I have lived there for 13 years and I am one of the

victims of living there.

THE MODERATOR: Now we'll hear from Jim Kloche, Greater Boston Chamber of Commerce. Following Mr. Kloche, Kathy Callahan.

MR. KLOCHE: Thank you very much and thank you for holding this hearing. I'm Jim Kloche. I'm the director of economic development for the Greater Boston Chamber of Commerce. The Greater Boston Chamber did a study a year ago in which -- I live in the city of Boston -- in which we identified the five industries that contribute the jobs to our economy, health care, high tech., higher ed., financial services, and tourism. All of these industries depend on Logan Airport. All of these industries bring customers and workers in and out of Boston every day. T2.11

We believe that we need a two-step approach to address the air travel issue. Step one is to do more with regional airports. Step two is an expanded 14/32. The chamber believes that if we can take these two steps, we will set the stage for T2.11.1

job creation to 2030 in the greater Boston area.

If, on the other hand, we do not, we risk threatening the competitive position of those five industries, high tech., higher ed., health care, tourism, and financial services. Those industries represent half the jobs in our area, and they support another 30 percent of jobs. Again, we ask for your consideration of this proposal. We appreciate your holding the hearing tonight, and we wish to be recorded in support of both regional airports and 14/32.

THE MODERATOR: Next will be Kathy Callahan. Following Ms. Callahan, we'll have Glen Morse from Continental Airlines.

MS. CALLAHAN: Hi. My name is Kathy, with a K, K-A-T-H-Y, Callahan, C-A-L-L-A-H-A-N, Bunker Hill Street, Charlestown. T2.12

THE MODERATOR: Hang on a second. We'll lower the microphone for you.

MS. CALLAHAN: I say that where I live because there's another Kathy Callahan in Charlestown and I've gotten her into all

kinds of trouble. Congressman Capalano said that you don't have to be licensed to understand this issue, but Preston encouraged me to speak about a couple of things because I am licensed, and in a little bit I'd like to speak about overwhelm, overload, overkill, and homework problems in a couple of minutes.

This is an editorial that appeared in the Herald, a piece of it, and it's hard to read my handwriting so I'm going to read it. I have lived on two battlefields. Before moving to Bunker Hill Street in Charlestown, I lived in Lexington. Bottom line, based on living in Lexington and going to meetings, it's a class issue.

Charlestown is sacred turf. So is Lexington. I happen to want to stay in Charlestown and I really would like to buy a home there this year, but if Massport builds the runway for the conventioneers, I'm moving out. Quality of life issues are important to me. I'm a writer about attention deficit disorder. Even if you don't believe in attention deficit disorder, you all know

people here who are easily affected by noise. Everybody does.

By way of example, I'm originally from the New York area. New York City is a study in contrast. That's also a world-class city. Research shows that the New York City economy and tourist trade isn't suffering because planes fly into and out of Newark, JFK, and Laguardia. All of the runways that service New York City are located 15 to 20 miles outside the city.

Individuals and companies, as far as I can tell, aren't pulling up stakes and moving out because they have to drive into New York City. New York City had the foresight not to build an airport smack dab in the middle of the city where residents sleep, read, and recreate and have barbecues.

Massport and the governor have a lot to learn from New York City and the people in this community who have to help their kids with homework every night. How hard is it to get a kid to settle down and read? Add all these planes over their heads,

it's going to be a nightmare.

Across the board, those who support the runway mostly don't live in the area. I would love to stay in Charlestown, I love my neighbors, and I put together a petition that I will circulate eventually with the help of CARE because I'm a member of that group. T2.12.1

THE MODERATOR: Please wrap it up.

MS. CALLAHAN: It's in support of Representative O'Flaherty and Delio's legislative bill 1576 which opposes the runway. Thank you.

THE MODERATOR: Next we'll hear from Mr. Glen Morse from Continental Airlines, and following him will be John Tardif from Winthrop.

MR. MORSE: Thank you. Good evening. My name is Glen Morse. That's M-O-R-S-E. I'm senior director, industry affairs, for Continental Airlines. Prior to joining Continental Airlines 14 months ago, I was serving as managing director, regional operations, for the Air Transport Association. ATA is a trade association for T2.13

all the major U.S. passenger and cargo airlines.

In my role with ATA, I worked closely with FAA and Massport to implement environmentally acceptable air traffic and airport improvements to reduce the historically high level of delays at Logan. As a result of this involvement, Massport asked me to co-chair the air side review committee which was formed to insure active and extensive community involvement in the planning and environmental processes associated with the Logan air side improvements planning project.

The air side review committee was comprised of community and business representatives, and served as a technical liaison between Massport and the many diverse constituencies around Logan. In order to further assist the community in the review process, Massport allocated funds to the Logan Community Advisory Committee for an independent consultant to analyze and critique the technical results of this study.

It is important to note that the CAC's consultant did not dispute, and in fact accepted, Massport's technical findings on the operational benefits of the environmental analysis which serves as the basis for this environmental documentation. The purpose of this introduction is to describe briefly the extensive coordination process which Massport used to foster understanding of the various components of the proposed Logan air side improvement project.

Continental Airlines supports the implementation of all of the airfield improvements and the instrument approach minimums reductions contained in Massport's preferred improvement alternative 1A. To repeat, alternative 1A consists of the mid-field taxiway, the minimums reduction for runways 15 right, 22 left, 27 and 33 left, extension of taxiway D, as in Delta, realignment of taxiway N, the southwest taxiway optimization, and the unidirectional runway 14/32.

For the record, we concur with

Massport's decision to exclude implementation of peak hour pricing from the preferred alternative at this time because its limited delay reduction benefits as identified in the draft EIR/EIS, its adverse economic impacts, and a firm belief that it does not address the primary causes of delay at Logan; that is, wind and weather.

We support all of the taxiway improvements, most notably, the mid-field taxiway, because they will enhance the safety and efficiency of aircraft movements on the airport. These efficiency gains translate to environmental benefits as stated in the draft EIR/EIS -- T2.13.1

THE MODERATOR: Please wrap it up.

MR. MORSE: -- because they reduce taxi times and consequently reduce engine and noise emissions. Finally, Continental supports the construction of unidirectional 14/32. Everyone acknowledges that 14/32 is not a silver bullet for all delays. However, in good weather when the winds are from the northwest like tonight and delays are caused T2.13.2

because there's only a single arrival runway, this program will serve to eliminate those delays.

THE MODERATOR: Thank you very much, sir.

MR. MORSE: This is a problem that we have now and will continue to be a problem in the future.

THE MODERATOR: Now we'll hear from John Tardif, followed by Gail Visentin.

T2.14

MR. TARDIF: Mr. Moderator, I'll try to speak quickly in my brief time period. My name is John Tardif, T-A-R-D-I-F. Massport, in their opening statement, made reference to an injunction. You may be aware that 1974 through 1976 that court order went into effect. It indicates Massport shall not be allowed to further construct runways at Logan Airport.

That, sir, was signed on with agreement by Massport and the secretary of environmental affairs from this commonwealth. Those parties agreed at that time that there was irreparable harm, irretrievable,

irreconcilable, permanent, irreparable harm. No runway was built. The economy blossomed.

It's about the environment. It is about people, it's about churches, it's about neighbors, it's about quality of life, but it's also about a reasonable, fair, accurate evaluation of the Massport report. The whole thing surrounds the parable of 120. You're all aware of what 120 is for aviation people. To these people, it means a plane every 30 seconds.

When that injunction went into place, there was only 200,000 planes, I knew that in 1974 and 1976, that flew in and out of that airport. Now today there's 539,713 planes this year. With a marginal 4 percent increase, there will be 600,000 planes next year. That is a three-fold increase. Has the environment corrected itself? Has there been a self adhesive on this band-aid?

The problem with the EIR is Massport is myopic. They see 14/32 as the exclusive center of their report in that EIR. Oh, well, those runways are already there.

We're not taking into account the effect of that whole body. That's why the science is skewed. It is junk science. I ask you to disregard it.

Very briefly on that rise in airport traffic. We can reasonably expect that with the runway construction they will be able to increase, even with their 75,000 number offset by the use of the new configuration, to reach 120.

THE MODERATOR: Please wrap it up.

MR. TARDIF: One twenty will be 863,000 planes over this town, over this community, over the million people that stretch from north and south. We can't take 120. It doesn't fit in an inner-city airport. As to the other arguments of delay, that's been refuted by a 3 percent accuracy taking out cancellations which should not be in there. And lastly I say, if tourism is an endangered species, then we will not be sacrificial lambs to indentured servants of tourists.

THE MODERATOR: Ten seconds will be

subtracted from the next opponent's speech. Gail Visentin is next.

T2.15

MS. VISENTIN: My name is Gail Visentin and I'm British Airways director of passenger and cargo operations at Logan. I was born in Chelsea and I lived the first 15 years of my life in Revere. British Airways has been serving Logan since 1952, and is

T2.15.1

sensitive to concerns about noise at Logan. The airport improvement program proposed by Massport is in the interest of all citizens around Boston because it promotes airfield safety and operational efficiencies.

In the interest of time, I will submit a written testimony, and I thank you for the opportunity to be heard this evening.

THE MODERATOR: Next we'll hear from Robert Driscoll, Sr. Following Mr. Driscoll, we'll hear from Terry Trainor from U.S. Airways.

T2.16

MR. DRISCOLL: Good evening. My name is Bob Driscoll, Sr. That's D-R-I-S-C-O-L-L. Please be sure and put down senior because you heard from my son last night who

speaks for himself and he's a member of the Board of Selectmen. I'm the vice chairman of the Winthrop Noise Air Pollution and Airport Hazards Committee.

There's been some statistics and some statements made that I would just like to add some clarification to. Last night, one of your speakers mentioned that Logan needed a fourth runway. Logan Airport has five runways. What Massport is asking for is a sixth runway, and I think this is very important when you realize that the other major airports in our country, most of them do not have five runways. T2.16.1

The three airports that service New York City all have four or less runways. The three airports that service our nation's capital have three runways at the best. I don't know why they think they have to have a sixth runway at Logan Airport when the newest airport in the United States at Denver only has five runways. They also have 50 miles of nothing around them so that they don't bother anybody.

Now, it's important to keep this in mind because Delta Airlines just announced I believe yesterday that they're going to add another 18 flights out of Boston. Delta Airlines' major terminal is Atlanta. Atlanta is also the hub of the southern travel. They have four runways down there. I think that they need to be asked why they think that their answer to their problem is another runway when everybody in the United States has wind. Even in Denver and Iowa, they have wind but they don't have to be building new runways to accommodate it.

Mr. Blute came to Winthrop a few months ago to try to talk us into believing that 14/32 was good for all of us. We, of course, rejected his ideas, but he made some very interesting statements. It was a meeting that went on for four hours and it's all on tape courtesy of WCAT which is our cable network in Winthrop, and if you'd like a copy I'll be glad to give it to you.

Near the beginning of it, Mr. Blute made the statement that we know that Green

and Manchester will reach full capacity in I think he said a couple of years. He gave a time frame. About an hour-and-a-half later, forgetting that he had said that, I guess, he made a comment in regard to somebody else, in which -- I believe it was Mr. Blute -- one of them did make a comment that even if they don't get 14/32, that Logan will increase at 4 percent per year. T2.16.2

THE MODERATOR: Please wrap it up.

MR. DRISCOLL: In other words, gentlemen, other airports reach full capacity but Logan never reaches full capacity. I'll wrap up by saying that this is the double talk that we have had to tolerate not only from this current management at Massport but for the last 25 years, and this is why we're so incensed at their idea that they can do this. In the planning board office in the town of Winthrop on the second floor of town hall --

THE MODERATOR: Thank you, Mr. Driscoll.

MR. DRISCOLL: -- they say on the

plaque that poor planning on your part does not necessarily cause an emergency on our part. Unfortunately, it has caused an emergency because their poor planning is creating havoc for this entire area.

THE MODERATOR: Thank you, Mr. Driscoll. Next we'll hear from Terry Trainor from U.S. Airways, and he will be followed by Richard Rodes.

MR. TRAINOR: Hello. My name is Terry Trainor. I am the general manager for U.S. Airways here locally at Logan, an airline which employs more than 1150 people locally at Logan, and who --

T2.17

THE MODERATOR: I think you need to speak closer to the microphone, Mr. Trainor.

MR. TRAINOR: I represent an airline which employs more than 1150 people locally here at Logan, many of who live in and contribute to the local economy and the communities that are represented here tonight. U.S. Airways, which carried more Boston passengers than any other airline, strongly supports the development of a new

5,000-foot runway and other air side improvements designed to reduce delays at Logan International Airport.

As you know, for many years restricted airfield capacity at Logan has resulted in extensive delays for our Boston passengers. Because of the unbalanced nature of Logan's current airfield layout, the amount of usable runway capacity changes dramatically depending on the direction of the wind can change.

As a result, not only does Boston rank sixth in delays in the U.S., but the occurrence and severity of those delays are particularly unpredictable. In order for U.S. Airways and other airlines to provide reliable and affordable air service, it is important that we are able to operate efficiently. Current airfield limitations at Logan do not permit efficient operations. The resulting delays are costly to the airlines, and also costly and inconvenient for our customers. T2.17.1

As with other major cities,

Boston's future economic health, while dependent in part on having reliable air transportation links to national and international markets, many other cities including Atlanta, Miami, Philadelphia, San Francisco, and Seattle are addressing this challenge by improving runway capacity. To remain competitive, Logan must move forward as well.

I'd like to submit comments from our executive office which also represents my view. Thank you.

THE MODERATOR: Thank you, Mr. Trainor. Now we'll hear from Richard Rodes. He will be followed by Ed Freney from American.

MR. RODES: Thank you. My name is Rick Rodes, R-O-D-E-S. I am chairman of the Public Relations and Citizens Activity Subcommittee of the Winthrop Airport Hazardous Committee, a Winthrop airport issues resolutions activist, and I'm president of CARE, Communities Against Runway Expansion.

T2.18

But most importantly, I'm here because I'm a citizen whose family lives very close to the airport just down the street from one of the runways. Every day of my life and my family's life, we are impacted by Logan Airport. Basically, the quality of our life I have seen change dramatically especially in the last few years. The pollution, the impact of overflights, and the noise is just getting worse.

I won't repeat a lot of the things that everybody else has said and said probably far better than I, but I just brought an illustration for the big picture is this is Massport's 75th anniversary newspaper supplement, and in it they have a very nice map that shows Logan Airport overlaid by Chicago-O'Hare, Dallas-Fort Worth, and Denver.

And Boston-Logan, which serves about 25 million people, over 25 million people, sits on 2500 acres. Comparing that to Denver Airport, which serves 31 million people, just 6 million more than Logan

granted, but not basically on the same scale, that sits on 33,000 acres, over ten times more than Logan.

Think about the impact on the environment of all the traffic that goes into Logan, all the airplane traffic, compared to the same roughly capacity that goes into Denver and Fort Worth. That concentration, and that's what people here are saying, that this is a small urban airport. Denver would cover a range from Revere, Winthrop,, Boston, Chelsea, East Boston, Charlestown, Everett, Roxbury. That is how large Denver is.

We are having roughly the same amount here in Boston. Enough is enough. This is at capacity. I'll wrap up simply by saying on behalf of the Airport Hazards Committee in Winthrop, the Winthrop Air Activities, the people of CARE, my two young children live right beside the airport and my family, I ask you, I beg you, I implore you, and if I may be so bold as a citizen, I direct you to do your job and protect us, protect the environment, please protect us.

Thank you.

THE MODERATOR: Now we'll hear from Ed Freney from American. He'll be followed by Richard Dimes.

T2.19

MR. FRENEY: I'm Ed Freney, the general manager from American Airlines here at Logan Airport. I'm here tonight to underscore American's support for the Massport air side improvement project. We believe that a new unidirectional runway for regional aircraft will benefit all of Logan.

T2.19.1

The new runway will help reduce delays at Logan and allow the airport to operate more efficiently when the winds are northwesterly. This enables the airport to operate a three-runway configuration that is required to handle the demand. A plane that is late in leaving Logan likely will be late in arriving at its destination, and whether we talk about a complex, intensive hub and spoke operation or a tightly-scheduled point between networks, it doesn't take much to throw an entire day's schedule out of whack.

As delays increase, the costs of

providing reliable schedules tend to rise even faster which can result in higher fares, and as anyone who has experienced a crowded, chaotic terminal during a severe weather event knows, any time an airline's capacity is restricted, the quality of service we can offer our customers declines dramatically.

Improving the efficiency of an airline's operation at Logan will also enable the carrier to create much less environmentally-offensive product. With less waiting time on the ground, we'll definitely reduce fuel burning emissions. American has a long, rich history in Boston. We began service back in 1927 with a non-stop flight to New York. The aircraft was a single-engine Falker and it carried six passengers, a pilot, a co-pilot. It took two-and-a-half hours to reach New York.

THE MODERATOR: Excuse me, Mr. Freney. Please everyone, let's keep the catcalls and comments to yourselves. This doesn't add anything, and let's be civil and let each speaker speak. Even though they may

not agree with your opinion, they are entitled to some civility. Continue, Mr. Freney.

MR. FRENEY: Today, American operates more than 70 flights daily, carries thousands of people to destinations throughout the United States, Puerto Rico, London, England, and Paris, France. On June 1st, we'll celebrate two major events at Logan. We'll launch non-stop service to Seattle using a new, next-generation Boeing 737-800, and we'll mark the 40th anniversary of the very first jet flight at Logan.

Today, American is a top carrier at Logan with four-and-a-half million passengers coming through our gates each year and nearly over 2500 American employees that call Boston their home. We need business in Boston. Not only is it our slogan but it's our commitment to providing quality service to our passengers and customers. Building the new runway will help us live up to our commitment. It's good for Logan. It will be good for the airlines that serve Logan.

THE MODERATOR: Next we'll hear from Mr. Dimes, and then we'll hear from Sean Donahue from United.

T2.20

MR. DIMES: My name is Richard Dimes, D-I-M-E-S. I live in the town of Winthrop on Johnson Avenue which borders the airport. In the year 1970, I was then chairman of the Winthrop Board of Selectmen and testified at hearings just like this in opposition to a Massport plan to add two parallel runways to Logan Airport.

At that time, after numerous hearings, protests, and demonstrations as we have gathered you see here tonight, then-Governor Sargent rejected the plan, and his statement at that time was that Logan had reached its capacity and that the environmental impacts on the surrounding communities was such that it could not continue on or enlarge this airport to give it more detrimental effects to us.

Now, I have lived at this location for 29 years, and in all that time I have looked over at the airport and seen the

capacity, I have seen more aircraft coming in by the hundreds or thousands, and I have seen Massport do not one iota to solve our problems.

You have heard mentioned that they were going to take Rhode Island airport, they say Manchester, New Hampshire. They are not Massachusetts airports. They are states other than ours. They're just smart. They're enlarging and robbing our customers, I suppose, but case in point is this. We cannot tolerate -- I'm not going to be around too much longer, I've been around a long time, but I don't want the future generations -- we are a proud community, we have a lot of assets that add to our will to live there.

We don't want to have it affected constantly by an airport who feels they can go unlimited because they don't want to face the fact that other areas of Massachusetts might have to shoulder the burden that we have been shouldering for the last 40 years. I'm a hundred percent against 14/32. Thank you. T2.20.1

MR. DONAHUE: Good evening. My name is Sean Donahue. I'm the city manager with United Airlines in Boston. United has served Logan Airport for 54 years and we employ over 1500 employees here at the airport. United supports the new runway for three critical reasons. T2.21

The first reason is safety. Safety is United's number one core objective, and while Logan is a very safe airport, it is clear that this new runway will make it even safer. In our industry, safety is something we can never be satisfied with nor complacent with, and this runway will improve safety at Boston and at Logan Airport. T2.21.1

The second reason is service. There's no secret that Logan is a very delay-prone airport. That creates great disservice for our customers, and this new runway, in reducing delays, will allow the airlines to serve our customers better and meet their needs. T2.21.2

The third reason is air quality. Again, the delays cause the airlines in many T2.21.3

cases to be out on the runways for 45 to 60 minutes before we're allowed to take off. That obviously creates air quality problems and pollution problems. The new runway will alleviate those issues and be able to improve the pollution in the area and to improve air quality. T2.21.3 (cont.)

In summary, we support the runway for three critical reasons. It will make Logan safer, it will allow us to serve our customers better, and it will improve the air quality and reduce the pollution. Thank you.

THE MODERATOR: Thank you, Mr. Donahue. Next we'll hear from Mr. Ronald Taylor from Charlestown, and he'll be followed by Scott Godfried from the Airline Transport Association.

MR. TAYLOR: My name is Ronald Taylor. I'm a member of the Community Advisory Committee and a member of the technical airport research group. As a technical person, I've listened to this safety issue as it refers to lowering of approach minimum. It is not a safety issue. T2.22

It is an issue of more aircraft being allowed to arrive in more severe weather. The safety issue is the worst the weather, the tougher it is to land.

The next issue, 14/32. The parties from the Federal Aviation Administration and Massport have yet to provide a traffic pattern for that given runway, and to explain what the approach will be, what type of an approach there will be, how the aircraft will be directed to that given runway as it is referred to the combination of 33 left 27. It appears that 27 and 32 will be a conflict and there will be a safety issue. T2.22.1

I would ask Mr. Pugsley to oppose and reject the EIR/EIS for this reason. There is an underlying portion of this inside the 1976 restriction on build-out at Logan. The extension of runway 9, the extension of 4 left, if you allow Massport to have their way, that restriction is lifted and we'll now have runway 9/27 10,000 feet long, runway 22 right or left, 10,000 feet long, and the number 120 operations per hour is fictitious.

It is a fictitious number that Massport would like attain by having 14/32. It is a catastrophe environmentally waiting to happen by allowing them to increase to 220 operations per hour. Thank you very much.

THE MODERATOR: Next we'll hear from Scott Godfried from ATA, who will be followed by Steve Stoddard from Winthrop.

MR. GODFRIED: Thank you. My name is Scott Godfried. I'm the director of the eastern region for the Air Transport Association of America, and we represent 23 major air carrier operators in the United States. Today I am speaking for these airlines, their respective employees, and the passengers and shippers who use Logan International Airport. T2.23

ATA and the airlines serving Boston Logan Airport support the Logan air side improvements planning project in its entirety. As a partner with Massport, local officials, and community representatives throughout the comprehensive process leading to the submission of the draft environmental

impact statement and environmental impact report, we believe that the benefits to be garnered by all parties weigh heavily in support of the project.

The present operational posture within which the airport operates results in significant delays during certain wind conditions. The efficiency of the airport's operation is severely compromised during these times due to the lack of a runway configuration compatible to the operational requirements otherwise addressed by the available runways in all other wind situations.

The obvious solution to this problem is the implementation of Massport's plan which includes the construction of runway 14/32. The ATA cannot stress enough the importance of the reduction of the current level of delays which plague Boston Logan Airport, and the corresponding level of service which we are able to provide to our passengers and shippers utilizing the airport.

T2.23.1

It is our position that the implementation of the entire project will lower the overall noise impact on the surrounding communities. This is due to the unidirectional orientation of the new runway and the efficiency gained which will cause a reduction of delayed late-night operations which currently impact citizens at the most intrusive time of the day. T2.23.2

In fact, tonight I think you're going to see this brought to bear on that example precisely. Right now we are running anywhere up to two-and-a-half hour delays at Boston due to the current situation, and the airlines will be operating later schedules.

Additionally, the air traffic system and pilot operational safety benefits will be realized. A lessening of fuel emissions from delayed aircraft on the ground will also result in associated economic benefits for the greater Boston area will be gained.

THE MODERATOR: Please wrap it up.

MR. GODFRIED: In the interest of

time, the ATA will submit a more detailed presentation of these and all the pertinent items via a written submission to the appropriate state, the MEPA, and the federal FAA agencies. Thank you.

THE MODERATOR: Thank you. Now we'll hear from Steve Stoddard. He'll be followed by Richard Salinni, East Boston.

MR. STODDARD: My name is Steve Stoddard and I'm from the town of Winthrop. I'd like to start off by thanking Rochelle Bennett for her courage in explaining what she did this evening. It was critical to the whole idea of the environmental protection that the neighborhoods and the communities surrounding Logan Airport need from you. T2.24

I'd like to open by saying the EIS, as currently constituted, should be thrown out and reworked with an independent group and be sent back to the public for further comment. As a former frequent business traveler, not once have I thought about the delay time that I was going to encounter at any airport in the United States. It did not T2.24.1

influence my ideas of going to a city to make money even when it was San Francisco who is the number one delayed airport in the country.

I'd like to bring up a little note that some people here should know about about Massport's concerns for our health and the wellness of our families. Somebody from the town of Chelsea had called Massport regarding a move that they had made for their child. They had moved so that the child could have an easier time sleeping as the child is severely autistic. When they brought this up to Massport, Massport said they would look into it.

This week, they received a letter from Massport. The letter enclosed in it had a Wall Street Journal article telling of medication the child should have at night so they could sleep better. We do have copies of it.

Over the next five years, Massport has stated that the flights over my town would be reduced. When asked what the

T2.24.2

impacts of 10, 15, and 20 years are, they have been unable or unwilling to answer. That is totally unacceptable. They promise that the new runway will be unidirectional. The FAA makes that decision, not Massport. T2.24.2 (cont.)

The main reason they want 14/32 is to reduce delays. There is conflicting data that shows Massport may be overstating the delays at Logan. I have asked for a break-out of the reasons for delays but have seen nothing to spell them out. What perçentage of the total delays would not be affected by any new runway; i.e., mechanical delays at the airport, pilots out sick, or flights delayed and then canceled for snow reasons? T2.24.3

Massport has not even followed what the needs are in filing a complete EIS. Below are a couple of items that are severely missing from the document as far as I am concerned. They are all from Chapter 6 of the EIS contents. Section 1502-1, the environmental impact statement shall inform decision-makers and the public of the reasonable alternatives which would avoid or

minimize adverse impacts or enhance the quality of the human environment.

THE MODERATOR: Please wrap it up.

MR. STODDARD: We have seen nothing of that nature. The environmental impact statement should present the environmental impacts of the proposal and the alternatives in a comparative form, thus sharply defining the issues and providing a clear basis for choice. We have seen none of that. T2.24.4

I am advocating enclosing a comprehensive up-to-date study showing all alternatives that are available. We should be looking at Otis Air Force Base, Worcester, Green Field, Hanscom, and further regionalization as well as a new airport to develop a plan that compares what is the best long-term strategy, not a quick, short-term fix.

THE MODERATOR: Thank you, Mr. Stoddard. Richard Salinni, please.

MR. SALINNI: My name is Richard Salinni. I live in the Jeffrey's Point neighborhood of East Boston. I've lived T2.25

there for 47 years. First off, what alarms me the most -- I mean, I could tell you about noise all day long. I mean, I sleep like three hours a night, but what alarms me the most, in my neighborhood of East Boston, they tell me -- I heard Peter Blute, it come right out of his mouth, that there's going to be little, if no, effects on the Jeffrey's Point neighborhood. T2.25.1

Well, I beg to differ with him. According to his chart in Volume 4 of the environmental draft, Appendix M, Table DM1-8, this is on VOCs, right now in 1999, you're around a level of 200. With a higher build in 2010, it goes to 448. There is no place close, not even Eagle Hill, which is going to get 21,000 more flights. They only go to 372 which is still damn high.

I want them to explain to me how they think that goes to 448. Is it something to do with maybe the breeze because these planes have to take off into them that will blow the VOCs back into the community and over the brand new park that we fought 20

years to get? They gave us six acres of park land when they took 71 from Wood Island Park, and now they want to pollute it.

The figures which I gave you which is the highest in the entire chart does not take into consideration background levels which is three tunnel vent buildings, an L Street power plant, and there's also a power station, the boiler plant on the airport. It doesn't even take into consideration those levels. That's number one.

Number two, cost. They talk about cost in delays. Let me tell you about costs. Every time I leave my house it cost me. Did you see this traffic jam out here tonight? I try to get to Revere and it used to take me 15 minutes to get to Revere. It can take me 40 minutes to get to Revere on a Friday night. It's insane. You're talking about costs? It costs me between gas and the insurance, my insurance rates are one of the highest in the state because every time a rental car in the airport gets into an accident, guess whose insurance it counts on?

Mine.

You know the VOCs that come down and spray a nice layer of dust on everything? Well, that nice layer of dust causes me to have to leave my beautiful four-foot slider that I got a beautiful breeze all summer long that I cannot enjoy. It costs me in air conditioning along something like $250 including another hundred on insurance and a hundred extra for gas. What's it cost me? Four hundred and fifty to $500. How do you like that for cost? Times how many people? They talk about costs?

THE MODERATOR: Please wrap it up, sir. T2.25.2

MR. SALINNI: Three, what are they doing to increase use of other airports? They recently hired -- in the March edition of the Airport Journal it says they hired a Wes Harper from Boeing Corp. And what are his duties? The Airport Journal says he would focus on attracting new international airline service to Boston, to Logan.

In wrapping up, I'd just like to

say I seen an interesting anti-smoking commercial this morning at 5 o'clock on TV where it showed elders dying of smoke and children picking it up, and the bottom line was, don't take it personal, it's just big business without a conscience. Thank you.

THE MODERATOR: I'm sorry. I didn't announce the next speaker. I apologize if I mispronounce this name. Joe Palenza. Following him will be Karen Madalina from East Boston.

MR. PALENZA: Good evening. I'm a lifelong resident of East Boston, the Eagle Hill area to be specific. I'm also the chairperson of the East Boston Land Use Council which is one of the oldest councils and committees in East Boston. On March 25th, we had an invitation for Massport to come to our meeting. Not only do we represent the East Boston Land Use Council, we represent the whole East Boston community. At that time, Massport refused to come to our meeting, without any notification, without giving us the reason why, and I think we need

T2.26

an apology for that.

The East Boston Land Use Council voted to oppose the building of runway 14/32, the center field taxiway, and the lowering of the minimum of the height of the approach. Also, the East Boston committee is basically coming closer together on this because at the meeting at Spinelli's that Massport came to, everybody was listening to Mr. Blute going on and on about his rhetoric, whatever he was talking about, I really didn't understand him. T2.26.1

But anyway, I have to thank Mr. Blute and Mr. Cellucci for one thing only, and this is the only time you'll see me thanking them. That's for bringing the East Boston community together more than ever before since I've been around. And also, I want to leave a message for Mr. Cellucci. We do sign your paycheck.

THE MODERATOR: Thank you. Next we'll hear from Karen Madalina, and she will be followed by John O'Connor.

MS. MADALINA: My name is Karen T2.27

Madalina. I'm chairperson of the Jeffrey's Point Neighborhood Association. I'm on the Green Way Council, East Boston Land Use Advisory Council. I'm a lifelong resident of East Boston. I'm opposed to 14/32 and the center field taxiway. The Jeffrey's Point Neighborhood Association had a meeting in February. The Massport Authority came and gave their presentation. Tonight is my fourth time listening to their presentation, and the more they do it, the better they get. T2.27.1

If they had been at the East Boston Land Use Council, then that would have been my fifth time. They are using divide and conquer strategy to try to divide this community, and as Joe said, it hasn't worked. We think that there are other options to runway 14/32 and the center field taxiway. This is also the Jeffrey's Point Neighborhood Association who voted to oppose it. There were 150 people there.

The communities should not be penalized for Massport Authority's poor planning, and them not taking a long-range

approach. Their band-aid approach is unacceptable. We're concerned about the quality of life issues, the environmental impact.

I'm going fast because I just want to reiterate everything that all the other people that are here this evening that have spoke about the environmental impact. We're concerned about the quality of life. We want environmental justice in our community. They talk about soundproofing, but there's noise, air quality that we're concerned about, the health hazards particularly to the elderly, the children. T2.27.2

I made telephone calls to get people to come to this meeting. I spoke to mothers who are concerned, their children have got ear infections, asthma, the elderly with the breathing problems. Dollars cannot -- I'm hearing from all the business people about the cost of dollars. Well, the cost of dollars cannot -- I'm getting nervous now -- but the cost of dollars cannot take the place of the quality of life and the health of the

people that live in our surrounding communities.

One thing that people have said, Logan Airport is like a five-pound bag. You cannot take ten pounds and stuff it into a five-pound bag. We demand environmental justice.

THE MODERATOR: Please wrap it up.

MS. MADALINA: And I'd like to say that the draft EIS and the EIR is inadequate. They use outdated studies and the figures that were used, the FAA modeling did not adhere to the qualifications. Lack of alternative studies. What about Hanscom Airport? I read in the Boston Globe that Blute talked about Worcester Airport. He never mentioned Hanscom Airport. There are other alternatives. T2.27.3

They also take credit for Manchester, using Manchester, Providence. The reason why people go there is because the airlines offer cheaper fares. You can go from Manchester Airport to Texas for $200, whereas if you use Logan Airport, it's $500.

Again, we want environmental justice.

THE MODERATOR: Thank you, ma'am. Now we'll hear from John O'Connor.

T2.28

MR. O'CONNOR: I'm John O'Connor. I'm part of the CARE coalition. I'm here to lend my voice to the neighbors to say no, no way, never, no more to 14/32. Let me just say that I do environmental technology for a living. If anyone ever wants to get bored out of their minds, I have three books I've written on the topic, so I know something about these environmental impact studies.

And I'll tell you, this study isn't worth the paper it's printed on. This study is, at best, intellectually dishonest, and at worst, it's a book of half truths and lies. The CARE coalition is going to submit a very detailed people's environmental impact study to give the neighbors a clue as to what's really going on because this doesn't do it.

But I'll tell you, if you look at the numbers, it reminds me of a book I read in college in a statistics course. It was called How to Lie with Statistics, and I'll

just walk you through some of it and you'll get the detailed written comments later because you can't do it justice in three minutes.

But anyhow, one is, you know, there's talk about the delays. Well, if you really read the numbers in here, the delay situation has gotten better in the last few years, not worse. Number two, if you read FAA statistics, they say there's only a 3 percent delay factor. Massport is saying it's 20 percent. Where does the truth lie? T2.28.1

If you look at the details, this only solves the congestion problem for five years. They're not being intellectually honest about one fact here. They're building the capacity of this airport, and all the studies that they have printed up until this point have talked about moving this airport to handle roughly 20 million to 40 million passengers in the next 15 years and that's the truth. They're expanding this airport to almost double the traffic in the coming years and you don't see that clearly in this T2.28.2

report.

There's little or nothing about these new planes. These new planes are going to be able to accommodate upwards of 500 to 600 passengers and will reduce some of the noise, they say, but the pollution from these new planes is going to be a lot worse. Talk to Boeing about this and they'll give you the nine yards. T2.28 3

THE MODERATOR: Please wrap it up. T2.28.4

MR. O'CONNOR: Finally, there is little or nothing as to how this airport impacts our public health. They care more about -- hey, I'm a bird lover, right? -- but they care more about the birds in this report than they do about the people. What are they going to do with the birds out here? They're going to move the birds to Cape Cod. Hey, are they offering to buy us homes in Cape Cod? No. This report is worthless. Reject it.

THE MODERATOR: Next we have Richard Lynds.

MR. LYNDS: Thank you. My name is T2.29

Richard Lynds, L-Y-N-D-S. My family and I are lifelong residents of the East Boston community, and I'm here this evening as an attorney who's familiar with the environmental review process to talk about the inadequacies of the draft environmental impact statement and impact report. I'm also here to express my opposition to Massport's plan to construct runway 14/32 and the center field taxiway.

Like most of us who live in this community, unlike the many people we've heard who represent the airline industries, we already know that Logan is situated on land ill-suited to house never mind the nation's 16th busiest airport, the nation's 16th busiest bus terminal. Although Massport plans to construct a new runway which promises to place less flights over the surrounding communities, their approach serves only as a temporary band-aid solution to a much bigger problem that they're ignoring. T2.29.1

Massport predicts that passenger

growth at Logan will increase from 25 million or so passengers to 35 or 40 million in the next ten years. Furthermore, operations at Logan which currently peak at 120 per hour are expected to increase as well, and Massport can't deny that. While Massport cites the need for a new runway at Logan to help solve efficiency problems, a better solution might have been something that solved their capacity problems.

And there's no question that a new runway will help increase capacity at Logan. According to the draft environmental impact statement, current flight demand at Logan can be accommodated on three runway configurations with minimal delay. By constructing a new runway, Massport and the FAA will be able to operate many more flights into Logan while keeping delays down to the so-called acceptable level. In my opinion, this is a capacity increase, not an efficiency increase, and it's something the community does not need.

T2.29.2

One thing I couldn't help notice is

part of the scope for the draft environmental impact statement issued in 1995, Secretary Trudy Cox required Massport to examine alternatives of using existing airports instead of constructing a new runway. In fact, she referred to comments which suggested expanding the use of Hanscom Field which is close to Boston and owned by Massport, but the PEIS and the DEIR ignore Hanscom's potential for relieving anything other than general aviation traffic. T2.29.3

Since the ENF was released in '95, the popularity of regional airports such as T.F. Green and Manchester have increased dramatically.

THE MODERATOR: Please wrap it up.

MR. LYNDS: I will. But Massport continues to ignore expanding the use of Hanscom despite the relatively low number of operations at that facility. For more than 25 years, this community has endured the prospect of an additional runway. Massport cites the project will provide improvements to alleviate the arrival and departure T2.29.4

problem, but in the very same breath, they talk about how in order to meet the projected demand of passengers at Logan, a new runway is necessary.

Massport can't have it both ways. It's either efficiency for today or expansion for tomorrow. The communities opposing a new runway at Logan Airport have spoken in a unified and loud voice. We don't want another runway, and we believe that our communities have shouldered the burden long enough.

THE MODERATOR: Thank you, Mr. Lynds.

MR. LYNDS: I'm wrapping up now. As the state and federal agencies responsible for protecting our environmental rights and our environmental justice, I ask that you assess the burden that our community is being asked to face once again, and consider the inadequacies of these documents. I thank you for your time.

THE MODERATOR: Now we'll hear from Mary Berninger. I apologize if I

T2.30

mispronounced your name.

MS. BERNINGER: You did what everyone does. It's Mary Berninger, and it's B-E-R-N-I-N-G-E-R.

THE MODERATOR: Go ahead, Ms. Berninger.

MS. BERNINGER: I live on St. Andrew Road in the Orient Heights section of East Boston.

THE MODERATOR: Before you start, let me announce that the next speaker will be Mary Ellen Welsh from East Boston.

MS. BERNINGER: I'd like to outline for you my reasons for being in strong opposition to the Massport Authority's proposed new runway, otherwise known as runway 14/32, the proposed center field taxiway, and the proposed reduced minimums as they pertain to environmental justice, and I'd like to couch them in terms that have to do with your implied and very, very specific mission statement with regard to protecting the environment.

The existing court ordered

injunction against the runway serves to protect the environmental interest of East Boston residents and should not be overturned. The reasons behind the injunction remain sound. Our community should not be asked to absorb additional negative environmental burdens without all other alternatives having been studied and serious implementation of all alternatives attempted.

Please do not be swayed by the argument that this runway is needed to help alleviate delays at Logan International Airport for the tourist industry or for business travelers coming to Boston. By Massport's own figures, fully 57 percent of all passengers arriving at Logan or departing Logan are residents of communities located west of Route I-95 and Route I-495. T2.30.1 T2.30.2

Clearly, the logic of siting another airport nearer to those residents cannot be denied. Such a new airport would serve to enhance the justice of not allowing more negative burdens here in Boston, and

would bring those passengers closer to their homes.

I would also ask that you consider the impact the airport currently has on the health of residents of East Boston. Our children's overall well-being is being compromised daily by the negative effects of the pollution created by the airplanes and the attendant traffic going to and from Logan. That includes cars, taxis, limousines, buses, and cargo trucks. T2.30.3

The infrastructure of our community cannot withstand additional burdens which would be evident if runway 14/32 is built. Massport's presentations have alluded to the 5,000-foot runway as being primarily for commuter planes and being necessary because of the wind patterns here in Boston, while a runway that is a mere 280 feet short of a mile which can accommodate 100 passenger jets creates an unfair environmental burden on East Boston.

With careful planning, another airport could be designed with a runway

configuration that would take into account all possible wind patterns and the problem would not be duplicated. I live right near the Bays Water Street area, and I am adamantly opposed to the reduced minimums because at the point of deciding to abort the landing, we would be most greatly affected by it, so I want that on record.

For the health and safety of all persons in East Boston who are trying to live a somewhat reasonable quality of life and whom should not be considered expendable to satisfy the needs of the traveling public, I ask that your agency deny Massport's request to sanction runway 14/32, the center field taxiway, and the reduced minimums. Thank you.

THE MODERATOR: Thank you. Next will be Mary Ellen Welsh, and following Ms. Welsh we'll have Tony Gambale.

MS. WELSH: I'm Mary Ann Welsh and I live in the Jeffrey's Point neighborhood of East Boston. I'd like to comment, number one, about the inadequacies in the EIR; and

T2.31

two, about the concept of environmental justice, but before I begin, I would like to address just something that Mr. Saltmarsh said at the very beginning of the hearing.

That was, he was touting the advantages of having the runway because it would send more flights over the water, but in fact, the runway, the flights that go over the water would impact us in East Boston, they would impact the people who are in the seaport district, and all the housing that's along the waterfront now and the new housing that's being proposed including that being proposed by Massport Authority. T2.31.1

The other issue is that while those flights would go over the water, they would, in a certain runway configuration, send twice as many or three times as many off of 27 over Boston Harbor, but then over very densely-populated neighborhoods in Boston and beyond.

And at the other end, it would send three times as many flights over very populated neighborhoods beginning in East Boston's Eagle Hill, and then on to Chelsea,

Everett, Malden, Somerville, and so on. So the advantages of the runway sending flights over the water are not advantages at all for people who live under those other flight tracks.

T2.31.1 (cont.)

We were looking for some experts to look at this document that's under consideration by MEPA. We found a document that was written by the Society of Senior Engineers, and they cited in that document several places where this document is inadequate, and I won't cite them all, but in the CEQ sections including 1502, 1, 2E, 14, 14A, B, C, D, and F, and others which I will give to you in my written comments, where the document doesn't meet environmental regulation standards.

In addition, our community consultants, in their review of the document, use many examples where deficiencies exist in the EIR/EIS. These professional technical experts substantiate and confirm the arguments and positions the community people have made over the years, and especially have

made about the current airport expansion proposal.

This representation of data to substantiate a certain point of view is found throughout the EIR. This is confirmed and illustrated by the community consultants to the CAC.

THE MODERATOR: Please wrap it up.

MS. WELSH: As an example, in Jeffrey's Point with takeoffs on the new runway 14, the day-night contours in the EIR show that the noise level would not reach 60, but yet in another table called times above noises levels, the information contradicts those figures. The times above noise level in the appendix show there would be an increase to the 65 DB threshold under option. T2.31.2

THE MODERATOR: Thank you, Ms. Welsh. Tony Gambale, please. He will be followed by Stephen Brown.

MR. GAMBALE: Good evening. My name is Tony Gambale I live at 169 Condor Street. I was born on this island 61 years ago. I'm a machinist by trade, a pretty good T2.32

machinist. At 61, I still like to learn things. I want to address something to the fine people of Massport.

Why do you want to patch up Massport? The airport's old, it's falling apart. Something that goes around in my head, you've got South Weymouth Naval Air Station which was just abandoned by the government. It's capable of handling B52 bombers. Why is it that nobody once tonight ever mentioned that airport? It's about a 15-minute drive from here and maybe a 10-minute drive from downtown Boston.

As I say, I like to learn. Can anyone from Massport tell me why no one's ever suggested using the South Weymouth Naval Air Station, other than the fact that the people in South Weymouth say they don't want it used as an airport because it will bring the value of their property down? Is that why you don't want to use it? T2.32.1

Why don't you do me a favor? I lived here 61 years. Buy me out and I could move somewhere, I don't know where I'll move

because I was born and raised here, and maybe for the next two or three or four or five years that I got left to life, I won't have to listen to your noise. Easter Sunday morning I turned 61 years old. 5:30 in the morning, the sorties come over. I thought I was in Vietnam. 5 o'clock the planes started.

The evening before that, I went to a vigil mass and I had communion, and there's 5 o'clock in the morning I'm cursing. This went on, may God strike me dead, this went on all morning. Look into South Weymouth. Either that, or buy me out and give me a kick in the ass and get me out of here.

THE MODERATOR: Thank you, Mr. Gambale. Stephen Brown, please. Mr. Brown will be followed by Susan Grogan.

MR. BROWN: How are you doing? My name is Stephen Brown. I'm a resident of East Boston. I was born and raised here, I still live here. I'm also a business owner in the city of Revere, and I want to speak -- I didn't really prepare anything. I figured,

T2.33

let me wing this. But I've listened to a lot of people here and they spoke a lot of concern.

One thing that I've noticed is, I mean, I've got a 15-minute walk, not even, at a slow speed from my house to Wonderland Station. One day, with the chaos of traffic, it took me, no lie, 35 minutes to get from my house to Wood Island Station, three city blocks.

Expanding the runways, you know, you can talk all that jargon you want, you can give me all your reports that you can pay for, but the thing that I see here is we talk about bringing in more -- well, we want to alleviate delays. I won't deny there's delays. I can watch them from my house.

We talk about trying to increase safety down the airport. How many times during the course of a day does it take when a plane comes in for a landing and it gets aborted because maybe someone approaches the runway slow? Maybe that just has to do with management as opposed to traffic. Travel,

yeah, a lot of people come in and out of Boston. They want to come enjoy our historical society here, but unfortunately it's being diminished by the airport.

Back in the early '90s, my house went through the soundproofing fiasco, I'll call it, because it was nothing but a fiasco, and when they were doing my house, I'm saying to myself, something's up, you know. And then I see the park being built down the waterfront, nice park, but I also say, something's up.

You know, it's just kind of sugar coating everything to pacify the people of East Boston, Chelsea, Winthrop, Revere and all the other surrounding communities. In the city of Revere, Route 60 is a major traveled road. It was probably built, God, probably in the '20s to accommodate 20 cars back then. I think it was a runway then.

But the thing is, too, there's a lot of times when people in Revere, and I've spoken on behalf of the people of Revere, argued about fire apparatus trying to get up

Route 60 to North Revere. Traffic is a major issue. Expanding the runways, expanding the size of the buildings is not the issue Massport should be looking at.

Massport should be looking at management control and trying to figure out how are we going to alleviate the problems that exist now before creating more problems? The taxi in the middle, you know, something kind of bugs me there, too, because I remember watching through Cablevision at one point in time when we started cleaning the Boston Harbor, and at one point they were barging all the dirt out, and then at one point they couldn't barge it out because someone was complaining about something.

THE MODERATOR: Try to wrap it up, sir.

MR. BROWN: Sure, no problem. If I remember correctly, they were dumping some of the bottom of the Boston Harbor in between the runways, and if I remember correctly reading in the paper something about PCB or something which is a cancer-causing agent.

I'm no science guy but it's just amazing how much bull could be published and not state the real facts.

I think people would probably work with Massport if Massport was straight and honest with them, but it's come to the point that people have said enough is enough.

THE MODERATOR: Thank you, Mr. Brown. Susan Grogan, please, and following her we'll hear from Anthony Nash. Susan Grogan? Anthony Nash? Is Louis Covino in the audience? I'm sorry, Mr. Nester, I couldn't read your handwriting. You're up.

MR. NESTER: My name is Anthony Nester from East Boston. I'm from the heights here. That's where I live. This morning I wake up and go out on my front porch and what do I smell? Jet A fuel blowing at me from a triple 7 from British Airways. I went in the house, went down the cellar so I could breathe better. T2.34

I'm not trying to get mad. The noise level's got to cool down, get rid of the 27s, get rid of the 737s, and get rid of

the DC8s at 11:30 at night, at quarter of 2 in the morning blasting down the runway. That's it. I've had enough noise level. You people can do it. And another thing. Don't put another runway, please. I'm asking you nicely to chill out, man. That's the way it is.

THE MODERATOR: Louis Covino? Art Flavin from Air Winthrop. Following Mr. Flavin will be Fred R. Moore from Saugus.

MR. FLAVIN: My name is Art Flavin. T2.35
I'm a resident of Winthrop. I live in an area that supposedly isn't anywhere near a flight path, but I'm pretty tired because I got woken up this morning at 5:30, and tonight I won't be able to get to bed until after 11:30 even though the average noise for today is probably way below 65 DB. T2.35.1

But the point that I want to make is we'd like -- I think the proponents would like us to believe that there is some master plan that 14/32 fits into. I don't believe there is a plan, no clear plan anyway. A plan doesn't consist of a nice slide

presentation, of a power plant presentation with a few bullets on it.

I believe that Green and Manchester grew because of market forces. Nobody stepped up ahead of it. A plan means you get ahead of the need, predict the requirements, you put programs and investments in place, and you're there before the need becomes urgent. That didn't happen at those two airports. It happened because Logan is so beyond capacity that people got frustrated with it.

The signs of obsolescence are coming in, as any business could see. As soon as there's another alternative, people are going elsewhere. Now, if there is a plan, I'd like to know what it is. Tell me what you think is going to happen to divert the planes in five or ten years. T2.35.1 (cont.)

How many people are going to be taking high-speed rail? How many people are going to be using city-side air terminals? How many people are going to be using the regional airports? We're even getting

signals that the regional airports are going to max out.

What I can't understand is, it's so obvious that anybody that's done any strategic planning looks at this and says, there isn't one. If there was, people wouldn't be talking about having a blue ribbon commission.

One of the disappointing things is, I wish there were some business people here, how can a business executive responsible for his company and responsible for the jobs in his company, has to look five and ten years in to the future and still support something like this that is so obviously lacking in planning? It's unbelievable.

THE MODERATOR: Please wrap it up.

MR. FLAVIN: What we need to do is start solving the problem. Get off this debate about 14/32, admit the airport is obsolete, divert our efforts to solving the transportation problem.

THE MODERATOR: Fred Moore from Saugus.

MR. MOORE: Thank you very much.

THE MODERATOR: Hang on just as second. Following Mr. Moore will be Anthony Petrucelli from East Boston.

MR. MOORE: This is going to be my only presentation on this issue. I deal with a lot of alternative transportation advocacy in my neck of the woods and I have an uncle who lives in Winthrop on Shirley Avenue and I visit him frequently so I know firsthand the nature of this problem. T2.36

First of all, let's get rid of all the fire and brimstone and neighborhood demagoguery on this issue and talk about what is the larger picture that these people, the proponents of this runway are looking at essentially, the nutshell things. Improved mobility, promoting commerce and prosperity, okay, very noble goals, right?

But I have a way with three words that we could improve mobility, mitigate environmental impacts, and truly address capacity, congestion, and mobility problems for the 21st century, yet this has been

glossed over and fluffed aside as kind of an aside. Three words, people, high-speed rail.

Now, the thing is, when we say we're talking about looking at the alternatives, frankly this crowd on both sides of the aisle I am really disappointed with. Essentially you've been talking about, well, let's put the airport somewhere else. Let's take our problems and put them on somebody else. Everybody has said about how obnoxious a form of transportation that aircraft gas turbine has done to civilization.

But, you know, the people who live in these other places that you have suggested the airport go to are just like you. They don't want it, either. Would you prefer to live a mile from an airport or a train station? Which would have less environmental impact? When we're looking at what will really mitigate and what's the true mobility picture, are we really looking at all the alternatives, or are we just looking at continuing government subsidy of the airline

industry because all the research and development for the aircraft gas turbine is dispense money?

So, you know, you've got the NIMBY factor out there, and locating airports out in the boondocks when there isn't enough critical mass of people to complain about siting is just an engine for suburban sprawl. And do you know that economic development, the new frontier, is not out on 495 in sprawlsville, it is here.

THE MODERATOR: Please wrap it up.

MR. MOORE: I'm a new urbanist and this is what we should be looking at. We should be planning now for more inter-modal transportation, and I'm appealing to you people to get a hold of your state and national legislators to increase funding for high-speed rail. There is no rail trust fund like there is an aviation trust fund. Heckling does not increase your credibility.

THE MODERATOR: Thank you, Mr. Moore.

MR. MOORE: Thank you very much.

THE MODERATOR: Anthony Petrucelli, please.

MR. PETRUCELLI: Thank you. My name is Anthony Petrucelli and I'm a lifelong resident of East Boston and I currently reside at 87 Orient Ave. I just want to first of all thank all of the residents who are here tonight in opposition for this proposal. You are a credit to your community staying out late at night. It's almost 9:30, and you deserve a round of applause for yourselves. So let's give a round of applause for everyone who's here tonight. T2.37

The residents have done a wonderful job in explaining to you why they're opposed based on the air traffic and the environmental impacts. I want to talk briefly about another impact that is directly related to this proposal that no one has touched on.

In order for Massport to build runway 14/32, Massport needs to demolish and relocate two existing air cargo facilities that are located on the current location on

the airport where they want to build runway 14/32. There is a proposal among many right now that will bring an additional 1850 vehicular trips per day to an already over-congested neighborhood of East Boston and its surrounding communities Chelsea and Revere.

Suffolk Downs recently had an article in the real estate section of the Sunday Globe, of all places, not in the metro region, not in the city weekly, it was buried in the real estate section, and it was just a small story, to develop 25 acres of land as airplane facilities. It doesn't make any sense. T2.37.1

I don't understand why Massport can't understand that in order to build this runway, you need to expand into our neighborhoods. That's a point that needs to be made. There's no more room to go. Go elsewhere. Go to Hanscom, go to Worcester, I don't care. There's just nowhere else for you to go and it's self-explanatory, and the need to expand those air cargo facilities is just a detriment to our community. Go over

on Eastern Ave. in Chelsea. There's all kinds of airplane facilities, park-and-fly, car rentals.

Those are the issues that are concerning me as an East Boston resident, not necessarily just the airplanes, the noise. We all live with that every day. Something has to stop. This needs to come to an end. We need to just stop where we are right now. No more airport expansion, period. Not just the runway, no more airport expansion, period.

Airplane facilities, car rentals, that's the air we breathe in our community. That's what you have to see. I don't know how it can be made any more clear. In order for them to expand, they need to come into our neighborhood. That's such an important point that's missed in the air side improvement program proposal that Massport pitches. So thank you, everyone in attendance tonight. Thank you very much.

THE MODERATOR: Mr. Ascolillo.

MR. ASCOLILLO: Good evening. My

T2.38

name is Hugo Ascolillo, and I'm a lifelong resident of East Boston for 71 years. The airport is across the street from my house. The original airport was across the street from my house and I still live there. I heard a lot of things tonight against runway 14/32 and the taxiway and all this, and I agree with it all. There's not much more I can say to it.

I just want to say this, is that I am an expert resident. I know what it is to be a resident at an airport. I don't need statistics to tell me what's good and what's bad about it. Now, I've done a lot of traveling around the world especially Europe in the last 20 years, and every airport, major airport that I went to in Europe from London, Milan, Berlin, Paris, Rome, Athens, every one of these airports have two major airports, and none of them are 10 or 20 minutes from downtown of any one of the major cities that I mentioned. None of them are 10 or 20 minutes, and I never gave any thought about how long it would take me to get to

Rome, Athens, Paris when I got there.

My argument is this. Logan Airport is 75 years old, four years older than me. I feel my age. I want to do a lot of things but my body won't let me do them. Logan Airport, formerly the Boston Municipal Airport, has served Boston, the commonwealth of Massachusetts, the United States of America, and the world in them 75 years.

Let's give Logan a break. She served us in World War II, she served us in Vietnam, she served us over the Cuban missile crisis with B52 bombers, I don't know how many airports can say this, with atomic bombs and hydrogen bombs on its runways, and we never complained about it.

THE MODERATOR: Please wrap it up.

MR. ASCOLILLO: Logan Airport is a grand old dame of airports in New England. Let's treat her with respect. Let her go. Enough is enough.

THE MODERATOR: Next is Thomas McCarthy from East Boston, please. Mr. McCarthy will be followed by Roberta Horn

from East Boston.

T2.39

MR. McCARTHY: My name is Thomas McCarthy, and I'd first like to thank you for coming and staying this late to hear the concerns of the people of this community, but my concern is that you're listening and I certainly hope you are.

I understand it's difficult for you and for Massport to be here, but the reason it's difficult is because the way this issue is being handled and this issue itself is so wrong and so grotesquely unjust. As an environmental protection agency, one of the jobs --

I also came here tonight with this button on as well as this one because I'm also a candidate for a state rep., but I took it off because I don't stand in front you as a candidate for state rep. I stand in front of you as a lifelong resident of East Boston, third generation. I've been around long enough that I remember Wood Island Park. I remember Neptune Road which was a beautiful environmental area, tree-lined, absolutely

gorgeous.

The environmental impact that Logan has had incrementally on this community over the years has been enormous. I'm raising five kids in this community. I hope a couple of them will stay and I'll have a fourth generation of my family living in this community, but I want them to live somewhere that is environmentally sound enough to have a family, to raise a family, to be where you can just live without the constant --

You know, the NIMBY argument that was made, without the constant -- it's not about this being in my backyard because Miss Desrosiers, when she gave her short presentation, she said something and it has to do with environmental justice, because as an environmental protection agency you should be thinking about environmental justice.

She said that the second airport study, it was deemed that it was impossible to build a second airport because of the social and environmental consequences which the areas might suffer. Well, if you built

the second airport, it might handle one-half of the traffic that Logan handles, so how is it that an airport in the suburbs, the white collar suburbs, handling one-half of the environmental impact that we're already bearing in this community is environmentally just and you should just put the entire burden on the blue collar communities that surround Boston. T2.39.1

Environmental justice is something that should be considered, and a second airport bearing one-half of the burden we've been bearing for years is something which should be considered and which the agency should be pushing for. T2.39.2

Also, one last thing is they keep talking about the runway bringing the flights out over the water, and anyone with any common sense will tell you that when you're standing behind a jet, the roar is much louder. I know a little bit about aviation. If you're taking off over the water, it's because the wind is blowing off the water into our neighborhoods, so when those jets T2.39.3

are taking off, the roar of the sound is being carried by the wind even more into our neighborhoods and the fumes are being carried off the water into our neighborhoods, so saying they're going over the water is not doing us any justice because we're still getting the same amount of pollution and noise. Thank you. T2.39.3 (cont.)

THE MODERATOR: Roberta Horn, please. Following Ms. Horn will be Anthony DiBennedetto.

MS. HORN: My name is Roberta Horn. I live on St. Andrew Road in East Boston, and I've lived on the same street for over 62 years. My concern is with this study they're doing. In Volume 1 on Page 2-9, they show a map of all the commercial airlines. Hanscom is not there. There goes their credibility. Misrepresentation by omission. T2.40 T2.40.1

Volume 3 on Page 4, there's a decision about changing the flight. The graph shows Saratoga Street as the last street before the water. Misrepresentation by omission. There are two streets after T2.40.2

Saratoga Street towards the water, St. Andrew Road and Bays Water Street.

They also refer to that little inlet there as Boston Harbor which it technically is, but I've never heard of it, and as a matter of fact, Massport, on their map of the Bays Water Street buffer zone, their own graph, map, or whatever you want to call it, they refer to that narrow body of water as Boston Inner Harbor tidal basin.

T2.40.2 (cont.)

Now, when you tell someone, oh, there's Boston Harbor between Saratoga Street and Boston Harbor, there are two more streets, there's a narrow body of water. It is technically Boston Harbor, but that's a misrepresentation also because it is a tidal basin. I used to swim to the airport from Bays Water Street when I was ten years old and I'm not a strong swimmer.

Also, when they abort the aircraft over the water with all the thrusts, the force of the engine going back into the homes. And they talk about having less pollution with the center field taxiway.

Well, I'll tell you, there's a November taxiway that's near Constitution Beach. They're supposed to have -- I hear this isn't true now -- but they've always had no more than five large jet aircraft on November taxiway.

Any Sunday night in the summer, you can go there between 4 and 7 o'clock and you will see at least 15. They're going to put the center field taxiway. If the planes take off over the water, their rear is going to be towards the Bays Water Street area. They will not have just one plane. They will sit there because the more planes, the more room they can squeeze into -- I'm sorry, I'm a little confused here, but they just put too many planes where they don't belong.

It won't be, oh, two or three planes on the center field taxiway. They will be backed up there just as they are now and just as they are on the November taxiway eery summer that I witness, and Miss Desrosiers knows this from when she was with the noise abatement office.

THE MODERATOR: Please wrap it up.

MS. HORN: Okay. What I want to say, too, is we need to breathe. We need, I need, we need, I need to breathe, I need to live, I need to sleep. We have planes that come over landing on 4 left, I believe. They skim the treetops, and I have videos of this, and people run out of their homes in fear because they're afraid a plane's going to land there. And you can all check my comments to Massport, but we are a working-class area. Are we lesser people? Are we worth less to you? Does the term environmental justice mean anything? It's your decision.

THE MODERATOR: Thank you, Ms. Horn. Anthony DiBennedetto, please. Following him will be David Rudolph from Chelsea.

MR. DiBENNEDETTO: It's DiBennedetto, like Tony Bennett. T2.41

THE MODERATOR: I'm sorry.

MR. DiBENNEDETTO: Just a couple of months ago, I went to St. Martin and in St.

Martin at the airport, it's an old-fashioned style of an airport where you still use the stairs to come down. They don't have that caterpillar that comes out to meet the plane. The plane was just sitting there idling as I came down those stairs, and the stink from that jet engine just idling, I could tell it doesn't use a catalytic converter or run on unleaded gas like the way we are required to use on our automobiles.

I don't know what sort of inspection the Environmental Protection Agency has for airplanes and the amount of pollution that they could spit out, but that's just a quick observation as far as I'm concerned.

I wanted to say something about -- too bad he's not here any more, the man from the Mass. Aeronautics Commission. As far as a second airport goes, he said that the airport that would have been situated out in Fort Devens was too far away and the airlines wouldn't go that far. Out in Colorado, the new Denver International Airport is 40 miles

from Denver. It is a state of the art airport with state of the art technology. Stapleton was a lot closer to the city of Denver. It was practically in Denver. They didn't say, let's build a new runway. They went out and built a new airport, and that's the difference.

We are so far behind here as far as band-aid approach, but let me get into the environmental because we don't have that much time. You know, what I get upset about is when they try to compare the city of Boston with the city of Seattle because they're basically sort of the same size. They are as different as night and day.

The city of Boston was established in the early 1600s and the city streets were designed as cow paths. They are not highways. The North End, East Boston, South Boston, Winthrop, all around the neighborhoods, those streets are not going to get any bigger today, tomorrow, or a hundred years from now. They cannot accommodate the overflow from Logan International Airport.

As far as the Big Dig supposedly trying to relieve some of this congestion, the Big Dig was designed to relieve the congestion that is there now, not for any increase. There's only one lane going to be going one way and the other way, so where's the plan? Where's the infrastructure?

I mean, everybody's talking about thousands of more flights and the delays that we get. What about the delays that we have just trying to get home? What about the delays of the tunnel backed up all the way to the North End? What about the delays in the tunnel backed up all the way on Chelsea Street?

And finally, I want the Environmental Protection Agency not so much, yes, you've got this paperwork. I want you to take a walking tour of the impacted communities to see for yourselves, and let's get by this.

THE MODERATOR: Please wrap it up.

MR. DiBENNEDETTO: And finally, not only am I against 14/32, I'm calling for the

Environmental Protection Agency to cap the existing flights that are there now, no more.

THE MODERATOR: Now we'll hear from David Rudolph, and then we have about an hour and 15 minutes left so I'm going to take a short break for the reporter's sake so he can get his voice back. Mr. Rudolph. T2.42

MR. RUDOLPH: David Rudolph, 3 Eldridge Place in Chelsea, Massachusetts, a member of the Chelsea Green Space and Recreation Committee. The synergistic impacts, this is what concerns some Chelsea residents who believe that Chelsea is in an extremely polluted condition.

Synergistic impacts are errant emissions from petroleum shipping and transfer station procedures, diesel truck exhaust from bulk salt, oil, and air freight terminals that supply the region, and prevailing winds bringing stack emissions from power plants that fall overhead.

In this era, the designated port area zone regulation upon Chelsea Creek allows residents of its banks to bear the

burden of fueling the region's economy. What would prevail that would dump more petroleum distillates overhead? I understand that landing more jet engines over Chelsea will add to the particulate pollutant soup to be inhaled. Chelsea's asthma rates in children rank among the highest in the state along with other airport-impacted areas. Thank you. T2.42.1

THE MODERATOR: Thank you, Mr. Rudolph. We will break now for five minutes. Following the break, Debbie Santiano-McHatton will be first up.

(Brief recess taken.)

THE MODERATOR: We'll get started again. Is Debbie Santiano-McHatton in the room? You are. Hang on just a second until the reporter gets ready. You may proceed.

MS. SANTIANO-McHATTON: Debbie Santiano-McHatton, Beachmont CAC. I'm here tonight on behalf of my community who sits under the bad weather runways 4 and 22 which brings out the point of the lowering of the minimum which is, from what I understand, an T2.43 T2.43.1

FAA concern.

Massport has presented this to us as a 94-hour gain. Well, I invite any one of you who allow this to go through to come to the Beachmont area on a foggy day and watch one of your international flights fly over where we can't see them but only hear them.

Your 94 hours relates approximately to 3,000 flights in inclement weather. We beg of you for our residents not to allow this to happen. We find it inadequate that you did not include this in Volume 1, that it was put into their appendix where many people were only sent out Volume 1 so they have not seen this. T2.43.1 (cont.)

We have asked over and over that you look at the Beachmont Hill again. We are sure that all of you understand that this hill has a school on the top of it. This is not reflected in your report. The pictures still show it without the 50-foot school on it. When you are flying above our heads 500 feet, 50 feet makes a big different.

In your report, you address noise T2.43.2

mitigation stage 3. We find this inadequate. We find that our main concern is excessive traffic and excessive noise. To be exact, 104 decibels. During a day when I received your noise abatement follow-up, we can see that we're at 75, mostly in the 80s, lots in the 90s, and a few in the hundreds. That's excessive and intolerable.

For you to mitigate with us with the stage 3 aircraft is absolutely ludicrous. Stage 3, I believe, you are currently flying at 85 percent. Your aircraft are now stage 3. Those still wake me up at night when you're flying only stage 3 at 10 p.m. 10 p.m. to 12 o'clock at night when you're flying heaviest over our community, we can't sleep. T2.43.2 (cont.)

When we finally do get to sleep, you've got a 4 a.m. flight that wakes us up again. So I'm asking you, please, perhaps to find another way that your airplanes will be no louder than 65 decibels. That would be a true mitigation.

The other thing is we find your T2.43.3

report, and I will wrap it up right here, sir, we find your report inadequate that you've only addressed this in short term. The long term, your growth, far outweighs anything that we might gain in the short term in our community. I thank you for listening.

THE MODERATOR: Now Mr. Bob Strelitz, and following him, Gregory Curci.

MR. STRELITZ: Bob Strelitz. I'm counsel for the East Boston Land Use Council. I was going to make some technically-based remarks but I'm going to leave that to our written comments and just say that my view from reading the draft environmental impact report, the unspoken argument in favor of your project, Betty, is economic. Five billion dollars in economic impact? Yeah. And a hell of a lot of economic and other impact on East Boston. T2.44

The ironic thing is that the economic future of Massachusetts is in these cities, in East Boston with its beautiful waterfront, with its beautiful views, with its potential, with its wonderful people.

This is an inadequate document. It's a mockery of environmental justice.

The economic future of this area and this state is right in Winthrop, East Boston, Chelsea, the old cities that are undergoing such a dynamic revival. Don't you squash this future with this horrible, horrible proposal that makes no sense from an aviation point of view, from an economic point of view, and from a human point of view. Thank you very much.

THE MODERATOR: Mr. Gregory Curci, please.

MR. CURCI: Hi. My name is Gregory Curci. T2.45

THE MODERATOR: Hang on a second. Following him will be Dick Gill.

MR. CURCI: I moved to Winthrop eight years ago, and I am not under the flight path and I am not in the noise abatement zone. I also live in a brick house that the walls are 12 inches thick and it's pretty solid. The other day, however, the other evening at 2 o'clock in the morning, I

was awakened by a very loud airplane taking off as was my six-year-old son came into my room crying.

What I've noticed in the last -- when I first moved to Winthrop, I knew I was going to be living near an airport and that really didn't trouble me much. I knew there was going to be sound, and I did pick a part of the town that was away from much of the most severe impact of the airplanes. However, now one of the things that I'm beginning to notice is the fumes that are coming to my house from the airport, and they never came to my home a few years ago and they do now.

I smell burning rubber from the tires which, by the way, the environmental impact statement doesn't discuss the thousands of pounds of tire rubber. I guess a tire lasts for a hundred landings, six tires or more per plane, 120 landings per hour, we've got six tires on fire constantly at the airport.

Massport has said that they're

going to soundproof 1500 homes. Last year, Winthrop's rate of problems from asthma and breathing problems went up by 130 percent. We're a seaside community, a peninsula surrounded by the ocean, and yet our asthma rate went up. We have no other sources of pollution. There's no industry.

If you walk around Winthrop during the day, there's hardly a car in sight because people leave town. What's happening in Winthrop is we're being impacted by the air pollution from the airport, and we've also been excluded from any real scientific studies of that impact. T2.45.1

And the reason why is because Logan Airport is surrounded by water. The pollution from Logan travels unimpeded. An airport that's inland is surrounded by trees which will absorb some of the sound impact and will also absorb much of the air pollution. However, in Winthrop, at Logan Airport the pollution travels in a laminar flow directly across the water, it goes to Boston, to East Boston, to Winthrop,

whichever the direction the wind takes it at that time in a highly-concentrated form.

This is one of the major problems with the airport. They are talking about increasing the number of flights, and they're saying that they're going to reduce the amount of ground pollution. I don't think that is really correct because every airplane that takes off burns fuel. The more planes, the more problems. T2.45.2

Massport has not spent a single nickel on promoting the regional airport aspect. I don't see a single billboard. The $200,000 that they wanted to spend to silence the people who are suffering from their air pollution and noise pollution problems would be better spent on publicizing Green Airport, on publicizing other airports, and on developing Hanscom Airfield rather than trying to silence us victims because of their overindulgence. Thank you.

THE MODERATOR: Dick Gill, please, and following him we'll hear from Linda Jolliffe. Following Linda Jolliffe will be

Ellie Johnson from East Boston. Thank you very much. So following Ms. Jolliffe will be Mary Ann McIntyre from East Boston.

MS. JOLLIFFE: My name is Linda Jolliffe, J-O-L-L-I-F-F, as in Frank, E, and I reside in Eagle Hill in East Boston. I also for the record want to make it known that I'm also a board member of the Eagle Hill Civic Association, and we voted against the airport expansion. T2.46

The siege Massport is waging upon East Boston and surrounding communities is no less historic than the British threat to burn Boston. Their determination to build runway 14/32 regardless of the devastating environmental and social impact is like the shot heard round the world.

The pollution and the noise resulting from thousands of increased jet aircraft operations promises to increase intolerable living conditions. Massport expects us to close our windows and retreat into some imaginary soundproof cubicle. In effect, to be held prisoners within our own T2.46.1

homes.

Quality of life is the issue. Without it, a healthy community cannot exist. East Boston is experiencing a reverse. Restoration and renewal are going on, activities throughout the community. Future development of our precious waterfront is carefully being studied. The Main Street initiative is spawning new vitality. Green space, an important ingredient for every flourishing urban environment, is taking root.

The Eagle Hill area has recently achieved long-overdue recognition as an important historical site, and is now listed on the National Register of Historic Places. Residents are excited with the development and are deciding to stay and rebuild their neighborhoods.

Massport and supporting business leaders tout an economic boom throughout the area. Not true. Airport expansion in other areas of the country where quality of life was ignored does not economically benefit

affected communities. Instead, people move out, real estate values plummet, businesses suffer, and crime rates increase. In short, many abutting and affected areas suffer depression and decay. The only economic boom belongs to Massport whose revenue-producing design further encroaches upon our treasured island.

THE MODERATOR: Please wrap it up.

MS. JOLLIFFE: Okay. What I'll do is then, Massport claims that building 14/32 would reduce Logan congestion. That statement merely reflects one of the many dishonest assessments Massport is promoting. Thousands of increased jets operating over our area is not environmentally safe. In other words, Massport and Governor Cellucci are willing to devastate the health, sanity, and well-being of our surrounding communities for a project which will benefit virtually no one.

T2.46.2

Governor Cellucci made a statement prior to his recent operation that he is undergoing a procedure to improve his quality

of life. It's a quality of life issue. Isn't it strange that he takes measures to improve his quality of life yet chooses to ignore the quality of life of thousands of citizens affected by noise and pollution?

THE MODERATOR: Thank you, Ms. Jolliffe. Mary Ann McIntyre, please. Barry Powers? Following Mr. Powers, Jess Stuart.

MR. POWERS: Hello. My name is Barry Powers and I'm a lifelong East Boston resident. I wanted to touch base on three issues that I think have been reiterated consistently tonight. First of all is one of the things that they touched base on was the safety issue. I'd like to mention that if you come into the surrounding cities and see the congested bottleneck traffic, you'd be considering the safety of the children and the people that live in the vicinity. T2.47

The second thing is of the delays. I think that right now we are doing good with the delays that we have because if we didn't have the delays, there would be total gridlock in the city. I've lived in all the

areas of East Boston that there are from Orient Heights, right now currently living in Day Square, and I've also lived at the Jeffrey's Point.

In the past five to ten years, it's been practically impossible to calculate where and when you want to be somewhere given the fact that it's within five minutes in your community due to the airport and mostly with the traffic.

Thirdly, environmentally, I wanted to touch base on something that Rochelle Bennett had mentioned earlier. I was just recently diagnosed with Hodgkin's disease which is cancer of the lymph nodes, and normally I would think that wouldn't be such a traumatic thing, but in the past four to six months that I've been going continuously to the Mass. General and seeing all the cancer patients, I have come to the realization that I am one of the few of my age that have this type of thing, and like I says, I have lived in East Boston all my life.

I grew up initially at the Heights up on Flagstone Street, and from what Massport does do, the only thing that they have done since they've taken away Wood Island Park which is offer us the insulating of the windows and stuff like that. First of all, that doesn't help in the summer unless they're going to give us central air as well. That's four of the busiest months of the summer with the highest traffic and everybody has their windows open.

Now, I touched base on the Hodgkin's disease only because environmentally I believe that a whole lot more studies need to be done to find out how traffic that we have at the airport now is affecting the people and the residents in the surrounding communities. Thank you. T2.47.1

THE MODERATOR: Thank you, Mr. Bowers. Jess Stuart? Pamela Smith from Dorchester? Following Ms. Smith, Kathleen McAuley from Winthrop.

MS. SMITH: My name is Pamela Smith and I was appointed by Dorchester Allied T2.48

Neighborhood Association to serve on the CAC representing Dorchester. I'm also one of the original members of CARE, and I'm proud to say that I am a candidate for Boston City Councilor city-wide.

The expansion of Logan Airport must be stopped. The residents of East Boston and all the surrounding communities today suffer an unacceptable level of noise and air pollution. No amount of noise mitigation will solve the problem when windows are open or people want to go outside. No amount of noise mitigation will address the high levels of asthma or other respiratory diseases in this area. T2.48.1

For Boston to be a world-class city, we must support the residents because if we don't support her neighborhoods and her residents, we will have a convention center and a business and industrial park and no neighborhoods in Boston.

It is my opinion that Massport must not waste money building runway 14/32. Instead, they should maximize the use of T2.48.2

airports in Rhode Island, New Hampshire, Bedford, Worcester, and New Bedford while building a new major New England international regional airport at Fort Devens.

Ultimately, the environmental disaster called Logan Airport must cease to exist, returning to Boston and Winthrop the land that is theirs. East Boston deserves this, Dorchester deserves this, and all the surrounding communities deserve this. Therefore, I support the report submitted by the consultant to the CAC and request that you deny the EIR/EIS. Thank you.

THE MODERATOR: Kathleen McAuley from Winthrop. Following Ms. McAuley we'll hear from John Rogers from Winthrop.

MS. McAULEY: I thank you for this opportunity for an ordinary citizen to explain what our daily life is like in Winthrop. I am not an expert, I do not understand all of the statistics, but we live this, and please excuse me if I'm a little nervous. This is the first time in my life I

T2.49

have ever spoken in front of such a group.

Each time the planes fly over my house, my ears begin to ring. On some days, I experience a constant bombardment of noise. I am an adaptable creature so I move from room to room in search of respite. None is to be found.

According to the FAA analysis of noise levels, my house is not in the high noise level zone. Therefore, I am not eligible to have one of my rooms soundproofed. Sometimes I would like to go outside for a walk or do some gardening, but I must time these activities to coincide with the days when the planes are not flying directly overhead.

I am an adaptable person so I wait. However, on some of these safe days, my ears are attacked by the planes which have to fly over my area regardless of the scheduled safe days. When I called Massport to complain of this intrusion to my safe days, I am told that the weather requires the use of that route. I am adaptable, so I go inside.

Since there is a curfew in effect at Logan, I look forward to getting a noise-free night's sleep, but after midnight I am awakened by a deafening noise and a frightening vibration of the house. It's a plane overhead. Apparently, the pilot is unaware of the curfew. I am adaptable, so I put plugs in my ears and pretend that the vibration is rocking me to sleep.

Now Massport wants to put in a new center taxiway, a new runway, lower the ceiling for landing, and continue the increased usage of Logan Airport. I cannot adapt any more. If I do, I will be a near-death, sleep-deprived, depressed individual with respiratory problems as a result of the emissions from the planes flying overhead. T2.49.1

We are working people who are realists. We know that in order to survive, one must respect the delicate balance between the economic development and quality of life. In order to protect ourselves from the environmental dangers of living near the airport, we have adapted our lives. However,

we can no longer adapt. The limit is reached.

Worcester understands this delicate balance and is looking for the economic benefits which will result if their airport is used more. They are ready to adapt to that point, and that point must be respected for them as well --

THE MODERATOR: Please wrap it up.

MS. McAULEY: -- so that they will not suffer excessively from the detrimental effects of noise and air pollution. Please, please protect us from any further noise and air pollution. We, the people, need your help. Thank you.

THE MODERATOR: John Rogers from Winthrop. Following Mr. Rogers will be Fran Riley from East Boston.

MR. ROGERS: My name is John Rogers. I live in the Point Shirley neighborhood of Winthrop. I grew up in the relatively quiet town of Brookline, Massachusetts. After serving in the armed forces during the Vietnam era, I returned and

lived in the relatively quiet neighborhood of Haverhill, Mass. I work in the business community in downtown Boston.

I was not surprised at all to hear the paid representatives of the airlines get up here and promote their business. I work for a large commercial real estate firm that I will leave unnamed for fear of reprisal. But we have lots of major tenants, some that are of major airlines, and I want to tell you, when they're in a high-rise building and their conference rooms get stuffy, they accuse the landlord of that building of not providing good air quality.

We talk about indoor air quality, indoor building air sickness. It's in the Wall Street Journal all the time. What about community pollution? I was amazed and appalled the first time I drove into Winthrop in 1981 looking to make my home there to be convenient to my work. I thought that an airplane had misjudged, it was flying so low, and was actually going to crash and I was going to see it on the 6 o'clock news. I

just couldn't believe it.

So to put a little perspective on it, people stand up here and they get paid lots of money to represent the airlines. If I can get my hands on that pilot flying that plane at 3 a.m. the other morning, it wouldn't be a good scene. Where are our rights? Where they're a tenant in a building, they have a lease. They quote to the landlord, we have the right to the quiet enjoyment of our premises. Go next door to this tenant who's doing construction and tell him they can't do that during normal business hours because it's interrupting with our business.

What about the fact that they're interrupting with our lives, our health? We can't sleep at night. So I'm against this runway. It makes no sense at all. And I will remind you that not too long ago, there was an article and it was on the TV, quite a bit of exposure on the TV, about several aircraft that were sent to an airport in the middle of a big blizzard, and people were

trapped in these airplanes for hours and hours without sanitary bathrooms, without diapers, without water.

THE MODERATOR: Try to wrap it up, please.

MR. ROGERS: They were not allowed to get off the airline. I'm going to wrap it up by telling you the same people in the airline industry that decided to fly those planes into that airport knowing they had a storm are the same people that poor judgment is what this proposal is all about. I'm against it. Thank you.

THE MODERATOR: Fran Riley, please. Following Ms. Riley, we have Martin Kaufman. T2.50

MS. RILEY: I live in Eagle Hill at 193 French Street.

THE MODERATOR: Hang on a second. We'll lower the microphone for you.

MS. RILEY: Okay. I live in the Eagle Hill section of East Boston. I'm going to be really brief with you. However, I would direct these comments to MEPA to listen carefully. Numerous times I requested from

the FAA the point of origin of a plane coming into Logan late which has to be then serviced and refueled which will depart late. I've never received that information, okay?

MEPA needs to hear why I want the information. If we went for eight months in each of the terminals watching the monitors, you will notice those flights are delayed from O'Hare, Los Angeles, Miami, New York. If the flights are late arriving at Logan, it is not 14/32 that has to be built. The FAA has failed at a national level to look at the points of origin of those delays. That is a poor, lame, ignorant excuse and contention to build 14/32. It's an insult. T2.50.1

I would further remind you that there are no children here speaking, but in the spirit of Anna Defronzo and Eleanor Welsh, I would remind you, clean air and clean water. The Wood Island bay marsh continues to be flooded with debris from the airlines. Go down with a boat and take a look at it. Test the water from when they de-ice the planes and find out why those

chemicals are in the Wood Island bay marsh.

When I look out my window, I don't see Apple Island, I don't see Governor's Island, I don't see any of those islands. I see more runways. We don't see any of the things that we once had. They robbed the land and they destroyed the wetlands to put the runways in.

I would remind you that children play recess. How dare you talk about soundproofing. How dare you tell me that the cheap windows you put in my home are good for me. We open our windows, we have barbecues in the summer just like any other person. This is a class issue. This is an environmental injustice. It's social injustice. T2.50.2

I really take exception to the cheap comments that are being made. That document that was filed isn't even on recyclable paper, by the way. I might point that out.

THE MODERATOR: Please wrap it up.

MS. RILEY: I will wrap it up, and

I'm going to wrap it up with saying this to you. You must study environmentally and I think that your environmental study should include a health study that you can document how you can scientifically control wind and its velocity. It cannot be done. The wind will blow from China to Boston, so how does Massport propose to build a new runway and tell me it won't further pollute East Boston and the surrounding communities? T2.50.3

I'm asking you that question to investigate it because I've talked to scientists at M.I.T., I've talked to scientists at Brandeis. They dispute the Massport findings. Those are scientists. They're not people without aviation backgrounds like Mr. Blute and some of the rest of the political appointed cronies that work at Massport. These are people who have degrees in science and I think you need to look at that.

THE MODERATOR: Thank you very much. Martin Kaufman, and then we'll have Blossom Hoag.

T2.51

MR. KAUFMAN: My name is Martin Kaufman. I live at 381 Meridian Street in East Boston. The neighborhood that I live in, if this runway as proposed is built, I'll end up with 21,000 more flights coming over my home every year. During all of these hearings and all of this talk and talk about money and economics and health and everything else, we're supposed to sit here and not take it personally.

T2.51.1

When Christopher up here says, wrap it up quick, does he tell Massport to wrap it up quick? Does he tell the ATA to wrap it up quick? I want you to understand something, Mr. Christopher whatever your last name may be, I take it very personal when people who are paid to protect me and protect my home and protect my environment sit there with this callous attitude that you've got and displayed all night tonight with wrap it up quick, please. I take it very personal.

And I don't care what the economic value is of Massport to Worcester, to Dover, or Denver. I'm telling you what it's going

to do to me, and I'm telling you I'm taking it very personal. And when this report is complete, I'm going to take the statements that you put into it and how you assign this runway very personal, and I'm going to hold each and every one of you very personally accountable for the actions and reports that you give out.

It's my home that's at stake, and I care what happens to it, and I care very, very much when the people who are being paid to protect me have such a callous attitude to me and my neighbors. I'm taking it very personal. Remember that.

THE MODERATOR: Blossom Hoag, please. Then we have Albert Van Buskirk, is it?

MS. HOAG: Hello. I'm Blossom Hoag. I live in Jeffrey's Point of East Boston. Both on my side of my family, my husband's side, we've been here since the 1600s. Everything that I do is for the environmental cause and to keep this world as good a place as I can have for my children

T2.52

and for the generations to come.

I've been involved with the Friends of the Boston Harbor Islands, I'm the chairperson of the Northeast Region of Conservation for the Sierra Club, and I'm on numerous neighborhood organizations. None of these organizations are supporting this project. The Sierra Club alone is over 20,000 people and has voted to ask that this project be declared inadequate for all of its lack of work that has gone into the document. They will have written comments as well.

T2.52.1

It's the hundreds of thousands of people in the city of Boston and surrounding areas that this project would affect, it's the environmental injustice that's being done to these people, to this city, this historical city that is such a wonderful city to walk around in and appreciate, and all the history that we have here, it's the islands where the inner-city people can go out and try to find some peace and some nature to appreciate.

Putting 75,000 planes over those

islands which are just in the process of coming into the National Park system is not a good work. We would like to work on working out a plan for the entire northeast, how to develop it regionally with all the airports, with all the alternatives in transportation, and it's not just airports, it's the rail, it's high-speed anything else that can be done, and the roadways and everything has to be looked at together. It's not only the airport. T2.52.2

It's not that we're saying not in my backyard, put it somewhere else. Everybody has to come to the table. Somebody has to take it. We're all taking it. We're not saying no expansion at Logan. The planes get bigger, you've got more people coming through. All this project is doing in putting more runways and more planes, making it more efficient for the big planes to land on those and put the smaller planes they can land much more quickly, bring much more people through, that's air pollution and traffic pollution in our neighborhoods. T2.52.3

This is not solving the real issue and the real problem that exists throughout New England, and we have to look at it region-wise and not just in one area where you have the most impacted people and the most low-income impacted people.

THE MODERATOR: Please wrap it up.

MS. HOAG: I respectfully ask that you declare this document inadequate. The studies have used old data. There's environmental injustice. They leave out Hanscom and second airport studies. There is a total lack of alternative studies, and they use the various studies to suit their own needs, and so please declare it inadequate, we request. Thank you.

THE MODERATOR: Albert Van Buskirk. I know I didn't get that right. He'll be followed by Michael Herbert.

T2.53

MR. VAN BUSKIRK: Hello. My name is Albert Van Buskirk. I'm a lifelong resident of Winthrop, and I'd like to say that the two issues that Massport is bringing up for the reason of expansion is for

environmental reasons and economic reasons, which I feel are bogus issues. I feel like the reason for the environmental is unfeasible because if you listen to these residents of these impacted communities, you would understand that this is going to create more pollution, increase more noise, and create more traffic. That is unacceptable for our communities. T2.53.1

The other issue, the economics, the only economics behind this is to create more business for big business. This will not help the smaller communities, the smaller businesses. I just see this as big business and big government, what you call a quasi-government agency, as running amok over these residents, and I'm opposed to it, and I feel this is disgusting. Thank you. T2.53.2

THE MODERATOR: Thank you. Michael Herbert, please. He'll be followed by Mike Furlong.

MR. HERBERT: Good evening, gentlemen. My name is Michael Herbert and I'm from Winthrop, Massachusetts. I'm here T2.54

to express my feelings for my friends and family that aren't able to be here. You gentlemen here are about to make a big decision that could adversely affect a lot of people's lives. I'm sure you're smart guys and you know the true meaning of what the word expansion is and what the judgment by permanent court order injunction means.

We live in the hub of the universe. In some ways, I kind of like the airport. It employs a lot of friends and family. Let's face it, it's not going away. Isn't it fair to say that Logan has served Boston and the surrounding communities way beyond Route 495 for the past 50 years? Well, it's about time we fine-tune the hub of the universe for the future, and you can't fine-tune it with just one tool because Bob Villa would just laugh at you.

Logan is not the only tool. We've got New Bedford, Worcester, Hanscom. New Bedford's economy could really use a piece of Massport's 3 trillion dollar piece of pie. Worcester is a hundred percent ready to go.

T2.54.1

Let's spread some of the world's busiest shuttle service to Worcester. Hanscom is right off Technological Highway. That's where half of Logan Airport's traffic comes from and the people around there want it. They will invite the business, the economy, the fuel.

Being the hub of the universe explains why Boston shares with New York the title of the busiest route in the world. New York has three airports, Washington has two airports, and we only have one. If we can fine-tune Massachusetts and spread the wealth and free up Boston's traffic, the Boston work force would work faster, stronger, and be more productive. We could really get the economic blood pumping through the Central Artery.

On my last flight, the woman beside me had a chauffeur picking her up and taking her to Rhode Island, adding another vehicle to our tunnel and our roads, and I know that chauffeur had to pay Massport to enter Logan Airport. It's supposed to be the

commonwealth of Massachusetts, not the massive wealth of Logan's little airport.

THE MODERATOR: Please wrap it up.

MR. HERBERT: On my second-last flight, I sat beside an airline employee that was coming to Boston to discuss the problem of the de-icing chemicals that run off into the storm drains into the harbor where our lobsters, clams, and cod fish live. You want to talk about environment? My house shakes like an earthquake. Have you ever been in an earthquake?

I mean, it really shakes hard. My Anderson windows rattle. I have cracks in my foundation. Babies wake up crying. And you've got mechanics lengthy testing engines at full throttle for minutes and minutes and minutes. I'd like to see a hypertension study done on me.

THE MODERATOR: Thank you, Mr. Herbert.

MR. HERBERT: Give me one more second, please. Jet fuel disperses every 30 seconds 115 times a day, 365 days a year.

Put it all together and you've got Exxon Valdez, Prince Edward Sound.

THE MODERATOR: Thank you, Mr. Herbert.

MR. HERBERT: One more second, please.

THE MODERATOR: We really have to move along.

MR. HERBERT: I know my constitutional rights, and not only do I say no new runway, but 11 p.m. when I have to shut down my stereo, I say Massport, shut down the runways.

THE MODERATOR: Mike Furlong does not appear to be here. Susan Powers? She will be followed by Scott McGovern.

MS. POWERS: My name is Susan Powers. I'm from Winthrop. I live next to runway 4L and the buffer zone, so-called, and I'm not really complaining so much about the noise although the past few weeks there has been an aircraft at 3 a.m. I think I've grown accustomed to that. It's the diesel jet fuel smell.

T2.55

Now, at our last meeting with Peter Blute a few months ago, we asked about the noise, and they said that by the year 2000, all aircraft should be equipped with the level 3, stage 3 aircraft. But with that comes another problem. As Mr. Rodes has said to us, with the stage 3 aircraft, all the equipment that needs, it burns more fuel. I feel this will be detrimental to our community as well.

The reason we live here by Winthrop by the ocean is for the nice sea air smell, the salt air. We're being deprived of that. We're being deprived of clean air. As a citizen, as a mother, as a taxpayer, and a voter, I implore you, please reconsider this. T2.55.1

THE MODERATOR: Scott McGovern.

MR. McGOVERN: Good evening. I would like to introduce myself with a scenario, what could happen at 11 o'clock, 12 o'clock, or 3 a.m. in the morning at my house. Hi, how are you? Oh, good. Yeah, yeah, that one was a little loud. Yeah, that was really loud that time. I live at 36

Broadway Parkway, yeah, Winthrop, yeah. How are the kids? Oh, good, good. All right, well, have a good night.

Now, Dino works for Massport in the noise abatement office, and is one of the most professional people I've ever dealt with at Massport, and I appreciate your group coming here tonight and acting so professionally. No one wants to sit in the den, especially the airlines people. They all got up and left.

But you know what, we live in Winthrop. We love Winthrop, and we're going to stay here. We're not going to get up and leave because we believe in the cause that we live in a great community. I'd just like to bullet a couple of environmental issues because science is a common sense thing.

Over the years, the runways have expanded in greater length. They say they don't, but they have. Trucks of dirt going out in my backyard day in and day out building piles of dirt, it's growing something. I don't know what they call it

but it's growing something. Either that, or it's a figment of my imagination, but that's one item.

The tanks, we have four big fuel tanks that have grown in the fuel farm area. That means more flights are expected. We have more hotels coming in, and the roads are being all switched to accommodate more traffic, so I don't know who's fooling who. I mean, it's like this runway is going to go in and this is all just a formality..

I hope that the runoff from the de-icing, the fuel jet streams that come off the planes, the burning smell of the rubber, the shotguns early in the morning to get the ducks and birds away sound like a ladder thrown against the side of my house. Every morning you hear it, and guess what? The water is getting cleaner, we're getting seals in. That means the fish are coming back, that means the birds are coming back, and we're going to have more and more birds in these estuary areas, and they're going to be shooting this thing off more and more.

In closing, I'd like to make the fairy tale story of Cinderella where the airport is the glass slipper. The airline representatives who left are one of the evil stepsisters. Massport is the other evil stepsister. Cinderella is the environment, a group of communities trying to get together. They're trying to fit their foot in a shoe that doesn't fit, and we need to stop it. If it doesn't fit, Massport must quit. Good night.

THE MODERATOR: Thank you for your indulgence. The only people that are left since we've exhausted the list of people who have not spoken before, so I will now go through the six people who have signed up to speak tonight who spoke last night. If they're still here, I would ask that they be very brief and cover only points that they didn't cover last night. M.J. Quinn.

MS. QUINN: Thank you very much. I'm Mary Quinn. I live on the Chelsea waterfront, and I will keep this brief. I appreciate your patience although I must

T2.56

admit I'm getting pleasure from keeping Massport folks up but it's all in good humor.

I'd like to mention one of the many of Massport data's statistical sins of omission or commission. Massport data's title, quote, Noise Exposure Population by Community, and then it has several communities and it has Chelsea listed as zero noise exposure population, people noise exposure, Chelsea, zero. T2.56.1

Jeremy Crawford was quote in the Globe last Sunday and we're not real happy about that because he talked about the CAC delay report that came out, and he said it was statistical nonsense versus common sense. Noise exposure, population, Chelsea, zero, statistical nonsense. Common sense, this is Chelsea waterfront. This is out of my second-floor window of a three-floor building. They can come in 256 feet, I believe. It's a 40, 50-foot building.

I'm not in the noise as I have zero noise exposure. This is a stealth plane. You can see it but you can't hear it. This

is the end of my street, Admiral's Hill. This particular day I remember it was one every 60 seconds. I can't believe that. I mean, we're not supposed to tailgate cars that close. One every 60 seconds. I counted it. If somebody told me it was one every 60 seconds, I'd say, it can't be. You can't put planes 60 seconds apart. They were that day.

THE MODERATOR: Would you wrap it up, please?

MS. QUINN: Thank you. That is just -- it's talking about the environment, it's talking about many impacts that you've heard, but I just want to mention again and again as everybody else has is that the data that they're using is flawed, there are things missing, it's manipulated.

T2.56.1 (cont.)

To get to the studies and comparisons that they're required to show, they mention a second airport. I'm a little suspicious why that was mentioned. It's a really big project with a lot of environmental impacts and it was shot down out of hand. It's not hard to believe it was

shot down out of hand. It's an awful big project.

But do they put anything in the study about alternatives that do not pollute such as improving the air traffic controllers' electronics which would improve safety, efficiency, and does not pollute at all? Do they talk about studies that they must have done about other airports that have similar delays? T2.56.2 T2.56.3

What are these other airports doing? They're a good business. They must have asked these people how are they doing it. Are these other airports building runways which heavily impact on the natural environment and on millions of people?

THE MODERATOR: Thank you, Ms. Quinn.

MS. QUINN: Thank you.

THE MODERATOR: Christopher Blackford? Mr. Blackford does not appear to be here. Arthur Hartnet? Mr. Hartnet is here. We'll wait for a second until he gets to the microphone. Then Peter Koff.

MR. HARTNET: Good evening again. T2.57
On April 4th of this year, which is just a very short time ago, upon a visit to Castle Island there was a very strong wind blowing from the direction of Logan Airport toward Castle Island. The resulting wind carried an extremely high odor from jet emissions. It was really very obnoxious, and I had never experienced that before so I know firsthand now what the people living very close to the airport experience on a daily basis.

Unfortunately, a lot of the business people have left, and one of my concerns that I didn't really address to them very well last night was the fact that no conscientious businessman that would want to grow his business would rely on a single source of raw materials or labor or any other item, so why do they want to rely on a single airport? It does not make good business sense.

One other item. The acoustical treatment as soundproofing should really be T2.57.1
known as is restricted to 65 decibel yearly

average but only to homes that are up to building codes, and they do not provide air conditioning. Try to live inside a house when it's a very hot, humid day, try not to think about that when you want to use your backyard and you can't because you can't acoustically treat your backyard. T2.57.1 (cont.)

One other item and this is primarily for MEPA. You know, when we were presented, the citizens who work every day, take care of their kids, their dogs, their homes, and run errands to the stores, we don't have the time to really sit down with multiple volumes of documents that we were presented.

You know, I received a document that looked like the Boston White Pages, and that was followed by another document that was a little bit bigger, and then I got three appendices that looked like the Yellow pages, and I said to myself, my God, if I have to swallow all this, I'm really doomed.

The length of documents that are presented to be reviewed should determine the

length of review time that the average citizens have, and I would strongly recommend that the law of the review be changed. If a proponent of a project comes in and they have documents up the ying yang, then the people should be given ying yang time to review these documents. Thank you.

THE MODERATOR: Jeff Buck? He doesn't appear to be here. Ronald Taylor? Mr. Taylor does not appear to be here. That exhausts the list of people that have signed up. Is there anybody who did not sign up who wishes now to speak?

MS. MILLER: I can appreciate the lateness of the hour. I'm Gail Miller. I'm currently the chair of the Conservation Committee. We are submitting written comments but I just want to make a public comment that we are opposed to this proposal, and we will certainly illuminate why in our written documents, and that's all I really have to say. But I would just like to yield 30 seconds to my comrade, Fran Riley, who omitted something.

T2.58

T2.58.1

THE MODERATOR: I'm not going to allow any yielded time.

MS. MILLER: Fifteen?

THE MODERATOR: No. I'm not going to allow any yielded time. The next person in the back who wishes to speak.

MS. RILEY: This is a question I've got for you. Why don't you tell us and why doesn't Massport disclose that more than five major airlines filed waivers with the FAA? It was never told to anybody in this room and that's a fact and it's in Washington. And I think MEPA, Mr. Pugsley, should investigate that fact. T2.59 T2.59.1

THE MODERATOR: Thank you, Ms. Riley.

MS. RILEY: Those airlines are not being in compliance with the stage 2 or 3 aircraft, don't you think that's going to raise pollution? Don't you think that that disclosure should have been made by Massport to all the communities?

THE MODERATOR: Thank you, Mrs. Riley. Anybody else? This gentleman in the

front.

T2.60

MR. CHOQUET: My name is Roland Choquet. I'm with CARE and the citizens organization. I left something out last night when I spoke. Back when Chelsea was induced into receivership, we were allowed to have financial troubles and go into receivership. At that time, Massport was in violation of the FAA standards for pollution at the airport in East Boston and they basically encroached on Chelsea's land and took a huge parcel of land and called it the airport-related overlay district.

Now they have five parking garages there to alleviate the pollution in East Boston from the overabundance of pollution they had. Now we've got some of it, and I'm just wondering how, after hearing all this, Logan Airport can expand to double capacity, but back then during receivership it was called Logan 2000, the program. They were granted double expansion for passenger and freight handling.

If they were at the limit back then

when we went into receivership, and they've taken over five parking garages to alleviate the pollution, how can they double its capacity and still be within the limits of pollution? How can that happen? It's a mystery to me. T2.60.1

Also, their terrorist organization is allowed to tyrannize the people who are trying to get a night's sleep but I mentioned this last night, too. Amnesty International declared that the number one form of torture in the world is sleep deprivation. We've heard again this evening too many people aren't sleeping and it's not right.

THE MODERATOR: Thank you, Mr. Choquet. The gentleman in the center and then I'll go to Mr. McGovern again.

MR. STAMOS: My name is Jim Stamos, S-T-A-M-O-S. I'm from the Squantum section of Quincy on the other side of the bay. Last night at the hearing for Massport at the transportation center, Mr. Cohen from the South Shore Chamber of Commerce spoke very eloquently about his 2500-member organization T2.61

in full support of the 14/32 runway and the center field taxi for economic reasons and the benefit of the businesses.

I am a member of the South Shore Chamber of Commerce and so is another organization that I belong to with over 642 members, and in talking to many of my business associates, none of us were polled by the South Shore Chamber of Commerce regarding our views on this Logan Airport runway. Every time the South Shore Chamber of Commerce has an issue, and they are, as far as I know, one of the most accredited chambers of commerce in the United States, they send out a letter, they send out a poll, what is your view, what is your concern, and nothing was brought from them to any of the members that I know.

I know Mr. Blute did a presentation down there and the board of directors unanimously supported him, but in my city of Quincy, we were told that we asked too late to have a presentation done by Massport and they're now too busy. In talking to several

other South Shore communities, none of them that I have spoken to have had a presentation by Massport, and I don't know how we can make any type of decision, environmental, economic, or otherwise, when everybody south of Boston has not had the presentation. It just doesn't make sense.

I've been involved in environmental issues from Marina Bay and Lot 23, to the Neponset River Watershed Association, Save the Beaches, Save the Bay. We live on the bay. We get the noise. We don't get a lot of the overflights, but we get the noise and the vibrations, and my new home of three years is cracking walls, and the vibration that we get all morning and again all night.

Five planes few over my house tonight from 6 to about 20 minutes past 7, and my wife and I decided that we would get in the car and drive back up here in support of the rest of the residents because it's intolerable.

When we went to a meeting in South Boston at L Street, Mr. Silva from -- I think

that's your name -- said to us that the accuracy of the planes flying in is 68 percent, not a hundred percent. You have to drive 100 percent straight down the highway or you'll crash, and now I know why the planes are flying from Neponset River over Squantum, over Quincy Bay, over West Quincy. It's intolerable.

I really don't understand how we can make and participate in the environmental process through MEPA when we have not had a presentation. I've called my state senator, Michael Morrissey, and our mayor and our city council voted unanimously against this, and we're going to demand that we get a presentation or it's going to be a flawed process. Thank you. T2.61.1

THE MODERATOR: Mr. McGovern, I'm going to give you 60 seconds more.

MR. McGOVERN: Very quickly, this winter I heard a news story where a couple was stranded at the airport because American Airlines were on strike, and the children were getting ready to go to Disney World, and

they sat there in the airport and they came up with an answer to their problem. They rented a limousine and went to Disney World. They got the kids down there.

Boston is a place that is a destination like Disney World. And guess what? People will find a way to come here. If it's not by a plane, it will be another way. So what I think we need to do is get together with the citizens and be good neighbors because they're very creative people, and come up with some solid solutions that everyone can live with.

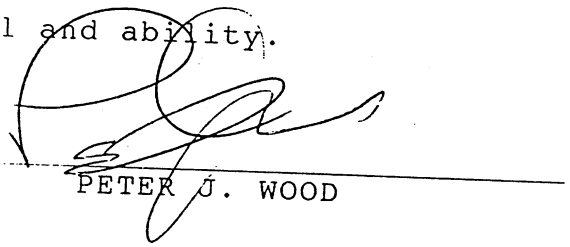
But they're my two heros, I don't know what their names are, but the parents that brought their kids to Disney World.

THE MODERATOR: Thank you all. I'm going to declare this hearing now closed, and that concludes tonight hearing.

(The hearing concluded at 10:50 p.m.)

CERTIFICATE

I, Peter J. Wood, do hereby certify that the foregoing record, Pages 1 through 213, is a complete, accurate, and true transcription of my stenomask tapes taken in the aforementioned matter to the best of my skill and ability.



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Transcript T2.01
MA Aeronautics Commission, Sherman Saltmarsh

Code	Topic 1	Topic 2	Comment	Response
T2.01.1	Alternatives	Runway 14/32	I think Massport has got an obligation to the people that surround this airport, all the communities that have been mentioned, to do anything they can to lessen the impact on the homes, their residences, their businesses, and their schools, et cetera, in that area...[T]hey will take approximately 75,000 flights over water. To me, that's an improvement to the people in this area...[W]e at MAC owe the support to make sure you'll get this small runway.	Comment noted.

Transcript T2.02 City of Somerville, Bob Haas, Mayor

Code	Topic 1	Topic 2	Comment	Response
T2.02.1	Alternatives	Runway Approach Minimums	[Revere objects to] [t]he proposal...to lower decisional heights for landing on runway 22F[R] in poor visibility weather...With lowering the decision height, the control tower will allow more planes to approach over Beachmont Hill during weather with poor visibility because planes would be allowed to fly closer to the airport before the pilot has to see the hill under worst conditions...Given the already narrow envelope between the existing approach down and the top of Beachmont Hill, an early decision height would increase the potential of a hazard for the Beachmont residents.	Reducing the current landing minimums for Runway 22L at Logan Airport does not equate to a reduction in the existing levels of safety and doesn't change noise levels. Aircraft would follow the same arrival paths, at the same altitudes as today, but the location at which a missed approach decision must be made would be moved closer to the airport. Both Appendix D and Section 3.4 include discussions of reduced minimums. Even under existing approach minimums, aircraft are already beyond Beachmont Hill before reaching the decision height (refer to Section 3.4 of the Supplemental DEIS/FEIR).
T2.02.2	Alternatives	Runway 14/32	We are not totally convinced that the construction of runway 14/32 will result in less air traffic over the city of Revere...It is Revere's opinion that the new runway will increase airport capacity which will obviously result in increased air traffic congestion and additional air traffic over our community.	The new runway at Logan Airport is not proposed to increase the annual capacity at Logan Airport. Rather, it is proposed to reduce delays, particularly on days with strong northwest winds. The Airside Project Draft EIS/EIR analysis shows that this runway also provides more flexibility in runway use, allowing the FAA controllers to adhere more closely to the PRAS goals with attendant benefits to the neighboring communities that are most highly noise impacted The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated by passenger or airlines, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts examined in the airside operational and environmental analyses would capture any potential variation in future passenger and aircraft activity at Logan Airport.
T2.02.3	Ground Transportation	Access to Logan	If we are talking about increasing airport traffic, passengers, over the next ten years by almost 20 million passengers, people coming from the north have to go through [Revere]...in order to get to the airport...we in Revere will be in complete gridlock	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of unidirectional Runway 14/32 would not be expected to induce additional aircraft operations or passenger traffic at Logan Airport. Refer to Section 4.2.

Code	Topic 1	Topic 2	Comment	Response
T2.02.2	Alternatives	Runway 14/32	We are not totally convinced that the construction of runway 14/32 will result in less air traffic over the city of Revere...It is Revere's opinion that the new runway will increase airport capacity which will obviously result in increased air traffic congestion and additional air traffic over our community.	The new runway at Logan Airport is not proposed to increase the annual capacity at Logan Airport. Rather, it is proposed to reduce delays, particularly on days with strong northwest winds. The Airside Project Draft EIS/EIR analysis shows that this runway also provides more flexibility in runway use, allowing the FAA controllers to adhere more closely to the PRAS goals with attendant benefits to the neighboring communities that are most highly noise impacted The runway will substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays will represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated by passenger or airlines, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred absent the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts examined in the airside operational and environmental analyses would capture any potential variation in future passenger and aircraft activity at Logan Airport.
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Transcript T2.03
Private Citizen: Preston Galarneau

Code	Topic 1	Topic 2	Comment	Response
T2.03.1	Noise	Model	The fact is that actual, that is, measured noise results in Chelsea have been year after year above 65, and the predicted number used by Massport to assess the noise impact on [Chelsea]...is below 65...Without an accurate assessment, the true impact of health, environmental, and real estate value effects cannot be clearly defined, making any mitigation offer unreasonable.	The dispersion model portion of the LDMS is an EPA-approved model. The methodology is consistent with FAA and EPA guidelines. Differences between measured and modeled sound levels have been reported in Logan Airport's various GEIRs and Annual Updates for a number of years. Differences at close-in locations were significantly reduced in 1996 through modification of source levels to better account for over-water sound propagation and apparent use of higher engine power settings than are normally assumed in the noise model's database (Refer to Appendix F of the *Logan Airport 1996 Annual Update*). In 1998, differences between measured and modeled noise became even less when Massport upgraded its monitoring system and began to report noise caused only by aircraft -- a metric directly comparable to the DNL exposure levels predicted by the noise model. At sites having exposure levels of 60 dB or more, this improvement to the monitoring system brought measured and modeled DNL values to within 0.2 dB of each other. (Refer to Chapter 5 of the *Logan Airport 1998 Annual Update*). Massport continues to investigate possible causes for remaining differences (such as from hill effects) but believes the FAA's INM noise model used in the Airside Project noise analyses accurately represents expected noise exposure.
T2.03.2	Noise	Model	[T]he noise monitor location, that's [shown on] Figure 5.2-1 on Page 5-13, indicates that there is a permanent noise monitor on Admiral's Hill in Chelsea, while all subsequent analysis of measured noise data is placed on Shirtleff and Essex Street in Chelsea. That's a site that has not had a permanent monitor since 1991, and then for only one year.	Comment noted. Also refer to response to Comment T2.3.1.

Code	Topic 1	Topic 2	Comment	Response
T2.03.3	Noise	Sound Insulation	Chelsea will receive the brunt of the short-term negative impacts of this proposal...In a presentation to the Chelsea City Council on March 3rd, 1999, Massport representatives said runway 33 departures will increase from 4.8 percent to 12 percent of total departures. That's a 150 percent increase. And runway 15 arrivals will increase from 1.5 percent to 7.7 percent. That's a 413 percent increase. The associated increase in noise is large enough that even using the understated predicted noise measures, 1100 homes will be eligible for soundproofing.	While equivalent jet operations increase by more than 50 percent from a 1993 base to the future 37.5M High Fleet scenario if the Preferred Alternative is implemented, the appropriate basis for comparison of the Preferred Alternative is the No Action Alternative. Equivalent jet operations would increase by more than 75 percent over the Preferred Alternative if no action were taken. Despite the increase in equivalent jet operations, the Airside analysis indicates that overall noise impacts decline over time with the elimination of Stage 2 aircraft and the replacement of hushkitted Stage 3 aircraft with non-hushkitted Stage 3 aircraft. By allowing aircraft operations to shift from over-land to over-water routings and by providing greater flexibility in the use of Runways 27 and 33L for takeoff, the Preferred Alternative further reduces the highest noise impacts to the close-in neighboring communities. Furthermore, the Supplemental DEIS/FEIR also demonstrates the more equitable balance of noise impacts among communities surrounding Logan Airport that can be achieved with the Preferred Alternative as opposed to the imbalance that occurs today and would occur in the future if no action is taken. Massport's Noise Rules and FAA-approved sound insulation program have been only two elements of its overall noise abatement program. Massport is currently supporting FAA's effort to improve conformance to the new Runway 27 flight corridor and is exploring means of extending its sound insulation program through innovative investigation of hill effects on sound propagation. Massport is also actively involved in encouraging growth at Worcester Regional Airport and other alternative airports, and is committed to monitoring and improving the PRAS.
T2.03.4	Noise	Sound Insulation	While we feel sound insulation cannot fully mitigate the impacts of increased ambient noise levels, many of the older homes will not be eligible for funding due to FAA order 5100.38A which requires the property owner to bring homes up to code before they pay.	Federal requirements typically exclude the FAA from any responsibility to bring a building up to code when the structure is sub-standard but otherwise qualifies to participate in an airport sponsored sound insulation program. However, to address impacts in particular projects such as the proposed Airside Project, FAA has discretion to use grant funds to bring buildings up to code as part of the mitigation program to the extent such improvement are required to proceed with the sound insulation work. The mitigation program for the Airside Project includes use of grant funds for such purposes. For the eligible residences, the FAA will fund building code improvements, to the extent necessary, to implement effective sound insulation treatment.

Code	Topic 1	Topic 2	Comment	Response
T2.03.5	Environmental Justice	Demographic Data	The EIR's conclusion [that] ["]Given the reduction in the highest noise-exposed population and this mitigation, soundproofing, the low-income and minority populations will not experience disproportionally high adverse impacts in comparison to the affected population as a whole["]...conflicts with President Clinton's environmental justice executive order 1289A... Essentially, the four-page environmental justice analysis contained within the EIR does not adequately analyze the environmental effects including human health, economic, and social effects of the proposed expansion, and I would suggest the analysis is yet another clever obfuscation of the truth, and the analysis in the EIR does not meet the standards of the Department of Transportation order.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.
T2.03.6	Alternatives	Other Non-Construction Alternatives	[A]lternatives under discussion such as comprehensive peak hour pricing analysis using a range of operations per hour levels instead of the single higher operational threshold that underestimates the delay reduction.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR contain an analysis of PPP as a demand management alternative at Logan Airport. The analysis indicates that PPP is an effective option when airlines schedule beyond the normal hourly operating capacity of the airport and provides an assessment of the extent of the benefits from PPP under such circumstances. See Section 4.5.4 of the Supplemental DEIS/FEIR.
T2.03.7	Regional Transportation	Regional Airports	Hanscom should not be ruled out as a piece of the regionalization solution, and a second major airport should have at least been considered.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
T2.03.8	Noise	Monitoring	Noise and air quality equipment should be along flight paths. Chelsea's air monitors at the Soldier's Home, out of harm's way.	There is a noise monitor located at Shurtleff and Essex Streets on Admiral's Hill in Chelsea. It is essentially directly under the flight corridor for aircraft departing from Runway 33L. It is referred to as Site 15 in tables and text throughout this document.
T2.03.9	Ecosystems	Rare Species	[A] plan to relocate or mitigate [impacts to] the upland sandpiper…is inadequate and also indefinite.	Massport has developed a comprehensive on-site and off-site Upland Sandpiper habitat mitigation plan in close coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) for loss of such habitat at Logan Airport from construction of the Centerfield Taxiway. The plan strives to enhance protection of remaining Upland Sandpiper habitat at Logan Airport without increasing the aviation safety hazards typically associated with birds or hazards to the birds. Additionally, it is expected that an area of former Upland Sandpiper habitat totaling approximately 150 acres at Camp Edwards on Cape Cod will be restored to grassland habitat by removing woody and shrub vegetation to encourage enhancement of the Upland Sandpiper regional population. This restoration effort provides a unique opportunity to expand grasslands in the Commonwealth far exceeding the ±40 acres to be lost at Logan Airport. A Memorandum of Agreement has been signed between Massport and the Massachusetts Army Air National Guard for implementation of the program and long-term maintenance of the area as Upland Sandpiper habitat. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR. Additional details of the Upland Sandpiper mitigation plan are presented in Section 6.5 of the Supplemental DEIS/FEIR.
T2.03.10	Ground Transportation	Access to Logan	A study of the long-term traffic impacts on the surrounding communities should be as comprehensive as possible.	Implementation of the Preferred Alternative would not increase capacity, but rather it would correct a series of deficiencies in the airfield geometry and operation. Massport's plans to handle the ground access requirements of future passenger levels are discussed in the *Logan Airport 1999 ESPR* (previously GEIR) and its subsequent Environmental Data Reports (Annual Updates).

Code	Topic 1	Topic 2	Comment	Response
T2.03.11	Alternatives	Runway 14/32	[Is there a] commitment to maintain the new runway's unidirectional status?	The Runway 14/32 concept under review in the Supplemental DEIS/FEIR allows unidirectional operations only (*i.e.*, all aircraft arrivals would occur over Boston Harbor to the Runway 32 approach and all departures would initiate from the Runway 14 heading out over Boston Harbor). State approval under MEPA and federal approval under NEPA will allow Runway 14/32 to proceed only on a basis consistent with the stated unidirectional limitations. Consistent with any such approvals, Massport will light and stripe Runway 14/32 to accommodate unidirectional operations only. Furthermore, the location of proposed Runway 14/32 involves physical limitations that reinforce the unidirectional requirements of that improvement concept. The Hyatt Hotel and Conference Center, which is 174 feet high, is within 1,300 feet of the Runway 14. The location of the Hyatt Hotel and Conference Center invades applicable FAA approach surface glide slope requirements, thereby precluding arrivals from the west to the Runway 14. Another factor limiting westerly operations on Runway 14/32 is the lack of available facilities to allow aircraft to taxi to the Runway 32. The unidirectional limitations of Runway 14/32 allow maximum use of over-water operations and thereby limit operational impacts over residential areas. To strictly reinforce these important environmental benefits, Massport has designated the intended unidirectional limitation on Runway 14/32 as a mitigation measure. Refer to Section 8.7 of the Supplemental DEIS/FEIR Draft Section 61 Findings, and the discussion in Section 8.5 of the Supplemental DEIS/FEIR regarding enforcement of unidirectionality of Runway 14/32.
T2.03.12	Analysis Assumptions/ Methodologies	Base Year	...Data used for this analysis is over five years old and does not reflect current conditions	The projections of future airfield delays at Logan Airport are not based on analysis and modeling of delays which occurred during 1993. The analysis for 1993 was included in the Airside Project Draft EIS/EIR to provide historical perspective to the delay problem at Logan Airport and for use in model calibration. The analysis contained in the Supplemental DEIS/FEIR has been updated to include modeled delay results for 1998 to provide more current context to airfield conditions at Logan Airport. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a description of the delay analysis and discussion of current and future delays at Logan Airport.

Transcript T2.04
US Congressman Michael Capuano

Code	Topic 1	Topic 2	Comment	Response
T2.04.1	Environmental Justice	Cumulative Impacts	I don't think it takes [a lot]...to understand that building this runway before adequate and fair consideration and every single effort is taken to reduce the impact, the negative environmental impact, on the most densely-populated area in New England, one of the poorest areas in New England no matter how you measure it, one of the most racially-diverse areas no matter how you measure it in this country.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Transcript T2.05 City of Chelsea, Paul Nowicki, City Councilor

Code	Topic 1	Topic 2	Comment	Response
T2.05.1	Environmental Justice	Impacts	[T]hese things, [the bridge, MWRA, and the new runway] benefit the entire state and region, but instead we're the ones that take the full burden and it's not fair, it's not proper, it's not right.	The population that will be served by the Preferred Alternative is the same population that is currently served by Logan Airport. Approximately 21 percent of passenger traffic is generated within the City of Boston, 29 percent within Route 128 (not including Boston), and 29 percent from the region between Route 128 and I-495. Logan Airport is also a major employer for the metropolitan region with the largest percentage of those employed at Logan Airport (19 percent) living in Boston. Other communities with significant employment at Logan Airport include Revere, Winthrop, Lynn, Peabody, Malden, Saugus, Chelsea, Everett and Salem. These communities account for 49 percent of the employment at Logan Airport.

Transcript T2.06 Wintrhop Airport Hazards Committee, Jerome E. Falbo

Code	Topic 1	Topic 2	Comment	Response
T2.06.1	Regional Transportation	Regional Airports	Governor Weld appointed a commission to study the regionalization of airports. They came back within six months to a year with a [report] ...recommending that's how we should go in the future. That was years ago and Massport nor the Commonwealth has taken any action on it.	The *Strategic Assessment Report*, completed in July 1993 for the Massachusetts Aeronautics Commission, examined a broad range of scenarios for meeting future high-speed intercity travel demand in eastern and central Massachusetts. The scenarios examined included high-speed rail, use of Air Force bases, use of other regional airports, construction of a new airport, and construction of vertiports. A principal finding of the SAR was, *"Regardless of the type of additional facility element added, the Commonwealth would have to make infrastructure improvements at Logan International Airport if demand growth is to be fully satisfied."*
T2.06.2	Alternatives	Runway 14/32	[Quoted from letter from Edward J. Markey] ..."The construction of the new runway would expand Logan's capacity for operations and increasing current potential for future growth..."	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Code	Topic 1	Topic 2	Comment	Response
T2.06.3	Regional Transportation	Regional Airports	[Quoted from letter from Edward J. Markey]..."We must examine closely the status of our regional aviation transportation system before we implement any new structur[al] changes at Logan International Airport...It is the responsibility of both the federal and the state governments to devise a strategy that insures some of the burden at Logan is relieved by those regional commercial airports that would welcome increase in regular[ly] scheduled passenger service."	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.
T2.06.4	Environmental Review Process	Blue Ribbon Panel	[Quoted from a letter from Edward J. Markey]..."[A] blue ribbon panel should be established to drive such a regional aviation transportation strategy."	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.

Transcript T2.07 Winthrop Board of Selectman, Jerry Ogus, Chair

Code	Topic 1	Topic 2	Comment	Response
T2.07.1	Public Health	Effects	How can we consider doing something like [increasing the number of flights out of Logan Airport] without really having scientific evidence? How can we take a chance with people, with people's health, welfare, their very lives, their children's lives? How can we go forward on something like this without doing the necessary health studies...[B]efore this is even considered any farther, I think what we really need to do is we need to go back and we have to do some really detailed analysis, and care about people and the health of people before we start talking about building more runways and having more people coming into the area.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Airside Project Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Airside Project Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts. The other projects cited in this comment are not related to the Airside Improvements Project. Any impacts associated with those projects will be addressed in individual project filings, if required under NEPA and/or MEPA and also in the ESPR (formerly GEIR) process. The ongoing state ESPR process provides information to the federal and state agencies and the general public on the environmental effects of existing and future operations at Logan Airport, on the cumulative effect of airport operations, and on the planning context for individual projects at Logan Airport. The GEIR/ESPR is specifically incorporated by reference in the Airside Project Draft EIS/EIR and Supplemental DEIS/FEIR as a background document. Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Transcript T2.08
Private Citizen: John Nucci

Code	Topic 1	Topic 2	Comment	Response
T2.08.1	Regional Transportation	Regional Airports	[I]f we allow ...[Massport] to build this runway, we remove all the incentive to look at the other alternatives.	Regional carriers that provide service to Logan Airport and the passengers they serve are an entirely different market than the airlines that and passengers that have generated tremendous growth at the regional airports over the past several years. As a result, regional carriers serving Logan Airport are unlikely to shift operations to the regional airports and the low-fare carriers that provide service from the regional airports are unlikely to shift operations to Logan Airport. Regional carriers serving Logan Airport carry a mix of local and connecting passengers. A significant number of passengers are either traveling to Boston or connecting to flights that are not available from the outlying airports. For example, service to Manchester would not be a viable alternative for a Provincetown passenger traveling to a location in downtown Boston. Likewise, service to Providence would not be attractive to a Provincetown passenger trying to reach Denver, since there are no nonstop Denver services at T.F. Green/Providence Airport. Market forces have been responsible for the shift in airport usage from Logan Airport to the regional airports and the induced growth at the regional airports. Regional airports have become attractive alternatives to Logan Airport because of airline decisions to increase the frequency and quality of regional airport services (i.e., jet versus turboprops), the availability of lower airfares, convenient access relative to Logan Airport, and increased public awareness of the regional airports. Until Southwest Airlines, Delta Express and MetroJet introduced low-fare services into the region, the New England region had been one of the only regions in the United States without a significant low-fare carrier presence. The resulting stimulation of traffic at the regional airports consists of both induced demand and diversion from Logan Airport. This diversion results from a recapture of traffic within Manchester and T.F. Green/Providence airports primary markets that was previously using Logan Airport. Since 1996, when low-fare services were first established at T.F. Green/Providence Airport, eight out of ten new air travelers in New England have chosen to use the regional airports over Logan Airport. Massport considers Logan Airport to be part of a regional system of airports that includes T.F. Green/Providence, Manchester and Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate growth in air travel demand. Refer to Chapter 2 of the Supplemental DEIS/FEIR for a discussion of the roles of Logan Airport and these regional airports in the eastern New England aviation system.

Transcript T2.09 City of Chelsea, Juan Vega, City Council President

Code	Topic 1	Topic 2	Comment	Response
T2.09.1	Environmental Justice	Impacts	[I ask you] to measure the environmental injustice that this proposal represents, and the disproportionate impact that it will have in the surrounding communities given the economic, the socioeconomic of this community.	The Environmental Justice analysis was expanded for the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations caused by the Preferred Alternative. Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation. A discussion of the Environmental Justice analysis is presented in Section 6.8 of Supplemental DEIS/FEIR.

Transcript T2.10 City of Chelsea, Chelsea City Council, Rochelle A. Bennett

Code	Topic 1	Topic 2	Comment	Response
T2.10.1	Public Health	Effects	[T]he health impact isn't being addressed as much as it should be.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Transcript T2.11 Greater Boston Chamber, Jim Kloche, Director of Economic Development

Code	Topic 1	Topic 2	Comment	Response
T2.11.1	Regional Transportation	Regional Airports	We believe that we need a two-step approach to address the air travel issue. Step one is to do more with regional airports. Step two is an expanded 14/32.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Transcript T2.12
Private Citizen: Kathy Callahan

Code	Topic 1	Topic 2	Comment	Response
T2.12.1	General Opposition		I put together a petition that I will circulate eventually...It's in support of Representative O'Flaherty and Delio's legislative bill 1576 which opposes the runway.	Comment noted.

Transcript T2.13
Continental Airlines, Inc.,
Glen Morse, Senior Director, Industry Affairs

Code	Topic 1	Topic 2	Comment	Response
T2.13.1	Alternatives	Taxiway Improvements	[Continental Airlines] support[s] all of the taxiway improvements, most notably, the mid-field taxiway, because they will enhance the safety and efficiency of aircraft movements on the airport. These efficiency gains translate to environmental benefits as stated in the draft EIR/EIS because they reduce taxi times and consequently reduce engine and noise emissions.	Comment noted.
T2.13.2	Alternatives	Runway 14/32	Continental supports the construction of unidirectional 14/32. ...in good weather when the winds are from the northwest...and delays are caused because there's only a single arrival runway, this program will serve to eliminate those delays.	Comment noted.

Transcript T2.14
Private Citizen: John Tardif

Code	Topic 1	Topic 2	Comment	Response
T2.14.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.15 British Airways, Gail Visentin, Dir. Passenger & Cargo Operations

Code	Topic 1	Topic 2	Comment	Response
T2.15.1	Alternatives	Preferred Alternatives	The airport improvement program proposed by Massport is in the interest of all citizens around Boston because it promotes airfield safety and operational efficiencies.	Comment noted.

Transcript T2.16
Winthrop Noise Air Pollution & Airport Hazard Committee, Bob Driscoll, Senior Vice Chair

Code	Topic 1	Topic 2	Comment	Response
T2.16.1	Alternatives	Runway 14/32	Last night, one of your speakers mentioned that Logan needed a fourth runway. Logan Airport has five runways. What Massport is asking for is a sixth runway, and I think this is very important when you realize that the other major airports in our country, most of them do not have five runways.	To accommodate seasonal on- and off-shore winds, the major runways at Logan Airport are set up at 60 degree angles to each other and have multiple intersections that greatly reduce the capacity of the airport compared to most other major facilities in the country. Also, Logan Airport's fifth runway, Runway 15L/33R, is just 2,557 feet long and can only be used by a few small propeller aircraft so that it does little to help reduce delays. Logan Airport needs the new, more useful Runway 14/32 if it is to improve its delay problems.
T2.16.2	Regional Transportation	Regional Airports	In other words, [it is unclear why]...other [regional] airports [will] reach full capacity but Logan never reaches full capacity.	Airport capacity varies according to weather conditions and traffic volume as well as the airfield layout, facilities and equipment such as ILS, and operational procedures such as approach minimums and aircraft separations.

Transcript T2.17
US Airways,
Robert A. Hazel, General Manager

Code	Topic 1	Topic 2	Comment	Response
T2.17.1	Alternatives	Runway 14/32	In order for U.S. Airways and other airlines to provide reliable and affordable air service, it is important that we are able to operate efficiently. Current airfield limitations at Logan do not permit efficient operations. The resulting delays are costly to the airlines, and also costly and inconvenient for our customers.	Comment noted.

Transcript T2.18 CARE, Rick Rodes, President

Code	Topic 1	Topic 2	Comment	Response
T2.18.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.19 American Airlines, Ed Freni, General Manager

Code	Topic 1	Topic 2	Comment	Response
T2.19.1	Alternatives	Runway 14/32	We believe that a new unidirectional runway for regional aircraft will benefit all of Logan. The new runway will help reduce delays at Logan and allow the airport to operate more efficiently when the winds are northwesterly.	Comment noted.

Transcript T2.20
Private Citizen: Richard Dimes

Code	Topic 1	Topic 2	Comment	Response
T2.20.1	Alternatives	Runway 14/32	I'm a hundred percent against 14/32.	Comment noted.

Transcript T2.21 United Airlines, Sean Donohue, City Manager

Code	Topic 1	Topic 2	Comment	Response
T2.21.1	Alternatives	Runway 14/32	United supports the new runway for three critical reasons. The first reason is safety…while Logan is a very safe airport, it is clear that this new runway will make it even safer.	Comment noted.
T2.21.2	Alternatives	Runway 14/32	The second reason is service…this new runway, in reducing delays, will allow the airlines to serve our customers better and meet their needs.	Comment noted.
T2.21.3	Alternatives	Runway 14/32	The third reason is air quality… [D]elays cause the airlines in many cases to be out on the runways for 45 to 60 minutes before we're allowed to take off…The new runway will alleviate those issues and be able to improve the pollution in the area and to improve air quality.	Comment noted.

Transcript T2.22 Community Advisory Committee, Ronald Taylor

Code	Topic 1	Topic 2	Comment	Response
T2.22.1	Alternatives	Runway 14/32	The Federal Aviation Administration and Massport have yet to provide a traffic pattern for ...[R]unway [14/32], and to explain what the approach will be, what type of an approach there will be, how the aircraft will be directed to that given runway as it is referred to the combination of 33 left 27. It appears that 27 and 32 will be a conflict and there will be a safety issue.	The flight tracks (included the approach paths for Runway 32) used in the modeling are presented in Chapter 6 of the Supplemental DEIS/FEIR. Arrivals to Runway 32 and departures from Runway 27 are dependent operations, and FAA controllers will ensure adequate separation between the two types of operations. All separation standards, operational procedures, and capacities used in the modeling were reviewed by the FAA.

Transcript T2.23
Air Transport Association of America, Scott Godfrey, Director East Region

Code	Topic 1	Topic 2	Comment	Response
T2.23.1	Alternatives	Runway 14/32	The ATA cannot stress enough the importance of the reduction of the current level of delays which plague Boston Logan Airport, and the corresponding level of service which we are able to provide to our passengers and shippers utilizing the airport.	Comment noted.
T2.23.2	Alternatives	Runway 14/32	It is our position that the implementation of the entire project will lower the overall noise impact on the surrounding communities. This is due to the unidirectional orientation of the new runway and the efficiency gained which will cause a reduction of delayed late-night operations which currently impact citizens at the most intrusive time of the day.	Comment noted.

Transcript T2.24
Private Citizen: Steve Stoddard

Code	Topic 1	Topic 2	Comment	Response
T2.24.1	Purpose and Need	Delay	...the EIS, as currently constituted, should be thrown out and reworked with an independent group and be sent back to the public for further comment.	In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental DEIS to address specific issues identified by the FAA following input from an Panel consisting of six persons. At the FAA's direction, three Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Airside Project's technical consulting team and other independent industry experts.
T2.24.2	Analysis Assumptions/ Methodologies	Planning Period	Over the next five years, Massport has stated that the flights over my town would be reduced. When asked what the impacts of 10, 15, and 20 years are, they have been unable or unwilling to answer.	Massport has developed a range of potential future traffic levels for planning purposes. For a variety of reasons, Massport believes that the forecasts described as 1999 and 2010 projections in the *Logan Airside Improvements Feasibility Study, Phase I Report and the DEIS/EIR* will not be achieved until after 1999 and 2010, respectively. The Airport is likely to reach 29 million passengers (formerly the "1999" forecast) in 2003. Developments at the regional airports and Amtrak's high speed Acela Express rail service to New York are expected to further slow Logan Airport's passenger traffic growth. As a result, Logan Airport is now expected to reach 37.5 million passengers in 2015 and 45 million passengers in 2024. Thus the planning forecasts that underlie the delays and environmental analyses cover a planning period that extends beyond 2020. Refer to Chapters 1 and 4 of the Supplemental Draft EIS/Final EIR for a complete discussion of the planning forecasts.
T2.24.3	Delay	Model	The main reason they want 14/32 is to reduce delays. There is conflicting data that shows Massport may be overstating the delays at Logan.	Chapter 4 of the Supplemental DEIS/FEIR contains a discussion on the estimation and modeling of flight delays used in the Airside Project. Chapter 1 and Appendix C include a description of measures used by FAA and U.S. DOT to calculate delay, the limitations of those measures, an explanation of computer models for estimating flight delays, and historical delay data at Logan Airport and other major United States airports. While regional alternatives will relieve traffic growth pressures at Logan Airport, the proposed airside improvements are necessary and provide clear benefits at current traffic levels. These benefits will only increase in the future, even as developments at the regional airports and high-speed rail services act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
T2.24.4	Environmental Review Process	NEPA	The environmental impact statement should present the environmental impacts of the proposal and the alternatives in a comparative form, thus sharply defining the issues and providing a clear basis for choice...	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan.* The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.
T2.24.5	Regional Transportation	Regional Airports	I am advocating enclosing a comprehensive up-to-date study showing all alternatives that are available. We should be looking at Otis Air Force Base, Worcester, Green Field, Hanscom, and further regionalization as well as a new airport to develop a plan that compares what is the best long-term strategy, not a quick, short-term fix.	Massport considers Logan Airport to be part of a regional system of airports that includes the T.F. Green/Providence, Manchester and Worcester Regional airports Refer to Chapter 2 of the Draft EIS/EIR and Supplemental DEIS/FEIR for a comprehensive discussion of regional alternatives.

Transcript T2.25
Private Citizen: Richard Salini

Code	Topic 1	Topic 2	Comment	Response
T2.25.1	Air Quality	Model	I heard Peter Blute...[say] that there's going to be little, if no, effects on the Jeffrey's Point neighborhood. Well, I beg to differ with him. According to his chart in Volume 4 of the environmental draft, Appendix M, Table DM1-8, this is on VOCs, right now in 1999, you're around a level of 200. With a higher build in 2010, it goes to 448.	The highest one-hour level of VOCs (odor indicator) at Jeffries Point will increase from the 1993 level of 225 micrograms per cubic meter ($\mu g/m^3$) to 448 $\mu g/m^3$ under the 45 million passenger scenario of Alternative 1. Notably, average concentrations will be lower than the values above. There are no standards for odor to which to compare this level.
T2.25.2	Regional Transportation	Regional Airports	[W]hat are they doing to increase use of other airports?	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Transcript T2.26
East Boston Land Use Advisory Council, Joe Palenza, Chairperson

Code	Topic 1	Topic 2	Comment	Response
T2.26.1	Alternatives	Preferred Alternative	The East Boston Land Use Council voted to oppose the building of runway 14/32, the center field taxiway, and the lowering of the minimum of the height of the approach.	Comment noted.

Transcript T2.27
Jeffries Point Neighborhood Association, Karen M. Maddalena, Chairperson

Code	Topic 1	Topic 2	Comment	Response
T2.27.1	Alternatives	Runway 14/32	I'm opposed to 14/32 and the center field taxiway.	Comment noted.
T2.27.2	Environmental Justice	Impacts	We're concerned about the quality of life. We want environmental justice in our community. They talk about soundproofing, but there's noise, air quality that we're concerned about, the health hazards particularly to the elderly, the children.	The available public health studies for communities adjacent to Logan Airport were reviewed and are presented in Section 6.8 of the Supplemental DEIS/FEIR. Public health status reports were available for the City of Boston; however, comparable public health reports were not available from the Public Health Departments of Chelsea, Revere, and Winthrop. A review of the available information did not indicate any causal relationship based on proximity to the airport, nor did it identify hearing loss as a public health concern. Noise was identified as the only off-airport impact from the Preferred Alternative with the potential for environmental justice impacts. The environmental justice analysis found no disproportionately high and adverse impacts to low-income and minority populations from direct project impacts. However, because the area added to the 65 dB DNL contour is primarily within the City of Chelsea, other environmental and health issues were also considered in an effort to assess other cumulative or multiple adverse exposures. Refer to Section 6.8 of the Supplemental DEIS/FEIR for additional information. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Code	Topic 1	Topic 2	Comment	Response
T2.27.3	Regional Transportation	Regional Airports	What about Hanscom Airport? I read in the Boston Globe that Blute talked about Worcester Airport. He never mentioned Hanscom Airport.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Since 1995, Massport has worked closely with the City of Worcester to aggressively market the Worcester Regional Airport to airlines. Massport increased its involvement with the Worcester Regional Airport by assuming operational responsibility of the airport on January 15, 2000. By its agreement with the City of Worcester, Massport could assume ownership of the Worcester Regional Airport by 2005. On February 1, 2000, Delta Connection began serving Worcester Regional Airport with two daily nonstop roundtrip flights on regional jet aircraft to Atlanta. On July 6, 2000, American Eagle began service to New York JFK Airport with three daily nonstop roundtrip flights on turboprop aircraft. Massport is in ongoing discussions with other carriers regarding potential new services at Worcester Regional Airport. In addition, MassHighway is analyzing alternative highway routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport and filed an ENF in December 1999 and is in the process of preparing a Draft EIS/EIR, which is expected to be filed in October 2001.

Transcript T2.28 CARE, John O'Connor

Code	Topic 1	Topic 2	Comment	Response
T2.28.1	Purpose and Need	Delay	[T]here's talk about the delays. Well, if you really read the numbers in here, the delay situation has gotten better in the last few years, not worse...[I]f you read FAA statistics, they say there's only a 3 percent delay factor. Massport is saying it's 20 percent. Where does the truth lie?	Logan Airport flight delays, as measured by the FAA, did decline between 1993 and 1997. Nevertheless, the same data show that Logan Airport was consistently ranked as one of the nation's most delayed airports throughout this period. In 1998, delayed flights at Logan Airport, as reported by the FAA increased by more than 30 percent, and continued to increase in 2000. In 200, Logan was the second most delayed airport for arrivals in the U.S. This represents the worst delay ranking in Logan's history. Refer to Chapter 1 of the Supplemental DEIS/FEIR for a discussion of Logan Airport delays caused elsewhere in the system. There are three reasons for the decline in delays between 1993 and 1997. First, in 1997, the number of hourly scheduled flights was less than Logan Airport's normal operating capacity of 120 flights per hour, unlike 1993, when airlines scheduled flights well beyond Logan Airport's hourly capacity. Second, Logan Airport's hourly demand profile is flatter than it was in 1993. Airlines are spreading scheduled flights throughout the day taking advantage of Logan Airport's off-peak hours (*e.g.*, 10 AM to 1 PM). Finally, airlines are carrying more passengers per flight. In fact, with roughly the same number of flights as in 1993, Logan Airport accommodated over 3 million more passengers. One reason for this is that the regional carrier network serving New England is more efficient. In 1993, there were three regional carrier systems serving 2.1 million regional passengers at Logan Airport. Since 1994, Logan Airport has been served by two regional airline systems (Business Express, now American Eagle, and US Airways Express). These carriers handled 2.2 million Logan Airport passengers in 1998. Key lessons learned from this are: 1) while PPP might work in conditions of overscheduling, such as the 1993 environment, because there is no sustained period of flight overscheduling at Logan Airport today, PPP would not provide meaningful delay reduction in the current operating environment; and 2) while delays declined from 1993 to 1997, Logan Airport continued to be one of the most delayed airports in the country because, even though carriers were more efficient at scheduling flights, delays caused by wind and weather continued to occur.

Code	Topic 1	Topic 2	Comment	Response
T2.28.2	Purpose and Need	Airfield capacity	They're building the capacity of this airport...They're expanding this airport to almost double the traffic in the coming years and you don't see that clearly in this report.	Implementation of the recommended Airside Project, specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway would substantially reduce the delays that now occur during northwest wind conditions. Preventing these delays would represent a real benefit to the passengers and airlines that currently experience them. However, because these wind conditions and the associated delays are not regular or predictable, and cannot be readily anticipated, it is not expected that their prevention will stimulate growth in Logan Airport passenger demand above and beyond the rates that would have occurred without the runway. Instead, growth in Logan Airport passenger demand will be principally driven by local and national economic conditions, competition and pricing within the airline industry, and the distribution of airline services and passenger traffic between Logan Airport and the surrounding regional airports. The broad range of forecasts considered in the Airside Project operational and environmental analyses capture any potential variation in current and future passenger and aircraft activity at Logan Airport.
T2.28.3	Air Quality	Fleet Mix	There's little or nothing about these new planes. These new planes are going to be able to accommodate upwards of 500 to 600 passengers and will reduce some of the noise, they say, but the pollution from these new planes is going to be a lot worse.	So-called New Large Aircraft (NLA) carrying up to 1,000 passengers are still just in the discussion phase. No manufacturer has undertaken serious development of such aircraft yet, which would be a multi-year process. These aircraft would probably require modifications to existing airport jetways and apron areas along with increases in taxiway width and turning area. Their use would be limited to extremely high-density markets, and it is not likely that Boston would be among these. In fact, the number of "jumbo jets" serving Logan Airport has declined in recent years. Consequently, the NLA was not included in the Future Fleet scenarios.
T2.28.4	Public Health	Effects	Finally, there is little or nothing as to how this airport impacts our public health.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR.

Transcript T2.29
Private Citizen: Richard C. Lynds

Code	Topic 1	Topic 2	Comment	Response
T2.29.1	Purpose and Need	Delay	Although Massport plans to construct a new runway which promises to place less flights over the surrounding communities, their approach serves only as a temporary band-aid solution to a much bigger problem that they're ignoring. Massport predicts that passenger growth at Logan will increase from 25 million or so passengers to 35 or 40 million in the next ten years...[O]perations at Logan which currently peak at 120 per hour are expected to increase as well...While Massport cites the need for a new runway at Logan to help solve efficiency problems, a better solution might have been something that solved their capacity problems.	Neither Massport nor the FAA has a program to increase passenger demand at Logan Airport. Rather, the objective of both organizations is to accommodate demand safely and efficiently. The recommended Airside Project is intended to enable Logan Airport to accommodate current and future aircraft activity with minimum delay. The construction of Runway 14/32 would significantly reduce delays associated with northwest wind conditions, but would not be expected to induce additional aircraft traffic or passenger activity at Logan Airport. Refer Section 4.2. The availability of Runway 14/32 is projected to produce a small improvement in air quality from improved efficiency of airfield operations.
T2.29.2	Alternatives	Runway 14/32	By constructing a new runway, Massport and the FAA will be able to operate many more flights into Logan while keeping delays down to the so-called acceptable level. In my opinion, this is a capacity increase, not an efficiency increase...	Refer to response to Comment T2.29.1.
T2.29.3	Environmental Review Process	MEPA	[T]he scope for the draft environmental impact statement issued in 1995, Secretary Trudy Cox required Massport to examine alternatives of using existing airports instead of constructing a new runway. In fact, she referred to comments which suggested expanding the use of Hanscom Field which is close to Boston and owned by Massport, but the DEIS and the DEIR ignore Hanscom's potential for relieving anything other than general aviation traffic...Massport continues to ignore expanding the use of Hanscom despite the relatively low number of operations at that facility.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field.

Code	Topic 1	Topic 2	Comment	Response
T2.29.4	Purpose and Need	Delay	Massport cites the project will provide improvements to alleviate the arrival and departure problem, but in the very same breath, they talk about how in order to meet the projected demand of passengers at Logan, a new runway is necessary. Massport can't have it both ways. It's either efficiency for today or expansion for tomorrow.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations.

Transcript T2.30
Private Citizen: Mary Beringer

Code	Topic 1	Topic 2	Comment	Response
T2.30.1	Purpose and Need	Delay	Please do not be swayed by the argument that this runway is needed to help alleviate delays at Logan International Airport for the tourist industry or for business travelers coming to Boston.	Runway 14/32 would serve to reduce delays under northwest wind conditions when arrivals are restricted to a single arrival stream. These reduced delays would benefit all users of the airport, not just tourists and business travelers from out of town. Local business travelers and residents would share in the benefits, and the Supplemental DEIS/FEIR has demonstrated that construction of the runway would also provide local environmental benefits in terms of increased PRAS goal compliance and increased over-water flights.
T2.30.2	Regional Transportation	Regional Airports	By Massport's own figures, fully 57 percent of all passengers arriving at Logan or departing Logan are residents of communities located west of Route I-95 and Route I-495. Clearly, the logic of siting another airport nearer to those residents cannot be denied. Such a new airport would serve to enhance the justice of not allowing more negative burdens here in Boston, and would bring those passengers closer to their homes.	The MassHighway is analyzing alternative routes that would improve surface access from I-90 and I-290 to the Worcester Regional Airport. MassHighway is in the process of preparing the EIS/EIR for these highway improvements. Massport supports this project.
T2.30.3	Public Health	Effects	I would also ask that you consider the impact the airport currently has on the health of residents of East Boston. Our children's overall well-being is being compromised daily by the negative effects of the pollution created by the airplanes and the attendant traffic going to and from Logan.	Massport has provided the City of Boston and public health agencies with air quality and emissions data. In January 1996, Massport reviewed available public health data, including mortality and morbidity from each neighborhood in Boston and cancer incidence data available from the Massachusetts Department of Public Health. These data indicated that causal relationships cannot be determined at this time. A review of the 1999 *Report to the Mayor, Health of Boston* prepared by the Boston Public Health Commission leads to a similar conclusion. In addition, Massport has shared the results of the *Soot Deposition Study* with public health agencies and is cooperating with the Harvard School of Public Health on the *South Boston Particle Source Apportionment Study.* Information on public health issues is provided in Chapter 6 of the Supplemental DEIS/FEIR. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Transcript T2.31
Private Citizen: Mary Ellen Welsh

Code	Topic 1	Topic 2	Comment	Response
T2.31.1	Alternatives	Runway 14/32	[A]t the very beginning of the hearing Mr. Saltmarsh [Chairman of the Massachusetts Aeronautics Commission] ...was touting the advantages of having the runway because it would send more flights over the water, but in fact, the runway, the flights that go over the water would impact ...[many residential areas including] East Boston...the seaport district...the housing that's along the waterfront now, and the new housing that's being proposed including that being proposed by Massport Authority... And at the other end, it would send three times as many flights over very populated neighborhoods beginning in East Boston's Eagle Hill, and then on to Chelsea, Everett, Malden, Somerville, and so on. So the advantages of the runway sending flights over the water are not advantages at all for people who live under those other flight tracks.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.
T2.31.2	Noise	Model	This representation of data to substantiate a certain point of view is found throughout the EIR...As an example, in Jeffrey's Point with takeoffs on the new runway 14, the day-night contours in, the EIR show that the noise level would not reach 60, but yet in another table called [T]imes [A]bove [N]oises [L]evels, the information contradicts those figures. The [T]imes [A]bove [N]oise [L]evel in the appendix show there would be an increase to the 65 DB threshold under option.	There is no contradiction between the tables of Day-Night Sound Level (DNL) values at the noise monitoring sites and the Time Above (TA) threshold values. The graphics in Appendix L of the Airside Project Draft EIS/EIR and the new graphics in the Supplemental DEIS/FEIR (for example Figures 6.2-7 and 6.2-8 showing exposure levels for the 29M Low and 37.5M High fleets) indicate that both sensor sites (Sites 14 and A, respectively) are properly situated on or between the 60 and 65 DNL contours, their locations accurately matching the tabular values of DNL listed in Tables 6.2-8 and 6.2-10 of Supplemental DEIS/FEIR. Comparable comparisons also exist between the noise contours of Figure 6.2-12 and Table 6.2-26 for the 2015 High Regional Jet Fleet. However, the commentor appears to be confused over the difference between the DNL and Time Above noise metrics. The time-varying sound level of a passing aircraft can rise to a numeric value that exceeds a threshold of say 65 dB, then fall back below that threshold and in so doing will add several seconds to the Time Above noise metric. Yet that threshold exceedance does not mean the DNL value (a cumulative measure of exposure for a full 24-hour period) will be greater than 65 dB. Readers unfamiliar with these technical issues should refer to Section 5.2.3 of the DEIS/EIR, *Appendix G of the Logan Airport 1998 Annual Update,* or Airside Project Draft EIS/EIR E of this document for background explanations of the noise metrics used in this evaluation.

Transcript T2.32
Private Citizen: Tony Gambale

Code	Topic 1	Topic 2	Comment	Response
T2.32.1	Regional Transportation	Regional Airports	Can anyone from Massport tell me why no one's ever suggested using the South Weymouth Naval Air Station, other than the fact that the people in South Weymouth say they don't want it used as an airport because it will bring the value of their property down? Is that why you don't want to use it?	In October 1996, the civilian Naval Air Station Planning Committee rejected redevelopment the South Weymouth Naval Air Station as a commercial airport because of opposition from the surrounding communities – Weymouth, Rockland, and Abington.

Transcript T2.33
Private Citizen: Stephen Brown

Code	Topic 1	Topic 2	Comment	Response
T2.33.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.34
Private Citizen: Anthony Nester

Code	Topic 1	Topic 2	Comment	Response
T2.34.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.35
Private Citizen: Art Flavin

Code	Topic 1	Topic 2	Comment	Response
T2.35.1	Cumulative Impacts and the GEIR	Master Plan	[There is no master plan that the runway fits into.]	The improvement concepts evaluated in the Airside Project Analysis evolved from prior studies including the FAA's *Logan Capacity Enhancement Plan* (October 1992); the *Logan Runway Incursion Mitigation Plan/Taxiway Relocation Study* (December 1993); the *Logan Final GEIR* (July 1993); and the *Logan Airside Improvements Feasibility Study, Phase 1 Report*, published in July 1995. The FAA evaluated a numerous physical, operational, and administrative concepts for reducing Logan Airport delays in its *Boston Logan International Airport Capacity Enhancement Plan*. The FAA recommended several improvement concepts, including unidirectional Runway 14/32, for further study. These improvement concepts, as well as concepts from other studies, were individually examined by Massport in the *Logan Airside Feasibility Study*, published in July 1995. Based on the Feasibility study, some concepts were rejected and the most promising concepts were combined into the Alternatives considered in the Airside Project Draft EIS/EIR. The alternatives analysis in the Airside Project Draft EIS/EIR is consistent with state and federal scoping directives for the Airside Project. The results of the Airside analysis indicate that alternatives that include unidirectional Runway 14/32 provide the most benefit in terms of delay reduction and ability to achieve PRAS goals.

Transcript T2.36
Private Citizen: Fred Moore

Code	Topic 1	Topic 2	Comment	Response
T2.36.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.37
Private Citizen: Anthony Petrucelli

Code	Topic 1	Topic 2	Comment	Response
T2.37.1	Alternatives	Runway 14/32	I don't understand why Massport can't understand that in order to build this runway, you need to expand into our neighborhoods [to rebuild the existing cargo facilities that would be demolished to build the runway]. That's a point that needs to be made. There's no more room to go...Go elsewhere. Go to Hanscom, go to Worcester...	Logan Airport's real estate is admittedly less than the desirable size. Since the existing area cannot be expanded, Massport proposed the Airside Project and is investigating other redevelopments to maximize efficiency, including the North Cargo Area and Bird Island Flats. Runway 14/32 will be located on fill that was prepared for this purpose 25 years ago. The runway will not increase airfield capacity, but will dramatically reduce aircraft and passenger delays during northwest wind conditions. Refer to Chapter 2 for a full analysis of the regional airports.

Transcript T2.38
Private Citizen: Hugo Ascolillo

Code	Topic 1	Topic 2	Comment	Response
T2.38.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.39
Private Citizen: Thomas McCarthy

Code	Topic 1	Topic 2	Comment	Response
T2.39.1	Environmental Justice	Cumulative Impacts	Environmental justice is something that should be considered.	The Supplemental DEIS/FEIR provides a detailed Environmental Justice discussion in the airport context. The Environmental Justice analysis was significantly expanded in Section 6.8 of the Supplemental DEIS/FEIR. Low-income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order, and the Council on Environmental Quality's guidance on Environmental Justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. This analysis found that there is no high and adverse disproportionate impact to low-income and minority populations from the Preferred Alternative. TEST Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. Mitigation of the increased noise within the 65 dB DNL noise contour will be provided to affected communities in the form of residential sound insulation.
T2.39.2	Regional Transportation	Regional Airports	A second airport bearing one-half of the burden we've been bearing for years is something which should be considered and which the agency should be pushing for.	Because the development of a second major airport would require ten to 15 years for site selection and environmental review in addition to a multi-year construction period, this option is not viewed as a solution to accommodating forecast demand over the next 20 years. Service developments at other surrounding airports, including Manchester, T.F. Green/Providence and Worcester Regional airports, preclude the need for a second major airport.
T2.39.3	Alternatives	Runway 14/32	[O]ne last thing is they keep talking about the runway bringing the flights out over the water…If you're taking off over the water, it's because the wind is blowing off the water into our neighborhoods, so when those jets are taking off, the roar of the sound is being carried by the wind even more into our neighborhoods and the fumes are being carried off the water into our neighborhoods, so saying they're going over the water is not doing us any justice because we're still getting the same amount of pollution and noise.	The goals of the Airside Project are to reduce delay, increase the airport's efficiency, and improve airfield safety in an environmentally responsible manner. Unidirectional Runway 14/32 would also give the controllers considerably more flexibility and allow them to improve achievement of PRAS goals, and redirect many flights to overwater routes. During very high demand periods, the controllers currently have little or no flexibility for runway selection. The addition of Runway 14/32 would be the single most important mechanism to achieve equitable geographic distribution of aircraft operations. Massport and the FAA are committed to the PRAS system and have been making improvements since 1982.

Transcript T2.40
Private Citizen: Roberta Horn

Code	Topic 1	Topic 2	Comment	Response
T2.40.1	Regional Transportation	Regional Airports	In Volume 1 on Page 2-9, they show a map of all the commercial [airports]...Hanscom is not there.	Hanscom Field was not listed in Figure 2.3-2 on page 2-9 of the Draft EIS/EIR as a commercial service airport, because the Figure only listed airports that have supported scheduled commercial passenger jet services. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established policy (60-seat regulation), it believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR), its Annual Updates, and applicable regulatory limitations, and shall be considered by the Hanscom Field Advisory Committee. Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. The environmental impacts of commercial services at Hanscom Field are summarized from the HGEIR and appear in Airside Project Draft EIS/EIR B of the Supplemental DEIS/FEIR.
T2.40.2	Environmental Review Process	MEPA/NEPA	[In] Volume 3 on Page 4, ...the graph shows Saratoga Street as the last street before the water...There are two streets after Saratoga Street towards the water, St. Andrew Road and Bays Water Street.	Refer to the new graphics in Chapters 4, 5 and 6 of the Supplemental DEIS/FEIR.

Transcript T2.41
Private Citizen: Anthony DiBennedetto

Code	Topic 1	Topic 2	Comment	Response
T2.41.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.43
Private Citizen: Debbie Santiano-McHatton

Code	Topic 1	Topic 2	Comment	Response
T2.43.1	Alternatives	Reduced Approach Minimums	I'm here...on behalf of my community who sits under the bad weather runways 4 and 22 which brings out the point of the lowering of the minimum which is, from what I understand, an FAA concern. Massport has presented this to us as a 94-hour gain...Your 94 hours relates approximately to 3,000 flights in inclement weather...We have asked over and over that you look at the Beachmont Hill again. We are sure that all of you understand that this hill has a school on the top of it. This is not reflected in your report. The pictures still show it without the 50-foot school on it. When you are flying above our heads 500 feet, 50 feet makes a big difference.	The Supplemental DEIS/FEIR indicates that the Preferred Alternative would promote runway use in a manner that is more consistent with annual PRAS goals. The PRAS goals were established after community input in the 1980s. The goal of PRAS was to distribute noise equitably, based on demographic considerations.
T2.43.2	Noise	Hushkitted Aircraft	In your report, you address noise mitigation stage 3. We find this inadequate. We find that our main concern is excessive traffic and excessive noise. To be exact, 104 decibels. During a day when I received your noise abatement follow-up, we can see that we're at 75, mostly in the 80s, lots in the 90s, and a few in the hundreds. That's excessive and intolerable. For you to mitigate with us with the Stage 3 aircraft is absolutely ludicrous. Stage 3, I believe you are currently flying at 85 percent...Those still wake me up at night when you're flying only stage 3 at 10 p.m...Please...find another way that your airplanes will be no louder than 65 decibels. That would be a true mitigation.	Massport's initial efforts have been to focus discussion with Logan Airport carriers to encourage substitution of full Stage 3 certified aircraft for hushkitted aircraft where feasible. Both the Supplemental DEIS/FEIR and the *Logan Airport 1999 ESPR* (previously GEIR) discuss the status of and potential for reducing the use of hushkitted Stage 3 aircraft. Refer to Section 8.4 of the Supplemental DEIS/FEIR.
T2.43.3	Noise	Impacts	[W]e find your report inadequate that you've only addressed [noise] in short term. The long term, your growth, far outweighs anything that we might gain in the short term in our community.	Current traffic trends at Logan Airport and the regional airports indicate that Logan Airport may not reach 29 million passengers, presented in the Draft EIS/EIR as a "1999" projection, until 2003. Continued air service expansion at the regional airports and the introduction of high-speed rail to New York in December 2000 is expected to further slow Logan Airport's passenger traffic growth. With these developments, Logan Airport is expected to reach 37.5 million passengers in 2015 rather than 2010, and the 45 million passenger forecasts will not be achieved until 2024. Thus, the planning forecasts that underlie the delays and environmental analyses cover a planning period of at least 20 years. Refer to Section 4.2 of the Supplemental DEIS/FEIR for a complete discussion of the planning forecasts.

Transcript T2.44
Private Citizen: Rob Strelitz

Code	Topic 1	Topic 2	Comment	Response
T2.44.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.45
Private Citizen: Gregory Curci

Code	Topic 1	Topic 2	Comment	Response
T2.45.1	Public Health	Effects	What's happening in Winthrop is we're being impacted by the air pollution from the airport, and we've also been excluded from any real scientific studies of that impact.	No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.
T2.45.2	Regional Transportation	Regional Airports	Massport has not spent a single nickel on promoting the regional airport aspect.	The analysis of regional alternatives presented in the Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR relies on air to high-speed rail diversion estimates published in the Supplemental DEIS/FEIR and Section 4(f) Statement, Northeast Corridor Improvement Project, prepared by the Federal Rail Administration in October 1994. In preparing the Supplemental DEIS/FEIR, Massport contacted Amtrak for more recent estimates, but Amtrak did not have any updated ridership estimates that could be released to Massport. Amtrak's written response to Massport's request for updated ridership numbers is contained in Airside Project Draft EIS/EIR B of the Supplemental DEIS/FEIR.

Transcript T2.46
Private Citizen: Linda Jolliffe

Code	Topic 1	Topic 2	Comment	Response
T2.46.1	Noise	Impacts	The pollution and the noise resulting from thousands of increased jet aircraft operations promises to increase intolerable living conditions.	The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR analyze the environmental impacts of the Airside Project, consistent with established federal and state scoping directives. Appropriate mitigation associated with the Airside Project has also been established. Massport has programs in place to reduce the environmental impacts associated with Logan Airport as a whole. These initiatives are described in the *Logan Airport ESPR* and its updates.
T2.46.2	Purpose and Need	Delay	Massport claims that building 14/32 would reduce Logan congestion. That statement merely reflects one of the many dishonest assessments Massport is promoting.	Based on simulation modeling, Logan Airport experienced 120,000 hours of runway-related delays in 1998. If no actions are taken, runway-related delays are forecast to grow as high as 333,000 hours under a 37.5M High Fleet scenario. The Preferred Alternative produces immediate and long-term benefits by lowering runway delays by 38,000 hours if it had been in place in 1998, and by as much as 94,000 hours in the future 37.5M High Fleet scenario. Because of the impact of the regional alternatives, the 37.5M High Fleet scenario is not expected to be achieved until 2015. The sooner airside efficiencies are implemented; the more benefits will accrue over time. Section 4.6 of the Supplemental DEIS/FEIR shows that delay reduction benefits increase over time as traffic levels increase.

Transcript T2.47
Private Citizen: Harry Powers

Code	Topic 1	Topic 2	Comment	Response
T2.47.1	Public Health	Effects	[E]nvironmentally I believe that a whole lot more studies need to be done to find out how traffic that we have at the airport now is affecting the people and the residents in the surrounding communities.	The purpose of the Airside Improvements Planning Project is to reduce current and projected levels of airfield congestion and delay and to enhance the safety of aircraft operations at Logan. Massport's proposed landside improvements are planned to enhance the efficiency of passenger processing, and include terminal modernization, as well as roadway, parking and service area improvements. The landside projects will not affect the design or implementation of the Airside Project, which has independent utility, nor will the Airside Project improvements affect the design or implementation of any of the landside projects. All airside and landside projects, where required, will continue to be the subject of separate comprehensive environmental analysis by project proponents in accordance with federal and state regulations. As expressed in the May 7, 1999 EOEA Certificate, Massport's Environmental Planning and Status Report (ESPR, formerly GEIR) process "is expected provide a big picture cumulative impact analysis of Logan operations, impacts and mitigation. It complements the project-specific EIRs," such as this one for the Airside Improvements, "helps to focus the review process of individual EIRs, and ensures that segmented project review does not occur in the context of MEPA review at Logan Airport."

Transcript T2.48
Private Citizen: Pamela Smith

Code	Topic 1	Topic 2	Comment	Response
T2.48.1	Noise	Impacts	The residents of East Boston and all the surrounding communities today suffer an unacceptable level of noise and air pollution.	PRAS noise goals are based on the fact that DNL levels above 75 dB are considered unacceptable for residential land use and that DNL levels above 70 dB are also excessively high and should be reduced if feasible. PRAS recommendations are thus designed to shift operations off of runways where these high levels still exist – primarily in Winthrop and to the north of Logan Airport in East Boston and Revere. No one in Chelsea or Charlestown currently experiences noise that is this high.

T2.48.2	Regional Transportation	Regional Airports	Massport...should maximize the use of airports in Rhode Island, New Hampshire, Bedford, Worcester, and New Bedford...[Massport should] build a new major New England International regional airport at Fort Devens.	A second major airport is not a solution to the current delay and congestion problems at Logan Airport. The Proposed Project to reduce delay and enhance safety at Logan Airport must be implemented in the near term to address current and future operating conditions. Even if a second major airport were to be pursued, the planning period for site selection and environmental review would require ten to 15 years, in addition to a multi-year construction period. Rather, Logan Airport is part of a regional system of airports that includes the T.F. Green/Providence, the Manchester, and the Worcester Regional airports. Service development and increased passenger traffic at these airports are an important part of the region's long-term strategy to accommodate passenger and activity growth. Greater use of the regional airports will provide passengers within the service area of such airports with a viable alternative to Logan Airport. Since demand within Logan Airport's primary service area will remain strong, the improvements at other regional airports will not eliminate the need for airside projects at Logan Airport. The Airside Project Draft EIS/EIR and the Supplemental DEIS/FEIR, specifically considered the role of Hanscom Field in the analysis of regional alternatives. Hanscom Field, which serves as a general aviation reliever airport to Logan Airport, already accommodates a significant number of aircraft operations (183,000 operations in 1998). The Hanscom Field activity includes private, business, charter, and air taxi operations that might otherwise use Logan Airport. Since the Airside Project Draft EIS/EIR was filed, Shuttle America, a newly founded airline, began commercial scheduled operations at Hanscom Field, offering limited turboprop services to short-haul regional markets – Trenton, Buffalo, Hartford (discontinued), Wilmington, Delaware (discontinued), and Greensboro. Shuttle America is also conducting operations between Hanscom and New York LaGuardia Airport. While Massport supports commercial service at Hanscom Field consistent with its established limits (60 seat regulation), Massport believes that Hanscom Field will maintain its role as a major general aviation reliever, and that its geographic proximity to Logan, Worcester Regional and Manchester airports will prevent its development as a significant commercial airport. Additionally, commuter airlines serving Logan Airport are unlikely to move a significant number of flights from Logan Airport to Hanscom Field, since approximately 50 percent of passengers on Logan Airport's commuter flights connect to other Logan Airport flights and a significant number of passengers are travelling to Boston. However, any new commercial service initiatives proposed for Hanscom Field shall be reviewed for consistency with the *Hanscom GEIR* (HGEIR) and its Annual Updates, and shall be considered by the Hanscom Area Town Selectmen (HATS). Refer to Section 2.6 of the Supplemental DEIS/FEIR for a discussion of Hanscom Field. Fort Devens was an alternative considered as a potential airport site in the Second Major Airport Site Selection study conducted in 1991 by the Massachusetts Aeronautics Commission. However, Fort Devens was not selected. The site has since been developed for other uses. Development at T.F. Green/Providence, Worcester Regional and Pease International Tradeport has superseded the need for a second major airport.

Transcript T2.49
Private Citizen: Kathleen McAuley

Code	Topic 1	Topic 2	Comment	Response
T2.49.1	Alternatives	Preferred Alternative	...[I am opposed to the proposal for] a new center taxiway, a new runway, lower[ing] the ceiling for landing, and continu[ing] the increased usage of Logan Airport.	Comment noted.

Transcript T2.50
Private Citizen: Fran Riley

Code	Topic 1	Topic 2	Comment	Response
T2.50.1	Purpose and Need	Delays	If the flights are late arriving at Logan, it is not 14/32 that has to be built. The FAA has failed at a national level to look at the points of origin of those delays. That is a poor, lame, ignorant excuse and contention to build 14/32.	The Airside Project addresses delays from constraints at Logan Airport. Section 1.6 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.
T2.50.2	Environmental Justice	Impacts	This is a class issue. This is an environmental injustice. It's social injustice.	Low income and minority populations were defined in accordance with Federal Executive Order 12898, the U.S. DOT Final Order and the Council on Environmental Quality's guidance on environmental justice. In addition, the analysis of low-income populations was expanded to include households at 150 percent of poverty level. The data presented are based on the most recently available census data (1990) using Geographic Information System (GIS) technology to analyze impacts at the most detailed level possible. Refer to Section 6.8 of the Supplemental DEIS/FEIR for a discussion of the analytical methodology and results, respectively.
T2.50.3	Alternatives	Runway 14/32	[H]ow does Massport propose to build a new runway and [claim] it won't further pollute East Boston and the surrounding communities?	Emissions are shown to decrease with the Preferred Alternative when compared to the No Action Alternative. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives.

Transcript T2.51
Private Citizen: Martin Kaufman

Code	Topic 1	Topic 2	Comment	Response
T2.51.1	General Opposition		No specific comment. General opposition only.	Comment noted.

Transcript T2.52
Private Citizen: Blossom Hoag

Code	Topic 1	Topic 2	Comment	Response
T2.52.1	Environmental Justice	Impacts	It's the hundreds of thousands of people in the city of Boston and surrounding areas that this project would affect, it's the environmental injustice that's being done to these people, to this city.	Adverse impacts are not predominately borne by low-income or minority populations. Only 21 percent of the population within the 65 dB DNL contour for the Preferred Alternative is minority, compared to the Suffolk County minority population of 38 percent. Less than two percent of the population within the 65 dB DNL contour for the Preferred Alternative has a household income less than 150 percent of poverty level. The additional area within the 65 dB DNL noise contour associated with the Preferred Alternative includes a predominately Hispanic neighborhood in Chelsea which is predicted under worst case assumptions to experience an increase of 0.6 dB or less. Under FAA standards, this change is not a significant adverse impact. The minority and low-income populations in South Boston and East Boston affected by the Preferred Alternative 65 dB DNL contour are almost identical to the No Action Alternative. The 65 dB DNL contour for the Preferred Alternative does not extend into Jamaica Plain, Roxbury and the South End. Mitigation of the increased noise within the 65 dB DNL contour will be provided to affected communities in the form of residential sound insulation.
T2.52.2	Regional Transportation	Regional Airports	We would like to work on working out a plan for the entire northeast, how to develop it regionally with all the airports, with all the alternatives in transportation, and it's not just airports, it's the rail, it's high-speed anything else that can be done, and the roadways and everything has to be looked at together.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of options to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of options to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Code	Topic 1	Topic 2	Comment	Response
T2.52.3	Alternatives	Runway 14/32	All this project is doing in putting more runways and more planes…[is] bring[ing] much more…air pollution and traffic pollution in our neighborhoods.	The proposed Airside Project will not stimulate additional growth in passenger activity levels at Logan Airport. Off-site motor vehicle emissions estimates are shown in Table 6.4-9 of the Supplemental DEIS/FEIR. Increases in the number of vehicles accessing Logan Airport are not analogous to increases in emissions. As indicated in the table, these emissions generally decrease in the future; as a result of improved motor vehicle emission standards, the increased use of alternative fuels, and other factors.

Transcript T2.53
Private Citizen: Albert Van Buskirk

Code	Topic 1	Topic 2	Comment	Response
T2.53.1	Alternatives	Runway 14/32	[T]his [airport expansion] is going to create more pollution, increase more noise, and create more traffic.	The Preferred Alternative, and specifically unidirectional Runway 14/32, would not increase Logan Airport's normal airfield capacity of approximately 120 operations per hour. This capacity is available at Logan Airport approximately 80 percent of the time. Runway 14/32 would allow Logan Airport to maintain this capacity during periods of strong northwest winds that now require controllers to operate on only one or two runways, compared to the typical three-runway configurations used at Logan Airport. The runway will not increase Logan Airport's normal operating capacity, nor will it encourage or induce an increase in aircraft operations. No alternatives violate the NAAQS. The Preferred Alternative shows better air quality results than the other alternatives. Implementation of Runway 14/32 would not result in substantial noise impacts in any community. Rather, it would enable the air traffic controllers to adhere more closely to the PRAS goals and decrease the population that is most severely affected. For example, implementation of the Preferred Alternative will reduce the population affected by Day-Night Sound Level values greater than 70 dB by four percent with the 29 M Low Fleet scenario, by 67 percent with the 37.5 M High Fleet scenario, and by 39 percent with the High Regional Jet Fleet, while increasing the population exposed to Day-Night Sound Level values greater than 65 dB by two percent, zero percent, and three percent for these three fleet scenarios, respectively. Refer to Section 6.2 of the Supplemental DEIS/FEIR and population counts presented in Tables 6.2-3 through 6.2-8 of the Supplemental DEIS/FEIR.
T2.53.2	Purpose and Need	Economic	[T]he only economics behind this [project] is to create more business for big business.	The benefits of Runway 14/32 are significant: (1) It provides a third runway for operations during northwest winds; (2) it reduces total annual delay by 27 to 37 percent (Preferred Alternative vs. the No Action Alternative); (3) it reduces delays during VFR conditions by 47 to 57 percent (Preferred Alternative vs. the No Action Alternative); (4) it allows controllers to separate aircraft of differing size classes during northwest winds; and (5) it increases the controllers' ability to achieve PRAS goals.

Transcript T2.54
Private Citizen: Michael Herbert

Code	Topic 1	Topic 2	Comment	Response
T2.54.1	Regional Transportation	Regional Airport	Logan is not the only tool. We've got New Bedford, Worcester, Hanscom.	Chapter 2 of the Supplemental DEIS/FEIR provides a discussion of the specific role played by the regional transportation alternatives and steps that Massport has taken to foster use of these alternatives. Massport has long recognized and has been a proponent of regional alternatives to Logan Airport. Together with the regional airports, Massport has implemented a regional strategy to enhance the use of regional alternatives to Logan Airport. In the Draft EIS/EIR, Massport identified up to 7.3 million annual passengers that could be absorbed by regional alternatives that include use of T.F. Green/Providence, Manchester and Worcester Regional airports, as well as the new high-speed rail to New York. In the Supplemental DEIS/FEIR, Massport recognizes that these developments will slow Logan Airport's passenger traffic growth. Logan Airport may not achieve the 37.5 million passenger forecasts until after 2010, but rather closer to 2015, and the 45 million passenger forecasts may not be achieved until after 2020. While regional alternatives can play an important role in reducing the rate of future traffic growth at Logan Airport, they do not address Logan Airport's inability to efficiently accommodate current levels of demand during northwest wind conditions. Runway 14/32, which is designed to correct the problem with Logan Airport's layout, is necessary to correct this deficiency and provides clear benefits at current aircraft traffic levels. These benefits will only increase in the future, even as developments at the regional airports act to reduce the rate of future growth at Logan Airport.

Transcript T2.55
Private Citizen: Susan Powers

Code	Topic 1	Topic 2	Comment	Response
T2.55.1	Air Quality	Odor	[I am concerned about] the diesel jet fuel smell...[T]he stage 3 aircraft...burns more fuel. I feel this will be detrimental to our community as well...We're being deprived of clean air.	The Airside Project leads to a decrease in odor-causing hydrocarbon emissions, when compared to the No Action Alternative. This is illustrated in Table 6.4-7 and Figure 6.4-5 of the Supplemental DEIS/FEIR. Small changes in odorous emission concentrations will be imperceptible as measured against the No Action Alternative. All scenarios include the future aircraft fleet mix, including Stage 3 aircraft.

Transcript T2.56
Private Citizen: Mary Quinn

Code	Topic 1	Topic 2	Comment	Response
T2.56.1	Noise	Model	I'd like to mention one of the many of Massport data's statistical...omission[s]...[The table in the DEIR/DEIS titled] Noise Exposure Population by Community, [lists] several communities, and it has Chelsea listed as zero noise exposure population...[T]he data that they're using is flawed, there are things missing, it's manipulated.	Tables 6.2-4 and 6.2-5 show the noise exposed population for Chelsea for the 29M Low and 37.5M High Fleet scenarios, respectively. Although both show no noise exposed population in DNL 70 dB and above, both show noise exposed population in the DNL 65 dB and DNL 60 dB and above categories.
T2.56.2	Alternatives	Other Non-Construction Alternatives	But do they put anything in the study about alternatives that do not pollute such as improving the air traffic controllers' electronics which would improve safety, efficiency, and does not pollute at all?	The goals of the Airside Project are to reduce delay, increase airport efficiency and improve airfield safety in an environmentally responsible manner. They do not reflect an "airport-wide growth and expansion plan", nor increase the capacity of the airport. Future passenger and operations levels can be accommodated by Logan Airport without any airside improvements but not without delays and resulting adverse environmental impacts. Long-term aviation growth is a recognized worldwide condition that is beyond Massport's control, which means that the sooner the airfield efficiencies are implemented, the more benefits they will accrue over the future.
T2.56.3	Alternatives	Other Non-Construction Alternatives	Do they talk about studies that they must have done about other airports that have similar delays?	Delays occur when wind or weather conditions require the use of configurations with fewer than three active runways, when poor weather requires increased separation distances between aircraft, or when airlines schedule more flights than Logan Airport can handle. The Airside Project is designed to reduce delays at Logan Airport from adverse winds and taxiway congestion. The Airside Project addresses delays from constraints at Logan Airport. Section 1.4 and Appendix C of the Supplemental DEIS/FEIR also contains a detailed discussion of the FAA and U.S. DOT delay measures and historical data, along with comparisons of Logan Airport delays within the context of delays at other United States airports.

Transcript T2.57
Private Citizen: Arthur Hartnet

Code	Topic 1	Topic 2	Comment	Response
T2.57.1	Noise	Sound Insulation	The acoustical treatment as soundproofing should really be known as is restricted to 65 decibel yearly average but only to homes that are up to building codes, and they do not provide air conditioning. Try to live inside a house when it's a very hot, humid day, try not to think about that when you want to use your backyard and you can't because you can't acoustically treat your backyard.	The average noise of Stage 3 aircraft operating at Logan Airport is expected to decrease with time as the low bypass JT8D powered aircraft, which have been hushkitted to meet Stage 3 requirements, are retired from the fleet and replaced by the quieter new high bypass powered Stage 3 aircraft.

Transcript T2.58
Private Citizen: Gail Miller

Code	Topic 1	Topic 2	Comment	Response
T2.58.1	General Opposition		I'm currently the chair of the Conservation Committee...[W]e are opposed to this proposal.	Comment noted.

Transcript T2.59
Private Citizen: Fran Riley

Code	Topic 1	Topic 2	Comment	Response
T2.59.1	Noise	Hushkitted Aircraft	[W]hy doesn't Massport disclose that more than five major airlines filed waivers with the FAA?...Those airlines are not being in compliance with the stage 2 or 3 aircraft, don't you think that's going to raise pollution? Don't you think that the disclosure should have been made by Massport to all the communities?	FAA did not approve any of the five waivers identified by the Commentor. The only waiver that FAA has granted on the 100 percent Stage 3 fleet requirement after December 31, 1999, has been to allow an operator to fly a Stage 2 aircraft into an airfield so that it can be converted to a Stage 3 airplane.

Transcript T2.60
Private Citizen: Roland Choquet

Code	Topic 1	Topic 2	Comment	Response
T2.60.1	Air Quality	Impacts	If ...[Massport was] at the [pollution] limit...when [Chelsea] went into receivership, and they've taken over five parking garages to alleviate the pollution, how can they double [the airport's] capacity and still be within the limits of pollution?	Massport is separately studying measures for reducing Logan Airport's contribution to air emissions in the region, in the *Logan Airport 1999 ESPR* (previously GEIR). Consideration is given to all emissions sources, and analysis is conducted for the airport, East Boston and regional study areas.

Transcript T2.61
Private Citizen: Jim Stamos

Code	Topic 1	Topic 2	Comment	Response
T2.61.1	Environmental Review Process	Public Process	I really don't understand how we can...participate in the environmental process through MEPA when we [in Quincy] have not had a presentation [from Massport]...[W]e're going to demand that we get a presentation or it's going to be a flawed process.	There was an extensive public participation and review process during the preparation of the Draft EIS/EIR. Public comments were received on the ENF after it was filed during the summer of 1995. In the fall of 1995, several public scoping sessions were held to provide community input to the subsequent state and federal scopes for the project. To assure that the Airside analysis was conducted with awareness and input from all concerned parties, the Massport Board established the Airside Review Committee (ARC), which consists of the Community Advisory Committee (with representatives from 24 communities surrounding Logan Airport), and 11 businesses and industry organizations. Massport also funded independent consultants for the CAC to provide them with the capacity to professionally assess the analysis and conclusions of the Airside Study. Between 1995 and 1999, Massport held 16 meetings with the ARC, an additional 15 meetings with just the CAC, and several meetings with the CAC consultants. In addition, Massport made 29 presentations to elected officials, most of whom represent Logan Airport's neighboring communities, and Massport held 45 meetings with community and business leaders, reaching an audience of more than 3,000 people. During the public comment period on the Draft EIS/EIR, the FAA held two public hearings. In January 2000, in response to the FAA's review of the Draft EIS, the FAA called for preparation of a Supplemental Draft EIS to address specific issues identified by the FAA following input from a SDEIS Panel consisting of six persons. At the FAA's direction, three SDEIS Panel members were appointed by the Governor of the Commonwealth of Massachusetts and three were appointed by the Mayor of the City of Boston. Under the direction of the New England Region FAA, the SDEIS Panel convened in March of 2000 and then met at least monthly with a final meeting in December of 2000. A total of 12 meetings were held. To provide the appropriate background, the SDEIS Panel was presented with an Interim Supplemental Draft EIS, the Draft EIS/EIR, answers to key letters written by members of the public, concerned agencies and public officials responding to the Draft EIS/EIR, and a series of 15 visual and written presentations from the Project's technical consulting team and other independent industry experts.